Harmful sexual behaviour in children: Evidence for identifying and helping children and young people who display harmful sexual behaviour.

Reference: CPH HSP ER (Evidence Reviews)

Authors:

Fiona Campbell[1], Evgenia Stepanova[2], Simon Hackett[2], Andrew Booth[1], Anthea Sutton[1], Kevin Hynes[3]

[1] **School of Health and Related Research (ScHARR)**

University of Sheffield

Regent Court,

30 Regent Street,

Sheffield,

S1 4DA,

UK

[2] **University of Durham**

[3]**Barnardo's**

CONTENTS

EXECUTIVE SUMMARY

SUMMARY of QUANTITATIVE DATA

Introduction

Since the early 1990s in the UK, there has been increasing recognition that children and young people may display sexual behaviours that lie outside normative developmental parameters and that can be experienced as harmful or abusive by others. Such behaviours may impact on both victims and the young people who display harmful sexual behaviours, as well as their families and the wider systems and communities in which such children live. It is estimated that between one fifth and one third of all child sexual abuse in the UK involves other children and adolescents as perpetrators.

The treatment of HSB in children and young people has evolved from interventions developed for use with adult perpetrators of sexual offenses. Increasingly these approaches were not seen as being appropriate for use with children and young people. Alternative approaches began to emerge that were focused on an assessment of the whole child and not simply the HSB.

The systematic review seeks to examine the effectiveness of the interventions being used in the treatment of HSB in children and young people.

Aim

To address the question: what types of interventions, including family and carer interventions, are effective and acceptable for children and young people who display harmful sexual behaviour (HSB)?

Methods

We conducted extensive searches across a wide range of electronic databases, working in close collaboration with content experts, in order to identify relevant studies. Further 'berry-picking' methods of searching were undertaken. Sifting references and data extraction were undertaken by two reviewers. We only excluded studies which were case study descriptions of an intervention and reported no comparison data. The results were described in a narrative format. The results of the quantitative analysis and the qualitative analysis were integrated following the completion of the analysis of both sets of data. This is presented in a logic model.

Findings

It is evident that many types of interventions are currently being used in practice but have not been rigorously evaluated and could not be included in this review. Thirteen studies were

identified for inclusion in the quantitative review. The studies were grouped for analysis based on the types of interventions they were evaluating. In some instances this masked the fact that many of the interventions, particularly more recently developed interventions, comprise of elements drawn from a range of approaches.

Nine of the studies explored the use of cognitive based therapies, but only three of the studies had a comparison group. When compared with those on a waiting list and not receiving treatment, the intervention appeared to be beneficial in reducing deviant responses to stimuli and the risks of recidivism. Evidence from before and after studies, suggested that whilst some of the CBT based interventions worked with some adolescents, the effects were not consistent and did not appear to reduce harmful sexual responses in all cases. One study explored the effectiveness of a CBT approach in younger children aged 5 to 12 years. The comparison group received play therapy. Both CBT and play therapy appeared to improve positive behaviours and lead to a reduction in HSB.

Three studies evaluated multisystemic therapies (MST). There is some evidence, that interventions that adopt a more holistic approach and are not simply focused on the abusive behaviour can lead to improved outcomes in terms of reduced HSB, more positive peer relationships, better school performance and reduced risk of recidivism.

One study evaluated activity based therapies. This study also reported beneficial outcomes, when compared with usual care in nonsexual re-offense rates, though no difference in sexual re-offense rates.

Conclusions

The current published evidence and 'grey literature' does not reflect the full range of interventions that are currently in use. The evidence available is largely dominated by evaluations of interventions that were developed for use in adult male sex offenders and also a dearth of studies of rigorous design. Most of the interventions that have been evaluated have been evaluating interventions of adolescent males who have committed sexual offenses. We identified very little evidence supporting interventions that address problematic HSB, i.e. behaviours that are harmful but do not include victimising another. Interventions for younger children, girls and adolescent females, children and young people with learning disabilities are also poorly represented in the current evidence base. Those interventions that include the family and which seek to consider and treat the child within their social context appear to have greater chance of improving social and psychological wellbeing and reduce the risk of recidivism. However, the evidence is far from conclusive, and there is a need for further

research to identify which components of interventions are most effective, why, for whom, and in which contexts.

SUMMARY of QUALITATIVE DATA

Introduction

Numerous factors make it difficult to assess the scale of the problem of children and adolescents who display harmful sexual behaviour (HSB). Official statistics and existing research suggest children and young people account for a significant minority of all sexual abuse perpetrated in the UK.

This qualitative evidence synthesis (qualitative systematic review) seeks to complement an effectiveness review by examining existing published and unpublished qualitative research to establish what intervention components are viewed as acceptable or useful by children or adolescents who display harmful sexual behaviour, their parents or carers, health or social care professionals and health or social care managers and what considerations should be addressed when seeking to implement such interventions.

Aim

The overall review question was:

What types of interventions, including family and carer interventions, are effective and acceptable for children and young people who display harmful sexual behaviour (HSB)?

Within this overall question the qualitative review component aimed to identify data on the acceptability of the interventions from diverse stakeholder perspectives (i.e. young people, their family and carers, health and social care professionals and service managers).

Methods

We conducted specific searches across multiple health and social care databases. We pursued citations for all included studies in an attempt to identify related studies. We examined a larger subset of almost 5000 references (including duplicates) that had been coded as containing potential qualitative aspects.

Findings

We have identified 26 studies offering qualitative perspectives on the delivery of interventions for children and adolescents who display harmful sexual behaviour.

Conclusion

The role of the family is critical in the delivery of interventions for children and adolescents who display harmful sexual behaviour. This can be both instrumental, in the sense of improving the likelihood that children or adolescents will engage with interventions but also as a therapeutic element, particularly in strengthening family resources for longer term sustainability of intervention effects. As with interventions for adults displaying harmful sexual behaviour the therapeutic relationship and the therapeutic environment may be considered particularly important. There is some evidence to suggest that children and adolescents are likely to interpret this environment beyond the metaphorical sense of simply providing a "safe place" to be influenced by the physical features of the environment and the characteristics of therapists and other staff who work there. Factors contributing to an impaired effect for the adolescent who has displayed harmful sexual behaviour include negative therapist behaviours, concerns with initiation and ongoing engagement with the group process, adverse effects resulting directly from involvement in the group process or by being in proximity, the impairment of ongoing participation with school or other social activities, with different types of offenders and ongoing dysfunctionality of the family situation.

List of Abbreviations

ASO	Adolescents who have sexually offended
BL	Baseline
CBCL	Child Behaviour Checklist
CBT	Cognitive behavioural therapy
CSBI	Child Sexual Behaviour Inventory
CSCS	Children's Social Care Services
CS	Change score
DSMD	Devereuz Scales of Mental Disorder
ES	Evidence statement
FFT	Functional Family Therapy
FTP	Family Treatment Program
FWI	Fight With Insight
HSB	Harmful sexual behaviour
JSO	Juvenile Sexual Offender
J-SOAP	Juvenile Sexual Offender Adolescent Protocol
IASO	Intrafamilial Adolescent Sex Offenders
LA	Local Authority
MST	Multi-systemic therapy
NS	Non-significant difference between groups
PT	Play therapy
RCT	Randomised Controlled Trial

SHB	Sexually Harmful Behaviour
SW	Social Workers
YSBP	Youth with Sexual Behaviour Problems

EVIDENCE STATEMENTS

Abuse Focused Interventions

Cognitive Behavioural Based Interventions (CBT)

Cognitive restructuring therapy confronts deviant sexual arousal in adolescent sexual offenders (ES1.1)

Evidence from one US study (-)[1] , using a before and after design reported that there was a statistically significant decrease in deviant arousal from pre-treatment to posttreatment ($p<0.01$) among offenders who were involved with male victims. The mean erection response in those young people (n=7) who had used physical or excessive physical coercion towards their male victims the mean erection response was reduced from 60.3% pre-treatment to 21.4% post treatment. In participants who had used verbal coercion (n=4) the mean erection response was reduced from 28.5% pre-treatment to 12.2% post treatment. For the eleven subjects who had male victims there was a decrease in arousal (measured by erection response) post treatment that was statistically significant at the $p<0.01$ level $F=9.79$ (1,9) using a repeated measures ANOVA. There was little evidence that the treatment was effective for adolescent offenders with female victims. Changes in erection response increased following treatment from 36.3% to 72% in one participant who had used verbal coercion. In the 12 participants who had used physical or excessive physical coercion against female victims the erection response to cues pre-treatment was 32.0% and fell to 18.2% following treatment. These decreases were not statistically significant at the $p<0.05$ level. Another study from the same authors and conducted in the US (-)[2] also reported low rates of re-offending in the intervention group receiving CBT, and this is reported as 9% at one year post-treatment. However, the data for the comparison group was not reported.

Applicability

This evidence is only partially applicable to treatment of young sexual offenders in the UK. Measurement of outcomes using this method is also not used in the UKThe is because the sample is drawn from adolescent sex offenders aged between 13 and 18 years referred to a sexual behaviour clinic in New York City.

[1] Becker et al, 1988 (-), USA

[2]Becker & Kaplan, 1993 (-), USA

Satiation therapy (verbal or masturbatory satiation) targets adolescent sexual offenders by decreasing deviant arousal and improving sexual impulse control (ES1.2)

Evidence from two US based before and after studies (-, -)[1,2] demonstrated that satiation therapy as one of the elements of CBT can be effectively used to decrease deviant sexual arousal in young sexual offenders. Adolescent perpetrators of offenses against prepubescent females showed a 35.5% reduction ($F(2,28) = 6.35$, $p<.01$)in plethysmograph responses in overall arousal to deviant cues from baseline conditions to a two month treatment interval, with a 39.1% reduction in overall deviant arousal shown by those adolescents who molested prepubescent males. Both groups of adolescent offenders showed a greater positive differential between arousal to stimuli involving consensual sexual activity with a same age female, and arousal to sexual activity with prepubescent children, following treatment. [1]

Applicability

The evidence has partial applicability in the UK. However, the management, characteristics and typologies of sexual young offenders in the UK may be different from that in NYC, US.

[1] Becker et al, 1988 (-) USA

[2] Hunter & Santos, 1990 (-), USA

The implementation of verbal satiation treatment technique can be effective in reducing deviant sexual arousal (ES1.3)

Evidence from two US studies (-)[1,2] suggests that verbal satiation using audio tapes, pictorial slides and phallometric evaluation showed decrease in offenders' arousal to atypical stimuli (14 out of 15 participants, from 70.5 % to 34.5%). In the first study, two subjects with 100% arousal pretreatment demonstrated 78% and 69% arousal posttreatment respectively. Verbal satiation suppresses arousal to deviant stimuli whist targeting reinforcement of arousal to appropriate stimuli. In the second study a group male adolescents (n=27) showed a significant decline in their percent deviant score from baseline and measured at nine months (ANOV, $F(3,63)=5.5$ $p=<0.01$). Age of the adolescent was a variable that predicted response to treatment, with older youth appearing to have a greater potential for learning to lower deviant arousal.

Applicability

The evidence has limited applicability to young people with HSB, i.e. applicable only to those with atypical arousal. This type of intervention may be less applicable to younger children. It

may also be less applicable to scenarios where the offender is closer in age to the victim. Psycho physiological assessment of changes in penile circumference are not outcome measures that are used in the UK.

[1]Kaplan et al, 1993 (-), USA

Hunter & Goodwin, (1992), USA

Cognitive restructuring therapy confronts rationalization of normalizing the engagement in deviant sexual behaviour used by offenders (ES1.4)

Evidence from 1 US study (-)[1] found that cognitive restructuring which is one of 7 components in the multisystemic treatment program confronts young offenders with cognitive distortion via role-playing (75- minute sessions of anger control training). Therapy aims to break the developed myths about adequate sexual functioning. Together with other components of the treatment, cognitive restructuring therapy decreased deviant arousal among offenders who were involved with male victims.

Applicability

The evidence is partially applicable to treatment of young sexual offenders in the UK. This is because the management, characteristics and typologies of sexual young offenders in the UK may be different from that in NYC, US.

[1]Becker et al, 1988 (-), USA

Vicarious sensitization (similar to covert sensitization) shows lower levels of deviant sexual arousal among adolescent sexual offenders (ES1.5)

Evidence from three US studies[1,2,3] (-,- ,+) found that the therapy showed significant reduction in deviant arousal. Weinrott et al (1997) (+) demonstrated that there was marginal decrease in deviant sexual arousal to prepubescent girls (38% vs 20%, % difference 18%, those on waiting list no reduction, after treatment 45% to 31%, % difference 14). The evidence from the study by Becker et al. (1988) (-) reported that covert sensitization (75-minute sessions) being one of the components of multisystemic treatment helped to disrupt the behaviours which would otherwise trigger offenders to come into contact with their victim. Hunter and Santos (1990) (-) also produced positive outcome by implementing covert sensitization (10 fifteen-minute tapes) in addition to satiation therapy and non-behavioural therapy. The evidence showed considerably lower levels of deviant sexual arousal, measured by penile plethysmograph.

Applicability

The evidence is partially applicable to treatment of young sexual offenders in the UK. This is because the management, characteristics and typologies of sexual young offenders in the UK may be different from that in NYC, US. That said the intervention meets the criteria of being a behavioural, highly structured treatment and focuses on a specific symptom.

[1]Becker et al, 1988 (-), USA

[2]Hunter and Santos, 1990 (-), USA

[3]Weinrott et al, 1997 (+), USA

SAFE-T Program (combination of CBT and relapse prevention techniques) shows significant reduction of the risks of sexual recidivism, violent nonsexual and nonviolent behaviour (ES1.6)

Evidence from one Canadian study[1] (+) found that SAFE-T program was effective to decrease recidivism rates for sexual assault by 72%. In comparison with the control group the treatment group had demonstrated a decrease in sexual assault (5.17% and 17.8% respectively), in violent nonsexual offenses (18.9% and 32.2% respectively), and in nonviolent offenses (20.7% and 50% respectively). The community based therapy included individual, group and family sessions whilst utilizing a mixture of CBT and relapse prevention strategies. The program targeted separately the issues related to denial and accountability, deviant sexual arousal, sexual attitudes, and victim empathy.

Applicability

The evidence has partial applicability to treatment of young sexual offenders in the UK. Although the management, characteristics and typologies of sexual young offenders in the UK may be different from that in Toronto, Canada, the participants were both male (94%) and female (6.1%), and were living in a range of settings including; home, secure-custody facilities, group homes, foster homes, or with friends or extended family. The participants also displayed a range of types of offense and victims. All had been referred for offenses involving direct physical contact with their victims, three for exhibitionism.

[1]Worling and Curwen, 2000 (+), Canada

CBT for younger children (aged 5-12 years) appears to have no benefit over dynamic play therapy. (ES1.7)

Evidence from one study from the US[1,2] (+) compared a CBT vs a play therapy (PT) intervention. Both followed manualized, session-by-session protocols for twelve 60-min sessions. Each session involved separate groups for children and parent groups. The CBT treatment relied on behaviour modification and psychoeducational principles, while the PT group was much less structured and was based on a combination of client- centred and psychodynamic play therapy principles. Both approaches were effective in increasing the children's social competencies while reducing their behavioural, affective and sexual behaviour problems. However, there were no significant differences between the two treatments. There were also no significant differences in the rates of subsequent inappropriate or aggressive sexual behaviour between the two treatment approaches, with 15% of the CBT group and 17% of the PT group reporting additional sexual behaviour problems. Ten year follow-up data[2] does report a significant difference between the groups, measured by juvenile and adult arrests and child welfare perpetration reports. The CBT group had fewer children who had committed sexual offenses (1/64 (1.6%)) compared with the PT group (7/71 (9.9%)). Given the high attrition rates and the small numbers of re-offenders at follow-up, it is difficult to establish if this difference is clinically significant. There were no group differences in nonsexual offenses (21%).

Applicability

The evidence has some wider applicability, as the participants were recruited from a range of settings, including child welfare, law enforcement and juvenile courts, physicians, school personnel and mental health centres. They included both girls (39%) and boys (61%) and were referred as a result of a range of different types of HSB. However, evidence is limited in its applicability to treatment of young sexual offenders in the UK as the management, characteristics and typologies of sexual young offenders in the UK may be different from that in Oklahoma, US.

[1] Bonner et al., 1999 (+), USA

[2] Carpentier et al., 2006 (+), USA

The Thought Change System Treatment is effective in decreasing psychological distress, sex offending risk and aggressive beliefs among male juvenile sex offenders (ES1.8)

Evidence from one US study[1] (-) found that a treatment called the Thought Change System which is a type of CBT demonstrated marginal reduction in externalizing deviant aberrant behaviours of sex offenders (64.0 (SD=10, Range 43-95) to 52.2 (Range=40-73)). Also, the therapy had an impact on decreasing cognition and aggressive behaviour (57.0 (SD=10, Range=43-84) to 47.50 (42-67). Finally, the therapy influenced the development of empathy

among juvenile sex offenders particularly targeting their understanding of the negative outcomes of inadequate cognition to their sexual offending behaviour.

Applicability

The evidence is partially applicable to treatment of young sexual offenders in the UK. This is because the management, characteristics and typologies of sexual young offenders in the UK may be different from that in Virginia, US.

[1]Apsche et al, 2004 (-), USA

Multi-systemic Therapy

MST can reduce the risk of adolescent's who have committed sexual offenses from re-offending when compared with CBT or usual care. (ES1.9)

Evidence from one controlled study[1] (-) and one RCT [2] (+) conducted in the USA found that significantly fewer MST participants had been re-arrested at follow-up for sexual offenses than in the comparison groups. In Borduin et al 1990 (-), at three years follow up the rates of recidivism for sexual offenses was 12.5% vs 75% for the control group who received individual therapy. In Borduin et al 2009 (+) the rates of arrests for sexual crimes was 13% vs 79% for the control group who received CBT group and individual interventions.

Applicability

These studies have limited applicability to the UK setting because they were undertaken in the US. Therefore the typologies of youth sexual offender and 'usual care' may differ to those in the UK. There should be caution in assuming that what works in the US setting will be similarly effective when compared with the UK model of 'usual care'. The later study by Borduin et al (2009) does draw on a larger more heterogeneous population so has greater external validity. The intervention was also designed and its fidelity monitored by the team also assessing its effectiveness. This too raises questions about its transferability, and its potential for being similarly effective if implemented by other practitioners.

[1] Borduin et al, 1990 (-), USA

[2] Borduin et al, 2009 (+), USA

MST for adolescent sex offenders can lead to a reduction in deviant sexual interests when compared with CBT oriented usual care. (ES1.10)

Evidence from one moderate quality RCT[1] (+) measured problem sexual behaviour (using the ASBI), and found that youth in the MST group decreased from pre-treatment to 12 months post-recruitment ($p < 0.05$). Youth in the MST group significantly reduced in deviant sexual interests and problem sexual behaviour compared to those in the usual care group.

Applicability

This study has

[1] Letourneau et al, 2009 (+), USA

MST can reduce both psychiatric symptoms and anti-social behaviour in adolescents who have committed sexual offenses when compared with CBT oriented usual care. (ES1.11)

Evidence from two US studies[1,2] (+,+) found that parents' and youths' reports of psychiatric symptoms (measured using BSI-GSI) decreased from pre to post-treatment (BBPC, M 45.40 vs 21.11, SD=14.88 vs 17.19), whereas counterparts in the usual care groups showed increases in their symptoms (M 31.66 vs 42.21, SD=23.95 vs 26.17). In addition, a significant effect emerged for parents' reports of youth behaviour problems. Parents in the MST group reported a decrease in youth behaviour problems, from pre to post-treatment, whereas parents of usual care youths reported an increase in behaviour problems. Youths in the MST group also showed a significantly greater reduction in self-reported externalizing symptoms over time compared to youths in the usual care group.

Applicability

These studies have limited applicability to the UK setting because they are undertaken in the US. Therefore the typologies of youth sexual offender and 'usual care' may differ to those in the UK. There should be caution in assuming that what works in the US setting will be similarly effective when compared with the UK model of 'usual care'. Borduin et al (2009) is also limited in its wider applicability as the intervention was designed and its fidelity monitored by the team also assessing its effectiveness. This raises questions about its transferability, and its potential for being similarly effective if implemented by other practitioners. Letouneau et al (2209) seeks to address this in a study where the intervention is a community based MST service delivered by an existing private provider, rather than clinical psychology doctoral studies and the principle investigator providing the clinical training and supervision.

[1]Borduin et al 2009 (+), USA

[2]Letourneau et al 2009 (+), USA

MST for adolescent sex offenders can lead to improvements in family and peer relations when compared to CBT oriented usual care. (ES1.12)

Evidence from one US based study[1] (+) measuring family functioning (using FACES-II) reported improved cohesion and adaptability at post-treatment (Cohesion M 45.74 vs 53.58 SD 12.62 vs 10.63; Adaptability M=33.11 vs 41.47 SD 13.83 vs 12.36). In the control group, receiving usual care, measures of cohesion and adaptability declined (Cohesion M 50.91 vs 47.42 SD 12.67 vs 14.88; Adaptability M=40.10 vs 35.91 SD 12.96 vs 13.45). Measures of youth emotional bonding to peers and social maturity with peers (MPRI) reported increases in emotional bonding (M=12.83 vs 14.05 SD 2.05 vs 1.61) and social maturity from pre to post-treatment for youths in the MST group (M=11.04 vs 12.30 SD 2.34 vs 1.77), whereas peer bonding (M=13.10 vs 12.27 SD 2.48 vs 2.44) and social maturity (M=10.62 vs 9.81 SD 2.46 vs 2.27) decreased over time for youths in the usual care group. Parents and teachers of youths receiving MST also reported decreases in youth aggression toward peers at post-treatment, whereas parents and teachers of usual care youths reported increases.

Applicability

This finding has limited applicability to the UK setting because the study was undertaken in the US. Therefore the typologies of youth sexual offender and 'usual care' may differ to those in the UK. There should be caution in assuming that what works in the US setting will be similarly effective when compared with the UK model of 'usual care'. The study by Borduin et al (2009) does draw on a larger more heterogeneous population so has greater external validity. The intervention was also designed and its fidelity monitored by the team also assessing its effectiveness. This too raises questions about its transferability, and its potential for being similarly effective if implemented by other practitioners.

[1]Boduin et al 2009 (+), USA

MST for adolescent sex offenders can lead to improvements in school performance when compared to CBT oriented usual care. (ES1.13)

Evidence from one US study[1] (+) found that parents and teachers of youths receiving MST reported increases in youths' grades at post-treatment (M=1.67 vs 2.49 SD 0.77 vs 0.99), whereas parents and teachers of youths receiving CBT oriented usual care reported decreases in grades (M=1.85 vs 1.22 SD 1.06 vs 1.06).

Applicability

This finding has limited applicability to the UK setting because the study was undertaken in the US. Therefore the typologies of youth sexual offender and 'usual care' may differ to those in the UK. There should be caution in assuming that what works in the US setting will be similarly effective when compared with the UK model of 'usual care'. The study by Borduin et al (2009) does draw on a larger more heterogeneous population so has greater external validity. The intervention was also designed and its fidelity monitored by the team also assessing its effectiveness. This too raises questions about its transferability, and its potential for being similarly effective if implemented by other practitioners.

[1] Borduin et al, 2009 (+), USA

Adventure based therapy for adolescent male sex offenders appears to be beneficial in reducing future risks of non sexual reoffending (ES1.14).

Evidence from one US based study[1] (+), used a matched control group to evaluate the effectiveness of an adventure based programme (LEGACY) to treat young sex offenders.

The Behaviour Management through Adventure approach centres on treatment focused on changing clients' thinking, feeling and behaving with the outcome of decreasing dysfunctional behaviour and increasing functional behaviour.

Re-arrest rates for violent sex offenses were no different between group; LEGACY (5.3%), YDC (5.3%) and OSP (8%). However there were significant differences in rearrest rates for nonsexual offenses; LEGACY (13.7%), YDC (29.5%) and OSP (24.2%).

Applicability

This study has partial applicability to the UK context as it was conducted in the USA. The typologies of youth sexual offender and 'usual care' may differ to those in the UK. There should be caution in assuming that what works in the US setting will be similarly effective when compared with the UK model of 'usual care'. There is also perhaps different cultural contexts that will influence a response to this type of intervention. The mediating factors of the relationships with the therapists may be important in influencing intervention effectiveness. However, it does support the growing emphasis on the value of strengths based approaches, which seek to build self esteem and self belief.

[1]Gillis and Gass 2010 (+),USA

Evidence Statements from the Qualitative studies

The involvement of the young person in supervised social activities that promote self-esteem and socially appropriate behaviours is a valuable component of effective treatment. (ES1.15)

Six qualitative reports from 4 contexts [1,2,3,4,5,6,] (++,++,++,-,-,-) support the need for young people with HSB to be involved in supervised social activities. This tackles the risk of social isolation, promotes self-esteem, the learning of socially appropriate behaviours and learning from good role models.

Applicability

This finding has good applicability to the UK context; it is supported by evidence from six reports, conducted in four different countries, including one from the UK. Two of the reports are of high methodological quality.

[1]Geary et al 2011 (++), New Zealand

[2] Somervell & Lambie (2009) (++), New Zealand

[3] Draper et al (2013) (+), South Africa

[4] Lambie et al 2000 (-), New Zealand

[5] Cheung and Brandes 2011 (-), USA

[6] Farmer and Pollock 2003 (-), UK

Flexibility to adapt the delivery of the intervention to meet the needs of the young person is important in maintaining their engagement and treatment effectiveness. (ES1.16)

Two qualitative studies [1,2 (++,-)] which collected interview data from families and professionals delivering HSB interventions, identified tensions between the flexibility needed by practitioners to respond to the individual needs of young people and the requirements for manualised treatment approaches. Flexibility to use a range of methods ensured that practitioners could help maintain young people's interest and involvement in the intervention.

Applicability

This study has good applicability to the UK context as the data was gathered in the UK, and it is a recent study.

[1]Belton et al 2014 (+), UK

[2]Muster 1992, (-), US

Relapse prevention and understanding the factors that led to the harmful sexual behaviours are traditional components of treatment programmes and appear to be important in helping young people with HSB. (ES1.17)

Evidence from three qualitative studies [1,2,3] (++,++,+) endorsed the value of relapse prevention and understanding the factors leading to HSB as components that are traditionally part of an intervention programme. One qualitative study [4 (-)] described the treatment of female sexual offenders which also included helping the young women to develop a discourse that enabled them to develop a narrative to describe their HSB and the factors that led to it. However, safety plans to prevent relapse were not always found to be well recalled by the young people themselves. There are also risks in the notion of a cycle of abuse which highlights useful risk factors but may also become part of a self-fulfilling prophecy.

Applicability

This has direct applicability to the UK context.

[1]Geary et al 2011 (++), New Zealand

[2] Halse et al 2012, (++), Australia

[3] Allan et al 2006, (+), Australia

[4] Miller 2011, (-), US

Victim empathy is a component of many interventions, and the modelling role of the therapist may be critical in this respect, particularly for males with no father figure. (ES1.18)

Evidence from three qualitative studies [1,2,3] (++,++,+) endorses victim empathy as a useful component of interventions to treat HSB. In the study by Geary et al (2011) victim empathy received the greatest mention by adolescents, parents and caregivers across all sites. Participants also describe their own experiences of also not being shown empathy and this is an attribute of the relationship they form with the therapist that is particularly valuable.

Applicability

Although these studies were not conducted in a UK context, these studies are methodologically rigorous and the findings are supported by relevant programme theory. Therefore it has direct applicability to the UK context.

[1]Geary et al 2011 (++), New Zealand

[2] Halse et al 2012, (++), Australia

[3] Allan et al 2004, (+), Australia

Anger management is not only an important component of HSB treatment for helping young people to manage HSB, but it is also a transferrable skill that can help them manage their anger in other social settings. (ES1.19)

Evidence from three qualitative studies [1,2,3] (++,-,+) suggests that anger management is an important part of treating young people with HSB. Anger has been found to be correlated to both sexual and non-sexual recidivism. Treatment programmes seek to provide adolescents with the concepts and skills to understand and develop prosocial attitudes and behaviours. Family members also communicated a great deal of anger on their part and they were only able to come to terms with the offence their adolescent has committed once they are able to let go of this anger. This suggests that intervention with anger management at a family level may yield additional benefits. Some studies suggested that harmful sexual behaviour expressed a perceived need to exert power or control over others in the form of anger or aggression.

Applicability

This is directly applicability to the UK context, it is dealing with a problem that is common to all groups irrespective of culture, and one of the studies was conducted in the UK.

[1]Geary et al 2011, (++), New Zealand

[2]Slattery et al 2012, (-), Ireland

[3]Green & Masson 2002, (+), UK

Support of parents and carers is a key factor in engaging young people in the programme and helps them to reinforce the messages outside the sessions. Greater family support, education and inclusion in the treatment itself was key. (ES1.20)

Evidence from five qualitative studies [1,2,3,4,5] (++,+,+,-,+) identify family support as crucial. They found that for most adolescents (83%), irrespective of ethnicity, the participation and support

of family members made a significant contribution to their involvement in treatment. Notwithstanding the strong presence of the traditional components of interventions described in previous evidence statements, the most substantive theme to emerge across the studies was the role of the family in the treatment programme. Harnessing family strengths provides a potential route by which to sustain the effects of an intervention beyond the lifespan of a formal treatment programme. In this context family engagement is key.

Applicability

Although these qualitative studies were not conducted in the UK, they have direct applicability to the UK context. The quality of the study design gives them greater external validity.

[1]Geary et al 2011, (++), New Zealand

[2]Allan et al 2004, (+), Australia

[3]Jones 2014, (+), US

[4]Lawson 2003, (-), US

[5]Pierce 2011, (+), US

The characteristics of the therapist and the relationship with the young person are vital to effective interventions. The relationship needs to be characterised by empathy, trust and connection and feeling safe. (ES1.21)

Evidence from three qualitative reports from two contexts [1,2,3] (++,++,++), highlighted the importance of therapist characteristics in generating rapport that was critical to effective treatment. Participants valued therapists who were understanding, caring, encouraging, challenging and supportive, and respectful and non-judgemental. They also appreciated therapists who were available outside session times, had a sense of humour and who showed a genuine and personal interest in the young person. For many adolescents it was particularly important that therapists were trustworthy, ''down-to-earth'' and patient by allowing sufficient time so they could progress at their own pace. Negative therapist behaviours identified, albeit by a minority of interviewees, included the expression of anger, lateness for appointments, swearing, using difficult language, and failure to notify parents and caregivers about changes of session times and appointments. It is evident that a strong therapeutic relationship between young people and practitioners is important in helping to motivate and engage young people in the programme.

Applicability

These findings have good applicability to the UK context; the studies are methodologically rigorous and the findings are unlikely to be determined by cultural context.

[1]Geary et al 2011, (++), New Zealand
[2]Yoder & Ruch 2015, (++), USA
[3] Yoder 2013 (++), USA

Growing maturity may operate with therapist effects in breaking the offender cycle. (ES1.22)

Evidence from one study[1] (++) highlights the important role of growing maturity in the treatment of young people with HSB. In contrast to adult sex offenders who may have proved unable to break the offender cycle, adolescent offenders are experiencing personal development and growth, changes to growing maturity together with therapist effects. This growth and development further emphasises a requirement for flexibility in approach, further emphasising that a one-size fits all intervention approach is not appropriate.

Applicability

This finding has good applicability to the UK context, it is drawn from a methodologically rigorous study and relates to a feature of all young people irrespective of cultural and socio demographic contexts.

[1]Halse et al 2012, (++), Australia

Initiating treatment, particularly commencing group therapy may present particular challenges for young people and their families. (ES1.23)

Evidence from two qualitative studies[1,2] (++,++) reported the initial difficulties and fears families and young people experience when initially engaging with the programme. This serves to emphasise that the need for communication between service providers in the delivery of interventions to children and young people with HSB should occur before the delivery of interventions. Failure to recognise the fears and anxieties of families and young people may be a barrier to their participation.

Applicability

This finding has good applicability to the UK context, it is drawn from a methodologically rigorous study and relates to a feature of all young people irrespective of cultural and socio demographic contexts.

[1]Geary et al 2011, (++), New Zealand

[2]Halse et al 2012, (++), Australia

Barriers to continuing in ongoing treatment include parental difficulties in discussing their child's offending and young people missing out on social activities. (ES1.24)

Evidence from one qualitative study[1] (++) highlighted some of the barriers to continuing in treatment. In some cases the ongoing process of attending the programme were reported as being very challenging, particularly for parents who had to discuss their own child's offending as well as listen to the experiences of others. Some participants appeared to resent having to neglect their school based activities in order to attend the programme thus inhibiting their participation in normalising social activities.

Applicability

This finding has good applicability to the UK context, it is drawn from a methodologically rigorous study and relates to a feature of all young people irrespective of cultural and socio demographic contexts.

[1]Geary et al 2011, (++), New Zealand

Stigma and ostracism may arise if young people are labelled as a sex offender. Treatment programmes that do not differentiate between offenders may be valuable but it also raises additional problems if sex offenders are treated in the same setting as young people who may be victims of sexual abuse. (ES1.25)

Evidence from four qualitative studies [1,2,3 ,4] (-,+,-,+) commented on the stigma associated with being labelled as a sex offender. Some commentators pointed out the dual victim/perpetrator status occupied by many clients within the treatment programmes. A residential environment that chose not to differentiate between offenders and other children was seen as a positive ethos. This avoids the potential for stigma and ostracism reported in many studies. However this situation was paradoxically seen as offering additional problems whereby a sex offender may find themselves with access to past or potential victims of similar abuse who need

protection. Concerns revolve not simply around safety issues but also with regard to the learning of negative skills.

Applicability

This finding has good applicability to the UK context; one study was carried out in the UK and one in Ireland.

[1]Brogi & Bagley 1998, (-), UK

[2]Allan et al 2004, (+), Australia

[3]Slattery et al 2012, (-), Ireland

[4]Green & Masson 2002 (+), UK

Treatment in group settings may be valuable for reducing a sense of isolation. Group work can provide valuable support both to the young person and to their family. For the young person it may be destigmatizing and reduce their sense of isolation. However, it also has potential harms. (ES1.26)

Evidence from three qualitative studies [1,2,3] (++,+,-) describes the potential benefits and harms of treatment in group settings. While it provides an important opportunity to remove the sense of being isolated, both for the young person but also their family, it does also raise the potential problem that for some discussing such difficult issues in front of others is not helpful. Uninformed mixing of youths who have shown different severities of harmful sexual behaviour in therapy groups may be harmful.

Applicability

This finding has good applicability to the UK context, it is a high quality study and the issues are resonant with those in the UK.

[1]Geary et al 2011, (++), New Zealand

[2]Duane et al 2002, (+), Ireland

[3]Martin 2004, (-), US

Communications and social skills training can be a very beneficial component of treatment that can lead to improved family relationships. (ES1.27)

Two high quality studies[1,2] (++,++) recommend communication and social skills training for both the adolescent and the family. This can lead to a general improvement in family relationships.

Applicability

These are high quality studies and the findings are relevant to treatment programmes delivered in a UK context.

[1]Geary et al 2011, (++), New Zealand

[2]Halse et al 2012, (++), Australia

Families and caregivers feel a lack of aftercare and the risk this presents to reoffending. (ES1.28)

Two studies, one of high and one of low quality[1,2] (++,-), highlighted the concerns of families and young people about the need for ongoing support, in order to help plan future directions and to maintain progress.

Applicability

These findings may have less applicability to the UK setting, the provision of follow-up care may vary, and it is not possible to conclude views on existing provision in the UK.

[1]Geary et al 2011, (++), New Zealand

[2]Slattery et al 2012, (-), Ireland

BACKGROUND

Introduction

Since the early 1990s in the UK, there has been increasing recognition that children and young people may display sexual behaviours that lie outside normative developmental parameters and that can be experienced as harmful or abusive by others. A range of terms has been used to describe both these behaviours and the children and young people who demonstrate them, including for example 'sexually aggressive children' (Araji, 1997), 'young abuser' or 'young sexual abuser' (Vizard, 2002), 'young people who sexually harm' (NOTA, 2003) and 'adolescent sex offenders' (Veneziano and Veneziano, 2002). Myers (2002) suggests that terms such as 'adolescent sex offender' or 'young abuser' reflect a dominant perspective on young people as 'mini' adult sex offenders and argues that such terms stand in stark contrast to emerging practice approaches which embody a positive and child-centred philosophy. Hackett (2001) similarly argues that other terms such as 'young people who sexually abuse' while better emphasising children's developmental status, also bring with them some unfortunate implications, particularly as they imply (through the use of the present tense) that the sexual behaviours are likely to be persistent. Hackett (2004) further distinguishes between sexual behaviours that are 'abusive' and those that are 'problematic'. He suggests that the term 'sexually abusive' is mainly used to indicate sexual behaviours that are initiated by a child or young person where there is an element of manipulation or coercion (Burton et al, 1998) or where the subject of the behaviour is unable to give informed consent. By contrast, the term 'sexually problematic' is more often used to refer to sexual activities that may not include an element of victimisation but may interfere with the development of the child demonstrating the behaviour or which might provoke rejection, cause distress or increase the risk of victimisation of the child. As both 'abusive' and 'problematic' sexual behaviours are developmentally inappropriate and may cause developmental damage, Hackett (2014) argues that a useful umbrella term is 'harmful sexual behaviours' and this conceptualisation has become, at least in the UK, the preferred terminology of many organisations. NSPCC, for example, defines harmful sexual behaviour as when:

'One or more children engaging in sexual discussions or acts that are inappropriate for their age or stage of development. These can range from using sexually explicit words and phrases to full penetrative sex with other children or adults.'

Such behaviours may impact on both victims and the young people who display harmful sexual behaviours, as well as their families and the wider systems and communities in which such children live.

There are no national data on harmful sexual behaviour among children and young people. The largely hidden nature of child sexual abuse makes recognition difficult. The stigma and shame associated with victimisation may lead to under-reporting and the broader social context is one of hostility towards individuals responsible for acts of sexual abuse. All these factors make it difficult to measure accurately the true scale of the problem (Masson, 2001). Nonetheless, official statistics and existing research suggest children and young people account for a significant minority of all sexual abuse perpetrated in the UK. Reviewing the pattern of criminal statistics over a period of a decade, Hackett (2004) estimated that between one fifth and one third of all child sexual abuse in the UK involves other children and adolescents as perpetrators. Some authors suggest the figure is even higher. Vizard et al (2007) reported that 30-50% of sexual abuse is perpetrated by adolescents, mostly boys. Other more recent indicators appear to show a drop in the number of young people sentenced for sexual offences. An overview of sexual offending in England and Wales published by the Ministry of Justice (2013a) highlighted that of 5,977 offenders found guilty of sexual offences in 2011 in England and Wales, 491 were juveniles under the age of 18 (i.e. 8.2% of all convictions). This represents a decrease of 11.9% from the corresponding figure (20.1%) in 2005. Of the 491 juvenile sexual offenders, the overwhelming majority (80.9%) were given community sentences; only 13.8% were sentenced to immediate custody.

However, official criminal statistics record only the minority of cases involving sexual offences by young people that come to the attention of police and the courts. Little is known about young people who display problematic sexual behaviours that do not reach the level where it is regarded as warranting action through the criminal justice system. The few general population surveys that have considered the issue suggest that a high level of sexual abuse of children and young people is perpetrated by peers. In their study of child maltreatment in the UK using a randomly generated postcode sample of over 6,000 individuals, Radford et al (2011) found that 65.9% of the contact sexual abuse reported by children and young people was perpetrated by under 18-year-olds.

The National Children's Home (NCH) Committee of Enquiry into Children and Young People who Sexually Abuse Other Children (NCH, 1992) was the first significant attempt to understand the specific needs of these young people and to outline a coherent response. This landmark Inquiry found that consistent and co-ordinated approaches to investigation were rare. Assessment and interventions were under developed (NCH, 1992). Just over two decades later a joint inspection was published into the effectiveness of multi-agency work with young people in England and Wales who had committed sexual offences and were supervised in the community (Criminal Justice Joint Inspection, 2013). The Inspection involved detailed analysis of 24 cases

in six youth offending teams on the young person's journey from disclosure of the offence through to supervision in the community. The report found that practice responses were generally poor: opportunities for early intervention at the onset of harmful sexual behaviours were often missed; there were few examples where holistic, multi-agency assessments had been undertaken and shared or of multi-agency interventions; and case management was often compromised by poor communication and information sharing. Examples of good practice existed, but the needs of young people were generally poorly met by the services working directly with them (Criminal Justice Joint Inspection, 2013).

Comparing the Inspection report (2013) to the earlier NCH report (1992) Smith, Allardyce, Hackett et al (2014) note significant continuing gaps in policy and practice responses. According to Hackett (2014), progress over the last two decades has been steady, but not remarkable. A range of specialist assessment and intervention services has been established in the voluntary, private and statutory sectors across the UK (Smith et al, 2013; Hackett et al, 2005). Many Local Safeguarding Children Boards or Child Protection Committees across the four nations of the UK now acknowledge the issue of young people with harmful sexual behaviours in their interagency procedures and policy documents. Many also offer short courses on the topic of young sexual abusers as part of their interagency training programmes (Hackett et al, 2013a). However, despite previous attempts – including drafts commissioned by government – there is still no national strategy or overarching service delivery framework in relation to this issue across the UK. There is also evidence to suggest that knowledge and awareness is not evenly distributed among professionals more generally (Criminal Justice Joint Inspection, 2013; Deacon, 2013).

Research on the issue of sexual abuse perpetrated by children and young people has gathered pace in recent years alongside the surge of practice interest in the subject. Indeed, from a base of just a few studies prior to the 1980s, Finkelhor and colleagues (2009) report that well over 200 research articles have now been published internationally (Finkelhor et al, 2009). There is a developing body of UK publications (for example, Calder, 2001; Erooga and Masson, 1999 and 2006) but relatively little UK-based empirical research. It has been suggested that the state of research in the sexual abuse field consists of a mixture of developmental and clinical studies that often use less rigorous methods than other areas of research (New et al, 1999). The sexual behaviour of children and young people within the general population is a sensitive topic, which may explain why clinical descriptions are so emphasised in the literature and why significantly less attention has been given to outcome studies and randomised control trials (Chaffin et al, 2002). To date, then, the effectiveness of different therapeutic approaches with sexually abusive children and young people has largely not been demonstrated (Seabloom et al, 2003). Finkelhor

and Berliner (1995) suggest that although a large body of clinical theory and expertise now exists about sexual abuse, little of this knowledge has been developed using the rigorous tools of treatment evaluation research.

So, Hackett (2014) suggests that despite the increasing attention given to research in this area, we have what amounts to not so much as a knowledge base, as a knowledge pile. The focus of this work is to consider the growing body of research and evaluate the evidence of effectiveness in the identification and management of children and young people who display harmful sexual behaviour by providing answers to the scope questions and to help develop the guideline.

In summary:

- Children and young people account for approximately a quarter of all convictions against victims of all ages and a third of all sexual abuse coming to the attention of the professional system in the UK.

- There is a developing body of research into the issue of children and young people as the perpetrators of acts of sexual abuse, but to date UK-based studies are limited.

- Professional awareness of children and young people with harmful sexual behaviours has grown, but significant variations and gaps in service delivery remain.

- There have been some noticeable improvement in aspects of policy and service delivery across the UK over the last two decades, as knowledge and awareness of the needs and risks posed by young people has developed.

- Policy developments are almost entirely focused on young people with harmful sexual behaviours, with the different profiles and needs of younger children with problematic sexual behaviours, those with learning disabilities and other minority groups notably absent from professional debates.

- There continue to be systemic weaknesses in the processes and procedures in place to support and manage young people presenting with harmful sexual behaviours in the UK.

- Smith, Allardyce, Hackett and colleagues (2014) note the total absence of informed public debate about preventing child sexual abuse and limited provision around primary prevention means we are still some way off from an effective and joined-up approach to this issue across the UK.

Definitions

Various terms have been used to refer to children who engage in developmentally unexpected sexual behaviours. These include; abuse-reactive, sexually reactive, sexually aggressive, sexualized children, children who molest, sexually abusive children, young sexual offenders. We are using the term 'harmful sexual behaviour' (HSB) as a descriptive term as it avoids labelling young children as sexual offenders, however it does not reflect the diversity of children who engage in sexualized behaviours. It is critical to differentiate children who engage in abusive sexual behaviours (e.g. oral, anal and vaginal penetration) from children whose sexual behaviours are problematic (e.g. compulsive masturbation). Problematic sexual behaviours do not harm others but create some risk for the children, make others uncomfortable or interfere in healthy psychosexual development.

AIMS AND OBJECTIVES

Research questions

What types of interventions, including family and carer interventions, are effective and acceptable for children and young people who display harmful sexual behaviour (HSB)?

The following elements of the interventions will also be explored and described:

- The theoretical underpinnings of the interventions and explanatory mechanisms that describe how, why and when they are effective.
- The settings and context in which the interventions are delivered and how these impact on their effectiveness.
- Barriers and facilitators to intervention effectiveness.
- The agencies involved in the delivery of the intervention and the degree of interagency communication the intervention promotes.

Categories of Children and Young People

An additional complexity of this evidence review is that the population of interest is very disparate. The appropriateness of assessment tools and treatments will be influenced by the developmental age of the child or young person, as well as the nature of the harmful behaviour. There are also sub-groups of children and young people whose particular needs may influence the assessment and interventions that are used and implemented. The extent to which these groups are covered by the existing evidence and the extent to which the tools and interventions meet their needs for accurate diagnosis, and treatment may differ. These subgroups include:

- Children and young people with intellectual disabilities
- Children and young people who offend online
- Young women who offend
- Young people who offend in the context of peer groups including gangs
- Children and young people who offend and have been the victim of abuse
- Children and young people who suffer social disadvantage

METHODS

Identification of evidence

Searching of electronic databases was completed on 28 May 2015.

Searches have been conducted in a range of multi-disciplinary bibliographic databases. These include:

MEDLINE via Ovid 1946-March Week 4 2015
Ovid MEDLINE In-Process & Other Non-Indexed Citations March 26, 2015
Embase via Ovid 1974 to 2015 March 26
Cochrane Database of Systematic Reviews via The Cochrane Library: Issue 3 of 12, March 2015
Database of Abstracts of Reviews of Effect via The Cochrane Library: Issue 1 of 4, January 2015
Cochrane Central Register of Controlled Trials via The Cochrane Library: Issue 2 of 12, February 2015
Health Technology Assessment Database via The Cochrane Library : Issue 1 of 4, January 2015
NHS Economic Evaluation Database via The Cochrane Library: Issue 1 of 4, January 2015
Science Citation Index Expanded (SCI-EXPANDED) --1900-present and Social Sciences Citation Index (SSCI) --1956-present via Web of Science
Social Care Online 1980-March 2015
PsycINFO via Ovid 1806 to March Week 4 2015
Social Policy and Practice via OvidSP 201503
EPPI-Centre - Bibliomap (mostly pre-2011), Dopher (2006-March 2015), TRoPHI (2004-March 2015)
The Campbell Library 2004-2015 (Volume 11)

Following the findings of the initial scoping search and in discussions with the NICE, a two stranded approach was applied to the searches, whereby a specific search naming particular interventions was conducted, followed by a more sensitive search using generic intervention terms. All references from the specific search were screened. The references from the sensitive search were screened using the "progressive fractions" technique.

Search terms were developed from the scoping search and in discussion with the NICE team. Thesaurus and free-text terms were utilised, relating to the population (children and young people who demonstrate harmful sexual behaviour) combined with terms relating to interventions. The specific search focused on named interventions or the term "intervention*"

in the title. The sensitive search utilised generic intervention terms, such as campaign, programme, initiative, or the term "intervention*" in the abstract. All searches were limited to English Language, humans, and the publication time span of 1990-present. This time limit reflected the evolvement of work in this area, and was determined in discussion with topic experts. The acceptance that HSB in children and young people was a problem, and needed interventions that were not simply transferred from the treatment of adult offenders emerged after 1990.

Inclusion of relevant evidence

Two reviewers (FC, ES) independently, and blind to the other's results, sifted the results of the searching in order to identify studies for inclusion in the review. We used pre-defined criteria for population, intervention, comparator, study design and outcomes to determine inclusion in the review.

Types of participants

- Children and young people aged under 18 years who display harmful sexual behaviour. In this review the term 'children' refers to children under 10 – the age of criminal responsibility in England The term 'young people' refers to those aged 10 to 18 and includes those serving community sentences, those on remand and those serving custodial sentences.

- Children and young people up to the age of 25 who display harmful sexual behaviour and have special educational needs or a disability. This age extension is in light of the Children and Families Act 2014.

Types of activities and measures that will be covered

- Commissioning and partnership work (among the statutory, voluntary and private sectors) to identify, assess and help children and young people who display harmful sexual behaviour.

- Models or tools, including checklists that can distinguish between: normal behaviour, behaviour that needs to be assessed and monitored, and behaviour that needs a legal response and treatment.

- Programmes that help parents, carers and families to challenge negative behaviours before they reach a need for formal interventions such as 'early help' projects and support from family nurse partnerships or telephone helplines.

- Assessment tools to identify the specific level of risk posed by children and young people who display harmful sexual behaviour and to identify how to address their needs.

- Interventions with children, young people and their families and carers to address harmful sexual behaviour. This includes behavioural or cognitive behavioural approaches and clinical treatments such as the 'Turn the page' or 'Good lives' models.

Activities and measures that will not be covered

- Testing to determine the internal and external validity of instruments to assess harmful sexual behaviour among children and young people.

- Primary prevention programmes such as strategies to promote healthy sexual behaviours through personal, social and health education or sex and relationship education in schools.

Comparator interventions may include current practice or usual care or a modified version of the intervention.

Types of outcome measures

Short term outcome measures

- Engagement, participation and attendance of the young person and/or the family
- (Re)offence outcomes (sexual recidivism and non sexual offending/recidivism
- Anti/pro-social outcomes (including general health and wellbeing)
- Placement outcomes
- Victim empathy scales
- Self-esteem measures
- Depression scales
- Psychometric tests
- Depression, post-traumatic stress disorder (PTSD), anxiety and child behaviour problems

Medium/Longer term outcome measures

- Pre-adolescent outcomes will include stability of transition to secondary school

- Pro-social outcomes – positive educational outcomes, stable living environment, stable relationships
- Positive peer group interaction
- Physical health
- Resilient functioning outcomes (Farrington)

Methods of analysis/synthesis

Once identified and retrieved, data was extracted from the included studies independently by two reviewers (FC, ES). We used a piloted data extraction tool, designed in collaboration with topic experts within the review team (SH, KH). The data extracted can be found in appendix 2. This was then subject to a narrative synthesis. The heterogeneity between the studies in the types of outcomes, methods of collection and differing time points for collection of outcome data meant that it was not possible to statistically pool the data in a meta-analysis. Data was therefore subject to narrative synthesis. Studies were grouped on the basis of the type of intervention and results tabulated for comparison.

Quality assessment

Quality Assessment was conducted in accordance with the current version of the NICE manual procedures for assessment of randomised controlled and controlled trials. The combined assessment of each study was then used to inform the allocation of overall study quality, indicated using the agreed ++, + and – notation.

FINDINGS

We identified 205 potentially relevant papers from searching the electronic databases, and an additional 34 studies from a search of bibliographies of relevant reviews of the topic and citation searching. On further detailed reading of the 205 papers, 39 were included in the review. The reasons for exclusion included; interventions directed at adult perpetrators of sex offenses, review articles and interventions designed for the treatment of children who have been the victim of abuse, lack of outcome data. See Figure One for a flow diagram showing the results of the searching and sifting of references.

Of the included papers; 15 papers presented data from 13 studies that were quantitative in design, 26 papers were qualitative. See Table One for an overview of the designs of the included studies. Studies were rated as high quality (++), moderate (+) or low quality (-) after assessment of the study design.

Figure One: Flow diagram of Study Identification

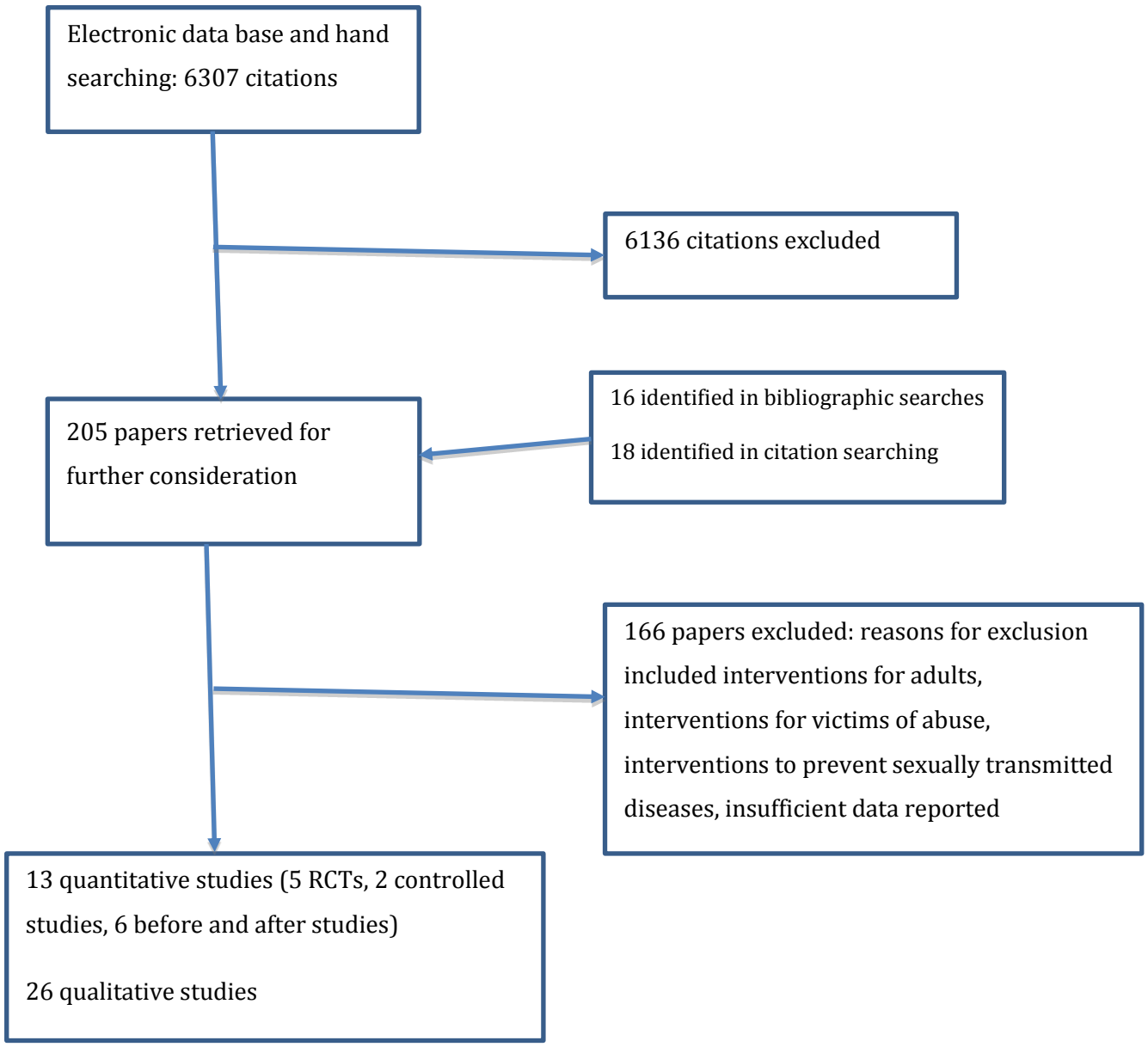


Table One: overview of the designs of the included studies.

Study design	**N identified**	**Quality Rating**		
		++	+	-
RCTs and controlled studies	7 (9 papers)	0	5	2
Pre and post test design	6	0	0	6
Qualitative studies	26	See qualitative review		

Case studies

Case studies were retrieved and used in this review to assist in identifying the spectrum of interventions that may be used in practice. They also served to further inform the search for relevant evaluation studies. We did not include the case studies in our assessment of the effectiveness of the interventions. We included case studies that described an intervention delivered to a child or young person with harmful sexual behaviour. The case studies were not critically appraised, as their purpose was to inform a mapping of the types of intervention that may be used in practice. Case studies were grouped by intervention type. They also provided an indication of the populations and sub-populations who are more commonly the focus of specialized interventions.

The list of retrieved case studies and the details of the cases are presented in table two.

Table Two: summary Interventions described in case studies

Study	**Intervention**	**Population and setting**
Abuse specific approaches		
Epps 1996	CBT	UK, male adolescent with learning difficulties
Etgar 2009	CBT	USA, children with HSB
Hunter et al 2008	CBT	USA, adolescent male
Shenk and Brown 2007	CBT	USA, adolescent male with learning difficulties
Griffin 1997	'Young Abusers Project' Group based programme	UK, young people with HSB

Calley and Gerber 2008	Empathy promoting counselling strategies	USA, residential group. Adolescent males
Loar 1994	Brief interventions	USA, young children
Rasmussen 2008	Trauma Outcome process (integrating CBT and expressive therapy interventions)	USA, young children
Multisystemic therapy		
Resilience based approach		
Myers 2005	'The Junction' Uses solution focused and narrative approaches	UK, young people with HSB
Ayland and West 2006	Strengths based approach using a narrative therapy	NZ, Young people with learning difficulties who have sexually abused
Belton et al 2014	'Change for Good' Strength based approach	UK, males aged 12 to 18 years with HSB
Wylie (cited in Hackett 2014)	G-MAP (Good Lives Model)	UK, young people with HSB
Restorative Justice approaches		
Mercer (cited in Hacket 2014)	AIM project	UK, young people with HSB

The spectrum of interventions described in the retrieved case studies are listed in table two above. The interventions described in table two should not be seen as a complete glossary of potential interventions, for example it does not include multi-systemic therapy. It is clear, however, that while there are a range of specialized treatment programmes for children and young people with HSB, relatively few have been evaluated using rigorous methodology. Most evaluation studies have been undertaken in the USA. More recently, published research in the form of case studies and qualitative studies have emerged from the UK. Interventions described by Belton et al (2014), Myers (2005) and Griffin (1997) have all arisen from within voluntary sector organisations (NSPCC, Barnardo's, Young Abuser's Project). The 'Change for Good' intervention, designed and delivered by the NSPCC in the UK is currently being evaluated and quantitative data will be published in June 2016.

Hackett (2014) suggests that interventions for young people can be grouped within four broad categories. These include; abuse specific approaches which focus on treating the problem behaviour and are most commonly described in the literature. These types of treatment programmes have predominantly incorporated cognitive behavioural treatment (CB) with a relapse prevention component (Walker and McCormick, 2004). Relapse prevention is an approach that focuses on the identification and management of high-risk situations that could lead to relapse, ie reoccurrence of the harmful sexual behaviour (Laws et al, 2000).

A second group of interventions are those that adopt a mostly holistic and developmental approach and do not focus solely on the sexually abusive behaviours in young people. They seek to enhance the young person's broader life skills, addressing social isolation, opening up access to appropriate opportunities in the education system, addressing family problems and improving the young person's relationships with parents or carers (Right and Welch 2001).

A third group of interventions are those that adopt a resilience-based approach, in which strengths and competencies can be developed or bolstered in young people who have experienced significant adversity in their lives (Hacket 2014). The final group of interventions are those that adopt a rehabilitative approach to criminal justice that focuses on the needs of victims, who take an active role in the criminal justice process. Offenders are encouraged to take responsibility for their actions and where possible, repair the damage their offences have caused.

Interventions will be grouped in the review using the typology described above. What is evident is that while there are a range of approaches, and innovative treatments that have emerged to address weaknesses in existing methods, there remains little rigorous evaluation of their effectiveness.

Summary of Included Studies

We identified 15 publications (13 studies) for inclusion in the quantitative effectiveness review; 5 RCTs, 2 controlled studies and 6 before and after studies. The quantitative studies evaluated a limited range of potential types of intervention. The included studies evaluated cognitive behavioural based therapy, multi-systemic interventions and one evaluating an adventure based intervention.

Table 3: Included intervention studies

Intervention	Evidence	Settings and population
Cognitive behavioural interventions Covert Sensitization Imaginal Desensitization Satiation Training Insight-Oriented Therapies	2 RCTs and 1 controlled study (4 publications)	
	Bonner et al 1999 Carpentier et al 2006	USA, aged 5-12 with HSB (n=147)
	Weinrott et al 1997	USA, male adolescent sex offenders (of children >4 years younger) (n=69)
	Worling and Curwen 2000	Canada, adolescent sex offenders (n=148)
	6 before and after studies (no comparison group)	
	Apsche et al 2004	USA, severely disturbed male adolescents (n=10)
	Becker and Kaplan 1993	USA, adolescent male sex offenders (n=205)
	Becker et al 1988	USA, adolescent sex offenders (n=24)
	Hunter and Goodwin 1992	USA, adolescent males in residential treatment (n=39)
	Hunter and Santos 1990	USA, male adolescent sex offenders (n=27)
	Kaplan et al 1993	USA, male adolescent sex offenders (n=15)
Multi-systemic interventions	3 RCTs (5 publications)	
	Borduin et al 1990 Borduin et al 2009	USA, male adolescents (n=16) USA, arrested for a serious sexual offense (n=48)
	Letourneau et al 2009	USA, charged with a serious sexual offense (n=127)
	Henggeler et al 2009 Letourneau et al 2013	
Adventure based interventions	1 controlled study	
	Gillis and Gass 2010	USA, male adolescents who have committed sexual offenses (n=285)

Abuse focused interventions

Cognitive Behavioural based interventions

Treatment components of CBT for sexual offenders typically consist of psycho-education related to sexual arousal and cycles, identification of antecedents for sexual arousal, accepting responsibility for offensive behaviour, identification of cognitive distortions pertaining to sexually offensive behaviour, social skills training, empathy and relapse preventions (Marshall and Laws, 2003).

Two RCTs, one controlled study and six pre and post-test design studies were identified evaluating the effectiveness of CBT based interventions to treat harmful sexual behaviour (HSB) in children and young people.

Participants

There were 684 participants in the included studies, with numbers in individual studies ranging from 10 to 205. All of the studies were carried out in the USA, except one RCT (Worling and Curwen, 2000) which was undertaken in Canada. One study (Carpentier et al 2006, and Bonner et al 1999) focused on the effectiveness of CBT compared with play therapy in children aged between 5-12 years (mean 8.8 years). The other studies were all exclusively focused on adolescents with ages ranging from 11 to 19 years. The mean age in these studies ranged from 13.5 years to 15.87 years. The ethnic profile of the participants was described in seven studies (Carpentier et al 2006, Weinrott et al 1997, Apsche et al 2004, Becker et al 1998, Becker and Kaplan 1993, Kaplan et al 1993, Hunter and Goodwin 1992). In three studies the majority of participants were described as Caucasian (Carpentier et al 2006, Weinrott et al 1997, Hunter and Goodwin 1992) with the percentage Caucasians: 86%, 94% and 59%. In three the majority of participants were described as Black or African American (Apshce et al 2004, Becker et al 1988, Becker and Kaplan 1993) with the percentage in these ethnic groups: 60%, 67%, 66%. In one study Kaplan et al 1993, the majority of participants were described as Hispanic (40%).

The Carpentier et al (2006) and Bonner et al (1996) study is the only one to focus on a younger cohort of children (aged between 5-12 years). This study included more girls (30%) whereas all of the other studies focused almost exclusively on adolescent males. Referrals in this study came from a wider range of sources, including; mental health professionals and agencies (35%, social services (20%), school personnel (8%), foster care (6%), local advertisements (2%), the legal system (2%), physicians (2%), and other sources (3%), no information regarding referral in some cases (22%). They also included children with a wide range of HSB behaviours, whereas the other studies focused on adolescent males who had committed sexual offenses. This study

included children who had 'clinically significant' HSB. These were categorised as falling into one of three groups;

Group 1, Sexually Inappropriate Children, who represented behaviours in which there was inappropriate sexual behaviour but no contact with another person.

Group II, Sexually Intrusive Children, was composed of behaviours in which the child made sexual contact with another person in an inappropriate manner, but did so only briefly.

Group III, Sexually Aggressive Children, involved behaviours in which there was significant or prolonged contact resulting in completion of a sexual act. In most instances, the behaviours in Group III were implicitly and/or explicitly coercive or aggressive.

In all of the other studies the adolescent participants had committed abusive sexual offenses, consistent with group III using the typology described above. In one study (Apsche et al 2004) the participants were in residential accommodation as a result. In most cases the victims were much younger than the perpetrators of the sexual offence. In one study (Hunter and Goodwin 1992) 59% had a diagnosis of a learning disability and/or ADHD. See Table 4 for a summary of the characteristics of participants.

Table 4: CBT based interventions - Summary of Participants

Study	N	Gender (% male)	Age Range and mean (SD)	Ethnicity	HSB History
RCTs and controlled studies					
Carpentier (2006) Bonner et al (1999)	291	70%	CBT group: 8.8 years (SD 2) PT group: 8.1 years (SD 1.6) Clinic comparison: 8.8 years (SD 2)	African American: 11% American Indian: 4% White: 86% Other: 2%	The referred child had clinically significant HSB. The control group had been referred for disruptive behaviour and did not have HSB.
Worling and Curwen(2000)	148	94%	Range 12-19 years Mean 15.5 (SD 1.5) years	NR	98% were referred for 'hands on' offenses involving direct physical contact with their victims
Weinrott (1997)	69	100%	Range 13-18 years Mean 14.7 years	Caucasian: 94%	Committed a hands-on sex offense against a child at least 4 years younger than themselves.
Pre and post-test design studies					
Apsche et al (2004) USA	10	100%	Range: 11-18 years Mean: 13.5 years	African-American: 6% Eskimo-American: 2% European-American: 1% Hispanic American: 1%	Adolescent inmate sex offenders with a history of failed treatment at prior placements or outpatient treatment centres
Becker et al (1988) USA	24	100%	Range: 13-18 years Mean: 15.6 years	Black: 67% Caucasian: 4% Hispanic: 29%	All had engaged in a hands-on non-consensual sexual activity with another person. The 24 subjects had victimized a total of 47 victims. The majority of victims were younger than 13 years of age. All subjects were nonpsychotic.
Becker and Kaplan (1993) USA	205	100%	Range: 13-18 years Mean 15.4 years	Black: 66% Caucasian: 9% Hispanic: 23%	Adolescent sex offenders referred to the Sexual Behaviour Clinic
Kaplan et al (1993) USA	15	100%	Range: 13-18 years Mean:15.4 years	Black: 33.3% Caucasian: 13.3% Hispanic/Black: 13.4% Hispanic: 40%	Accused of or charged with having committed a sexual crime against a child
Hunter and Santos (1990)	27	100%	Range: 13-17 years Mean of molesters of boys: 15.75 Mean of molesters of females:15.87	NR	Adolescents referred for evaluation and treatment by a variety of sources. Each admitted to engaging in sexually inappropriate behaviours.
Hunter and Goodwin (1992) USA	39	100%	Mean: 15.4 years	African-American: 33.3% Caucasian: 59% Other minority groups 7.7%	All referred for "hands on" sexual offenses, averaging 2.7 victims each. 59% had been sexually victimized as a child 51% having been physically abused by a caretaker.

					Majority had a secondary psychiatric diagnosis, including 59% with a diagnosis of a learning disability and/or ADHD.

Interventions

Nine studies evaluated the effect of a CBT intervention on juvenile sex offenders' treatment using cognitive behavioural therapy. CBT is designed to change behaviour of offenders through modifying their thoughts, deviant arousal patterns, poor sexual impulse control and system of beliefs. Each study organised and provided treatment to juvenile sex offenders differently by using one or several components of CBT including verbal satiation, vicarious sensitization and cognitive restructuring. In one study (Worling and Curwen 2000), the population targeted were adolescent males who had committed sexual offenses against children more than four years younger than themselves. One US and one Canadian study designed CBT specialized programmes namely 'SAFE-T' and the 'Thought Change System' treatment programme. These programmes targeted a conglomerate of deviant behaviour characteristics and personality disorders not only sexually harmful behaviours.

Each of the studies describes the interventions as comprising of a number of components, with CBT as one of those components. In the study by Carpentier (2006) and Bonner (1996) the CBT treatment relied on behaviour modification and psychoeducational principles. The intervention was highly structured, using a teaching-learning model and addressed topics including acknowledging and identifying the inappropriate sexual behaviour, learning concrete sexual behaviour rules, learning behaviour self-control techniques, and sex education. The CBT caregiver group provided educational material on developmentally normal and atypical childhood sexual behaviour and taught specific behavioural child management skills for preventing and responding to problematic sexual behaviour. They included suggestions for supervision and minimizing opportunities or situations in which HSB tended to occur. The intervention was 12 sessions, each session of 60 minute duration and each session involved separate groups for children and parent groups.

The remaining studies included only adolescents and included males who had committed 'hands on' sexual offences, i.e. those involving direct physical contact with their victims. In three studies (Weinrott et al 1977, Becker et al 1988, Kaplan et al 1993) either all or the majority of participants had victimised children who were much younger than themselves. In one study (Apsche et al 2004) the participants were in residential care, and had a history of failed treatment for previous HSB. One RCT (Weinrott et al 1977) and five pre and post test design studies (Apsche et al 2004, Becker et al 1998, Becker and Kaplan 1993, Kaplan et al 1993, Hunter and Goodwin 1992), focused on reducing deviant arousal and the CBT programme incorporated sessions of verbal satiation and covert sensitization (Becker and Kaplan 1993, Kaplan et al 1993, Hunter and Santos 1990, Becker et al 1988, Hunter and Goodwin 1992) or vicarious sensitization (Weinrott el al 1977). See table 5 for a description of the components of

treatment programmes. The treatment duration ranged from 2 months to an average of 18.3 months for those in residential care. The SAFE-T (Sexual Abuse, Family Education and Treatment Programme) evaluated by Worling and Curwen (2000) is a specialized community based programme, and like the study by Bonner et al (1996) and Carpentier et al (2006) includes the family in the treatment to a far greater extent than those studies focusing on changing deviant arousal patterns. The SAFE-T programme designs treatment plans tailored for each offender and family with regular review of treatment goals. Offenders are typically involved in concurrent groups; individual and family therapy. The CBT and relapse prevention strategies address issues related to denial and accountability, deviant sexual arousal, sexual attitudes and victim empathy. Given that sexual deviance is only one aspect of the adolescent's life, however, related treatment goals include the enhancement of social skills, self-esteem, body image, appropriate anger expression, trust intimacy. See table 6 for a summary of the interventions evaluated in each of the studies.

Table 5: Components of interventions

Verbal satiation	Therapeutic technique adapted from Mashall's procedure. It teaches the offender how to use deviant thoughts in a repetitive manner to the point of satiating himself with the very stimuli that he may have used to become aroused.
Cognitive restructuring	A procedure that assists the subject in confronting his rationalizations about why it was okay for him to engage in deviant sexual behaviour. The majority of sex offenders know that their deviant behaviour is contrary to the morals and ethics of society, yet they give themselves permission to engage in such behaviour. These 'permission giving statements' are cognitive distortions used by offenders to justify their behaviours.
Covert sensitization	This disrupts behaviours that are antecedents to the offenders actually coming into contact with his victim. The procedure involves having the offender imaging and verbalize on tape the various feelings or experiences that lead him towards committing a deviant sexual act and then immediately bringing to mind very aversive images that reflect the negative consequences of proceeding in that direction.
Group treatment	(Kaplan) – includes role play, aims at modifying cognitive distortions. Sessions focus on developing assertiveness and learning to control anger. Sex education
Vicarious sensitization (VS)	VS is a form of aversive conditioning the aim of which is to decrease sexual arousal to prepubescent children. Perpetrators were alternately exposed to an audiotaped crime scenario designed to evoke deviant arousal followed immediately by an aversive video vignette. The aversive stimuli portray adolescent sex offenders contending with negative social, emotional, physical and legal consequences of their sex crimes. Subjects received approximately 300 VS trials over 25 sessions.

Table 6: CBT based interventions – summary of components of interventions

RCT and controlled studies	
Study	**Intervention**
Carpentier (2006) Bonner et al (1999)	**Setting:** USA, community based **Delivered by:** Male and female therapist teams, with doctoral psychology trainees or postdoctoral psychologists. **Components:** A manualized session by session protocol. 12 sessions, 60 minutes each. Each session involved separate groups for children and collateral parent groups. The intervention adopted behaviour modification and psychoeducational principles. Group time was highly structured, used a teaching-learning model and addressed topics including acknowledging and identifying the inappropriate sexual behaviour, learning concrete sexual behaviour rules, learning behaviour self-control techniques, and sex education. The CBT caregiver group provided educational material on developmentally normal and atypical childhood sexual behaviour and taught specific behavioural child management skills for preventing and responding to problematic sexual behaviour. Included suggestions for supervision and minimizing opportunities or situations in which HSB tended to occur. **Comparison group:** play therapy. Play therapy group was much less structured and was based on a combination of client centred and psychodynamic play therapy principles. A different set of play therapy activities, such as drawing self-outlines, were included. Therapists were minimally directive, were trained to give reflections, probe into feelings and interpret patterns of play. Each caregiver PT group began with a discussion theme. The themes were similar to those in the CBT caregiver group – sexual behaviour problems, boundaries, parenting strategies, sex education and self-esteem, but rather than providing a structured educational curriculum the PT caregiver group was less directive and the therapist followed the caregivers' lead in the group discussion, providing reflections. **Duration of treatment:** 12 sessions, 60 minutes each. **Duration of follow-up:** Bonner et al (1999) one and two year follow-up**.** Carpentier et al (2006) 10 year follow-up
Worling and Curwen 2000	**Setting:** Canada, community based **Delivered by:** SAFE-T program staff **Components:** The Sexual Abuse, Family Education and Treatment (SAFE-T) Program - A specialized community based program that provides sexual abuse specific assessment, treatment, consultation and long term support. Treatment plans are individually tailored for each offender and family and treatment goals are reviewed every 4-6 months. Offenders are typically involved in concurrent groups, individual and family therapy.

	CBT and relapse prevention strategies address issues related to denial and accountability, deviant sexual arousal, sexual attitudes and victim empathy. Given that sexual deviance is only one aspect of the adolescent's life, however, related treatment goals include the enhancement of social skills, self-esteem, body image, appropriate anger expression, trust intimacy. Family participation where ever possible. **Duration of treatment:** At least 12 months. Average length of treatment was 24.43 months (SD 5.43) and the mean length of concurrent family treatment was 16.02 months (SD 9.28). **Duration of follow-up:** The follow-up period ranged from a minimum of 2 years post initial contact to a maximum of 10 years (mean 6.23, SD 2.02). **Comparator:** waiting list (most receiving alternative treatment elsewhere)
Weinrott (1997)	**Setting:** USA, outpatient juvenile sexual offender treatment programme **Delivered by:** not described **Components:** 3 month regimen of **vicarious sensitization** as an adjunct to specialized CBT -25 sessions of VS twice per week after which they were reevaluated. Virtually all youths had been adjudicated and were participating in a specialized sex offender treatment at the time of referral. Most treatment programmes utilized a peer group format supplemented by individual and/or family therapy. Typical treatment activities include accepting personal responsibility, cycle identification, empathy training, anger management, elimination of 'thinking errors', social skills training, and relapse prevention. All youths continued in their core treatment while participating in the present study. Very little information about a youth's performance in VS was conveyed to referring therapists until participation ended. **Duration of treatment:** 3 months **Duration of follow-up:** 3 months **Comparator:** wait list
Pre and post-test studies	
Apsche et al (2004)	**Intervention/s description:** Behavioural Studies Program at the Pines Residential Treatment Centre. The Thought Change concept requires each resident to carry a manual and record all negative thoughts. The individual therapy, and groups revolve around the record of negative thinking and the associated behaviours as a result of their cognition that propels the resident into his sexual offense system. For those residents who have learning disabilities and reading problems, the entire curriculum is available on audiotape. The Thought Change System includes the identification of the functions of the negative thoughts, feelings, behaviours and beliefs, and replacing them with transitional thoughts, feelings, behaviours, beliefs and finally alternative beliefs. **Theoretical basis:**

	BSP is based on a unique model of cognitive behaviour therapy. The concept is predicated on changing the clusters of dysfunctional beliefs that are prevalent in adolescent sex offenders; this concept is accomplished through BSP's Thought Change Book (Apsche, 1999). Based on the collected works of Richardson, Kelly, Bhante and Graham (1997); Awad and Suanders (1991); Monto Agourides, and Harris (1998); Becker and Kaplin (1991); Becker & Hunter (1998) and Hunter (1989) **Setting:** Pines Residential Treatment Centre. A residential treatment for male and female sex offenders. **Duration of treatment:** Mean estimated length of stay was 18.3 months (SD=3.53 range 12-23)
Becker et al (1988)	**Intervention/s description:** A structured cognitive behaviour treatment program that is a modified version of the treatment program described by Abel et al. **Component 1:** Each subject underwent eight, 30 minutes sessions of **verbal satiation.** Following the satiations, subjects participated in a group orientation session. During the orientation session, the cotherapists (one male and one female) informed the subjects that during the following sessions they would learn appropriate ways of relating to people. **Component 2:** This consists of four, 75 minutes group sessions held weekly. The sessions focus on **cognitive restructuring**. Subjects are confronted with their cognitive distortions via role playing. Subjects are asked to play the roles of members of the victim's family, the victim or criminal justice personnel. The patient then has to confront the beliefs presented by the therapist. This process of role reversal is highly effective in helping the sex offender to understand the inappropriateness of his thinking. **Component 3:** This consists of one 75 minute group session during which the therapist explains **covert sensitization**. Following the initial group session subjects are required over the next three weeks to complete eight, 15 minutes covert sensitization audio tapes at the clinic during the group time. **Component 4:** This component consists of four, 75 minute sessions of social skills training to help adolescent learn the requisite skills to relate d in a functional manner to peers, and to increase their comfort and skill in interpersonal communication by role playing. **Component 5:** This consists of four, 75 minute sessions of anger control training. The subjects are taught alternative means of problem solving through role-playing. **Component 6:** This consists of sex education and values clarification. Subjects are taught about sexual myths, adolescent sexual development, and appropriate sexual behaviour. **Component 7:** This is two, 75 minute sessions of relapse prevention, which consist of listing the situations that present risks to them and learning to identify and cope with any urges or deviant thoughts they might experience in the future. One week following the completion of treatment, subjects undergo a clinical interview, paper and pencil testing and repeat psychophysiologic assessment. **Underlying theory:** A structured cognitive behaviour treatment program that is a modified version of the treatment program described by Abel et al. **Therapist fidelity:** Not described
Becker & Kaplan (1993)	Multicomponent program utilizing a cognitive behavioral model. Verbal satiation, group therapy, cognitive restructuring. Verbal satiation – 30 min./8 times. (maximum 16 sessions) followed by 40-week group treatment, five sessions of cognitive restructuring. **Underlying theory:** Multicomponent program utilizing a cognitive behaviour model that was initially developed for, and evaluated on, an adult sex

	offender population (Abel et al 1984). After attempting to utilize this adult model with an adolescent sex offender population, it became apparent that numerous modifications had to be made to make the intervention more appropriate given the level of cognitive, emotional and social development these adolescents displayed. **Therapist fidelity:** Group treatment led by a male and female co-therapist team
Kaplan et al (1993)	**Verbal satiation** 8, 30 minute sessions. Duration from 8-13 weeks **Underlying theory:** Marshall (1979) observes that repeated exposure to deviant stimuli may result in the exhaustion of the subject's response and therefore may be the most important ingredient involved in satiation therapy. **Therapist fidelity:** Not described
Hunter & Santos (1990)	Verbal satiation, covert sensitization, non-behavioural therapy. Non-behavioral therapy – twice a week individual therapy, once a week group therapy and once or twice per month family therapy. CBT – verbal satiation 4 hours per week; covert sensitization 10 of 15-minute tapes. **Intervention/s description:** Satiation therapy. Key components include the reduction of deviant arousal via satiation therapy and the use of covert sensitization to develop greater control over sexual impulses. Patients were provided with non-behaviour therapies, in addition to the specialized cognitive-behavioural interventions. These included: twice weekly supportive, insight-oriented individual psychotherapy, one time per week insight-oriented group therapy and one to two times per month family therapy. The insight oriented therapies emphasized helping each patient explore and gain a better understanding of relevant intrapsychic feelings, needs and conflicts that may have contributed to the problem (low self- esteem etc). Family sessions focused on educating the patients parents concerning the nature of his sexual problem, and exploring pertinent family system issues. Each patient participated in a therapeutic milieu which provided monitoring of compliance with the CBT protocols, peer and staff support for a commitment to desired therapeutic involvement and change, and increased status and privileges in the program for demonstration of positive peer and staff relations and attitude toward treatment. **Underlying theory:** The satiation procedure is based on an extinction model where in deviant fantasy is repeated until it becomes boring and devoid of its reinforcing properties. Covert sensitization successfully teaches the patient to pair fantasy of sexual perpetration with mentally aversive stimuli and increases the individual's ability to inhibit deviant sexual urges. Other areas of treatment focus include: social skills training; assertiveness training and anger control; correction of cognitive distortions pertaining to the meaning of the behaviour; empathy for victims and sex education **Setting:** Treatment was provided in an inpatient residential program for adolescent sexual offenders.
Hunter and Goodwin (1992)	Verbal satiation, a minimum of six months (four, 60 minute satiation sessions per week) of verbal satiation in addition to individual, group and family therapies of a non-behavioural insight-oriented and problem solving nature. The VS session were divided into two parts: ten minutes of description of consensual sexual activity with same age peer, followed by fifty minutes of repetition of a deviant sexual phrase pertinent to their target deviant sexual arousal and behaviour. Approximately three months after the initiation of verbal satiation therapy, each participant was instructed in the making of ten, 15 minute covert sensitization audiotapes.

Outcomes

Recidivism

Two studies using a CBT based approach reported recidivism rates (Carpentier et al 2006; Worling and Curwen (2000). In the Carpentier et al (2006) study the data was gathered ten years following treatment. Event reports were drawn from multiple data sources including; juvenile justice, adult criminal justice and child welfare databases in the State where the study was conducted. The databases were queried for arrests, and the child welfare database was queried for maltreatment perpetration reports. The authors report that it was not possible to confirm how many children in the sample were still living in the State during the entire follow-up period and this introduces a potential bias in the data. Worling and Curwen (2000) accessed both youth and adult records from a national registry of criminal arrests and convictions. The follow-up period ranged from a minimum of two years post initial contact to a maximum of ten years.

Both studies report a statistically significant difference in sexual recidivism rates between the treatment and comparison groups. Worling and Curwen (2000) report that the sexual recidivism rate for the comparison group (18%), was 72% higher than the recidivism rate for the treatment group (5%) ($p=< 0.05$). However they combined the participants from the assessment only, treatment refuser and treatment dropout groups to form the comparison group. When compared with the assessment only group, which included participants who were in 67% of cases receiving some form of treatment outside of the SAFE-T programme, the difference in sexual recidivism rates is smaller; 5% (treatment group) versus 13% (assessment only). They also reported rates of recidivism for violent nonsexual offenses and nonviolent, nonsexual offenses. In these outcomes they also found that the rates of recidivism were lower in the SAFE-T programme participants when compared with those in the assessment only group. (see table 7 and 8 for a summary of the outcomes).

Carpentier et al (2006) report recidivism rates for sexual offenses as 1.6% in the treatment group compared with 10.9% in the play therapy group. However, an earlier report of this trial reporting outcomes at one and two years follow-up, found no significant benefit of CBT when compared with play therapy (Bonner et al 1999). Furthermore, Bonner et al (1999) reported that only 63% of participants completed the required number of CBT sessions.

Psychometric Tests

Child Behaviour Checklist

Two studies (Bonner et al 1999, Apsche et al 2004) report child behaviour outcomes measured using the Child Behaviour Checklist (Achenback, 1991). This is a 134 item standardized checklist of childhood behaviour problems and social competence that is completed by parents or caregivers. It measures factors such as depression, somatic complaints, hyperactivity, sexual behaviour, aggressiveness and delinquent behaviour as reported by the parent. Bonner et al (1999) reported no difference between groups, but both the intervention group and the play therapy group had seen an improvement in their scores (CBT group change score from baseline -4.6, play therapy group change score from baseline: -5.5). Apsche et al (2004) in a pre and post test design reported an improvement in the CBCL score from a pre test 68.5 (SD11.2) to post test 57.4 (SD 11.6), with change score from baseline (-11.1). This study only had ten participants and no comparison group so the results have limited validity.

Child Sexual Behaviour Inventory

Bonner et al (1999) used the Child Sexual Behaviour Inventory, Version 2 (Friedrick et al 1989) to assess participant's sexual behaviour. The CSBI-2 is a 35-item instrument completed by a parent or caregiver to determine the presence and intensity of a range of sexual behaviours in children ages 2 to 12 over a six month period. The instrument assesses the child's sexual behaviours on a continuum ranging from mild to aggressive and provides separate clinical scores based on the child's age and gender. The primary function of the CSBI is for the evaluation of children who have been sexually abused or who are suspected of having been sexually abused. There was a reduction in the score between the baseline and follow-up in both groups, but no statistically significant difference between the final scores in each group (CBT 14.6 (SD 15.6) vs play therapy 11.3 (SD 10.8).

Juvenile Sexual Offender Adolescent Protocol (J-SOAP)

The Juvenile Sexual Offender Asssessment Protocol (Prenky et al 2000) is an actuarial risk assessment protocol and was used in the pre and post test design study by Apsche et al (2004). The total mean scores decreased from 25.9 (SD 1.67) at the six months point in treatment to 19.9 (SD1.44) at 12 months of treatment.

Devereuz Scales of Mental Disorders (DSMD)

Apsche et al (2004) used the Devereux Scales of Mental Disorder (The Devereuz Foundation, 1994) to test function in comparison to a normal group, via behavioural ratings. A score of 60 or higher indicates an area of concern. The therapists completed the form in this study. After

12 months of the Thought Change System, the total scores were reduced from a mean of 59.4 (SD 10) to 49.9 (range 42-67) after a 12 month period.

Phallometric assessment

Phallometric assessment was used in five of the included studies (Weinrott et al 1997, Becker et al 1988, Kaplan et al 1993, Hunter and Santos 1990, Hunter and Goodwin 1992). Only one of these studies had a control group (Weinrott et al 1997). This procedure measures penile erectile response to different sexual stimuli and is measured by means of a flexible band placed round the subject's penis, which is connected to a polygraph and which records the expansion and contraction of the penis in response to such images or stimuli. It does however, lack empirical studies validating its use, and poses certain risks as it exposes children and adolescents to further sexual stimulation through portrayal of deviant sexual activities (Grant 2006 in Erooga and Masson 2006).

Weinrott et al (1997) assessed the effectiveness of vicarious sensitization to reduce deviant arousal. They found that there was a statistically significant reduction in deviant arousal to prepubescent females after three months of treatment. Those in the waiting list, who were continuing in weekly CBT showed no improvement. The decreases in arousal applied solely to composites of young girls and not their teenage counterparts. Changes in homosexual arousal were more difficult to interpret.

Becker et al (1988), Kaplan et al (1993), Hunter and Santos (1990) and Hunter and Goodwin (1992) all assessed the effectiveness of verbal satiation, cognitive restructuring and covert sensitization as part of the CBT based programme. All of these studies used a pre and post test design without a control group. Each reported some success in terms of reducing arousal to deviant cues. Becker et al (1988) found, however, that the decrease in arousal posttreatment was statistically significant for those subjects who had engaged in inappropriate HSB with males, but that the decrease in arousal was not statistically significant in those who had engaged in inappropriate HSB with females. Hunter and Santos (1999) also found a reduction in overall arousal to deviant cues although the reduction was slightly greater for those perpetrators of sexual offenses against prepubescent males (39.2%) compared with the reduction in overall arousal in perpetrators of offenses against prepubescent females (33.6%). Hunter and Goodwin (1992) found that there was only a significant effect for those who remained in treatment for nine months.

Table 7: Summary of CBT study outcomes

	CBC[1] Total Scores Mean (SD)	**CSBI[2]**	**J-SOAP[3]**	**Recidivism Sexual offences** Number of reoffenders/total (%)	**Recidivism Non- Sexual offences**	**DSMD[4]**
Carpentier et al (2006) Bonner et al (1996) (+)	**CBT (n=30)** Pre: 67.4 (12.1) Post: 62.8 (12.6) CS: -4.56 **PT (n=25)** Pre: 67.5 (8.1) Post: 62.0 (10.0) CS: -5.47 NS	**CBT (n=30)** Pre: 21.7 (15.6) Post: 14.6 (15.6) CS: -7.16 **PT (n=25)** Pre: 20.8 (13.7) Post: 11.3 (10.8) CS: -9.51 NS	NA	**10 years follow up** **CBT:** 1/63 (1.6%) **PT:** 7/ 64 (10.9%)	NA	NA
Worling and Curwen (2000) (+)	NA	NA	NA	**6 years follow up** **SAFE-T:** 3/58 (5%) **Assessment:** 6/46 (13%)	**Violent nonsexual offenses** **SAFE-T:** 11/58 (19%) **Assessment:** 13/46 (28%) **Nonviolent nonsexual offenses** **SAFE-T:** 12/58 (21%) **Assessment:** 26/46 (59%)	NA
Apsche et al (2004) (-) *also beliefs assessment	**N=10** **Baseline:** 68.5 (SD 11.2) **12 months:** 57.4 (SD 11.6)	NA	**N=10** **Baseline:** 25.9 (SD 1.67) **12 months:** 19.9 (SD1.44)	NA	NA	**N=10** **Baseline:** 59.4 (SD 10) **12 months:** 49.9 (range 42-67)
Becker and Kaplan '93	NA	NA	NA	9% had recommitted sexual crimes	NA	NA

[1]Child Behaviour Checklist; [2] Child Sexual Behaviour Inventory; [3] Juvenile Sexual Offender Adolescent Protocol; [4] Devereuz Scales of Mental Disorders; CBT = cognitive behavioural therapy; PT play therapy; CS = change score; NS = non-significant difference between groups; BL = baseline; NA = not applicable as not measured with this outcome

Table 8: Phallometric assessmnent

Study	Phallometric outcomes
Weinrott et al '97 For self perception profile. Reports a significant increase in self esteem. no data reported	**% of full erection to female child composite stimuli (3 months)** **Video Phallometric Measures** / **Audio Phallometric Measures** / **Slide Phallometric Measures** VS: 20.2% (SD 22.1%) / VS: 55.5 (SD 35.9%) / VS: 17.7 (SD 14.8%) WL: 31.2% (SD 29.2%) / WL: 63.7% (SD 33.8%) / WL: 28.1% (SD 21.6%) **Self-Perception Profile** No data given. But reports that there was a significant increase in self-esteem over time across groups. Post hoc tests revealed no differences between the two groups at any point.
Becker et al (1988)	**Subject who had engaged in inappropriate HSB with males (n=11)** There was a decrease in arousal post-treatment what was statistically significant at the $p<0.01$ level, $F = 9.79$ (1,9), using a repeated measures ANOVA **subject who had engaged in inappropriate HSB with females (n=13)** There were decreases in arousal using erectile measurement, however decreases in arousal were not statistically significant at the $p < 0.05$ level
Kaplan et al (1993)	Pretreatment: range 29% - 100% Posttreatment: range 0% - 96% 1 participant demonstrated an increase in the arousal to deviant stimuli The mean arousal to the same stimuli declined by 34.5%
Hunter and Santos (1990)	Adolescent perpetrators of prepubescent females showed a 33.55% reduction in overall arousal to deviant cues from baseline conditions Adolescents who molested prepubescent males showed a 39.15% reduction in overall arousal to deviant cues from baseline conditions. Analysis of variance (ANOVA) of the combined mean peak scores for aggressive and non-aggressive paedophilic cues produced a significant difference between scores across baseline and treatment conditions; $F (2, 28) = 3.66$, $p < 0.05$ Arousal to description of consensual sexual activity with a same age female remained high across baseline and treatment conditions creating a greater positive differential between non-deviant and deviant arousal following treatment.
Hunter and Goodwin (1992)	**N=39** a significant treatment effect was not found Deviant arousal scores: / Consensual arousal scores: Baseline: 72% / Baseline: 87% 6 months: 67% / 6 months: 92% **n=27** remained in verbal satiation for 9 months did produce a significant repeated measures ANOVA $F (3,63) = 5.5$, $p < 0.01$ using the deviant score (peak % score for deviant target) as the dependent variable. A post-hoc Scheffe test revealed that the mean deviant score at baseline was significantly higher than the same at nine months. Deviant arousal scores: / Consensual arousal scores: Baseline: 67% / Baseline: 86% 9 months: 39% / 9 months: 82%

Study Quality

Two of the included studies (Weinrott et al 1997; Bonner et al 1997 and Carpentier et al 2006) were described as randomised and one was a controlled study (Worling and Curwen 2000) with a comparison group receiving only an assessment, some of whom were receiving treatment elsewhere. Adolescent sex offenders who refused treatment or who dropped out of treatment before completion were also used as comparators. The study authors found no significant group differences on baseline data, however, the lack of randomisation and allocation concealment poses a risk to the validity of the study and differences in outcomes may not necessarily be attributable to the intervention where differences between groups exist. None of these studies sought to blind the outcome assessor to group allocation which also raises the possibility of bias in the collection and reporting of data. Carpentier et al (2006) sought to undertake an intention to treat analysis of the data gathered 10 years previously and reported by Bonner et al (1997). Carpentier et al (2006) reported a reduction in rates of recidivism for those who had received the MST based intervention compared with the control group. However, only 29% of the sample provided data and only 63% of the participants had attended the required number of sessions to be counted as research participants. The high dropout rates in this study raises concerns that attributing reduced recidivism rates at 10 years follow-up may reflect a chance finding, particularly as the sample size is small.

The five studies that were a pre and post-test design can provide an indication of how treatments may work within one individual where the effects on a range of variables are being evaluated – however they are a poor design for exploring intervention effectiveness as it means it is impossible to ascertain the relative impact of treatment on outcomes. See table 9 for a summary of quality assessment.

Table 9: Source of bias table (RCTs and controlled studies only)

Study (date)	Randomisation and Allocation concealment	Baseline outcome measures and characteristics similar	Blinding	ITT	Measurement of recidivism	Additional comments	Quality ratings (++,+,-)
RCT Studies							
Weinrott, M., Riggan, M. and Frothingham, S. (1997)	Randomly assigned	T tests and chi-square tests of variables yielded no significant pre-existing differences. Three separate sets of phallometric stimuli including MANOVAs and ANOVAs were utilized	Not described	24 out of 93 dropped out	Self –reports, parental reports	none	+
Carpentier, M., Silovsky, J. and Chaffin, M. (2006)	Simple randomisation – random number table	Baseline assessment: CBCL, CSBI-2, Ratings of SBP aggressiveness, KBIT. Both groups did not meaningfully differ at baseline on gender, race, ethnicity, CBCL scores, CSBI scores, or aggressiveness ratings.	All charts meeting inclusion criteria for the general comparison group were coded.	15 dropped out prior to randomisation, 7 excluded to be randomised to treatment. 29% completed 2 year follow up	Arrests from juvenile justice and adult criminal justice databases; maltreatment perpetration reports from child welfare database	State in which the study was conducted does not put these children on sex offender registries or has any tracking system. Thus the low rates of future arrests and reports found could not be attributed to policies for segregating children as a class.	+
Worling, J. and Curwen, T. (2000)	Random assignment was not possible. Instead comprehensive battery of psychological tests and test scores to control pre-treatment	Assessing Environments Scale III, Tennessee Self-Concept Scale, Youth Self-Report, The Beck Depression Inventory, The Buss-Durkee Hostility	Not described	Intervention group – 29% dropped out (18 out of 58); control group – 33% dropped out	Criminal charges for both sexual and nonsexual recidivism	On some occasions participants were not given the entire battery of tests.	+

	differences were used in the clinical assessments	Inventory, The Socialization Scale, Multiphasic Sex Inventory-Juvenile Male-Research Edition		(30 out of 90)			
Other quantitative studies – no comparative group							
Apsche (2004)	None	Social History Information-BSP Youth Version, Beliefs Assessment, Child Behaviour Checklist, Fear Assessment, Devereux Scales of Mental Disorder, Juvenile Sex Offender Assessment Protocol	Not described	None	Self-reports	None	-
Hunter and Santos (1990)	None	Physiological assessment of changes in penile circumference conducted with CAT-200/300	Not described	None	Self-reports, sexual arousal patterns	None	-
Becker (1988)	None	Psychophysiologic assessment	Not described	None	Follow-up interviews	Psychophysiologic assessment should not be the only criteria for determining the efficacy of treatment outcomes but needs to be combined with other measures.	-
Becker and Kaplan (1993)	None	Structured clinical interview, psychometric testing (via Adolescent Sexual Interest Cardsort), and physiological evaluation (Matson Evaluation of Social	Not described	27.3% (56) attended 70-100% of the scheduled therapy sessions.	Criminal charges Self-reports, reports from parents and	None	-

		Skills in Youngsters. Beck Inventory)			criminal justice agencies		
Kaplan (1993)	None	Psychophysiologic assessment	Not described	25 out of 40 participants dropped out	Self-reports	None	

Multi-Systemic Therapy (MST) (n= 3 RCTs)

MST draws upon systems theory and the theory of social ecology (Bronfenbrenner, 1979), the primary purpose being to understand the fit between identified behavioural problems and their broader systemic context. MST is an intensive community and home-based approach that has generated support in response to a broad set of adolescent problem behaviours, including harmful sexual behaviour (Borduin et al, 1990; Swenson et al, 1998; Henggeler et al, 2009; Letourneau et al, 2009). Central to the approach is the emphasis on interventions that are present-focused and action-oriented, targeting specific and well-defined problems. Interventions are delivered in the community or family environment and are designed to require daily or weekly effort by family members. The aim is to promote treatment generalisation and long-term maintenance of therapeutic change by empowering caregivers to address family members' needs across multiple systemic contexts.

A modified version of MST has been developed specifically for work with young people with harmful sexual behaviour, known as Multi-Systemic Therapy (Problem Sexual Behaviour) or MST-PSB. The approach explicitly uses elements of other intervention modalities, notably drawing on CBT, humanistic and psychodynamic approaches, but rather than focusing exclusively on 'offence-specific' work in a clinical setting, the approach engages with the young person's broader social ecology, including school and educational achievement, and actively encourages family contributions to the young person's supervision as well as involving the young person's peer group.

Participants

Five published papers (Borduin et al 1990, Borduin et al 2009, Letourneau et al 2009, Henggeler et al 2009, Letouneau et al 2013) drawing on three research studies evaluate the effectiveness of an MST approach to treating HSB. All the published studies are USA based and the study authors are involved in all of the studies. The number of participants ranges from 16 to 127 with a total of n=191. In the smallest study (n=16) all of the participants were male (Bordiun et al (1990) and in the two later studies with larger sample sizes there were a small percentage of females (2-4%). The mean age of the participants in the studies ranged from 14 -14.6 years. In two studies the majority of the participants were of White ethnicity (62.5% and 72.9%) (Borduin et al 1990, Borduin et al 2009). In the most recent study there were more Black participants (54%) (Letrouneau et al 2009). The participants were adolescents whose harmful sexual behaviour was abusive, involving criminal convictions.

Table 10: Summary of participants in MST studies

Study	N	Gender (% male)	Age years mean (SD)	Ethnicity	HSB History
Borduin et al (1990) USA	16	100%	14 years	Black: 37.5% White: 62.5%	Most had committed multiple sexual offenses. Most met the criteria for conduct disorder Most had presented long-term emotional and interpersonal difficulties.
Borduin et al (2009) USA	48	96%	14 years (1.9)	Black: 27.1% White: 72.9% Hispanic: 2.1%	Previous arrests: mean 4.33 (SD 4.81), for sexual crimes (mean 1.62 (SD =NR), nonsexual (mean 2.71 SD =NR).
Letourneau et al (2009) Henggeler et al (2009) Letouneau et al (2013) USA	127	97.6%	14.6 years (SD 1.7)	Black: 54% White: 44% Hispanic: 31%	35% had nonsexual offenses in addition to sexual offenses Index sexual offense charges included aggravated criminal sexual assault (31%) Criminal sexual assault (18%) Aggravated criminal sexual abuse (15%) Criminal sexual abuse (24%) Other sexual offenses (5%) Sexual offenses that were pled as nonsexual offenses (7%)

Intervention

Borduin et al. (1990) compared the efficacy of multisystemic therapy (MST) and individual therapy (IT) in the outpatient treatment of adolescent sexual offenders. Sixteen adolescents arrested for sexual offences were randomly assigned to either MST or IT conditions. Young people in the MST and IT conditions received an average of 37 hours and 45 hours of treatment, respectively. MST was provided by two female and two male doctoral students in clinical psychology.

Borduin, Schaeffer, Heiblum (2009) further compared the efficacy of MST versus usual community services (UCS) comprising individual and group CBT for 48 high risk juvenile sexual offenders who were equally assigned to the two treatment conditions. The MST intervention comprised three hours of intervention each week across family, school, peer and individual systems, with families able to access therapist support 24 hours a day, 7 days a week. In the comparison group, young people attended a standard CBT group work programme for 90 minutes twice weekly and individual treatment of 60-90 minutes once a week. A pretest–posttest control group design with an average 8.9-year follow-up for arrest and incarceration measures was used.

Three further papers report on outcomes from a community based effectiveness trial comparing multisystemic therapy (MST) adapted for juvenile sexual offenders with CBT oriented 'treatment as usual' for juvenile sexual offenders (TAU-JSO). Young people were randomized to MST (n= 67) or TAU-JSO (n=60). In this trial, in contrast to the earlier studies, the intervention was delivered by an existing private provider rather than doctoral students. The developers of the MST programme provided clinical oversight and training.

Outcomes at 12 months post-recruitment were assessed for problem sexual behaviour, delinquency, substance use, mental health functioning, and out-of-home placements (Letourneau et al., 2009; Hengeller et al., 2009). Building on these trials, a further paper outlines outcomes in the same sample at a two year follow-up period (Letourneau, 2013).

Outcomes

Three trials (Borduin et al 1990, Borduin et al 2009, Letourneau et al 2009) have evaluated the outcomes of MST using a range of different tools, with outcomes measured at different follow-up points. It is therefore not possible to combine the data in a meta-analysis, so the results are described in a narrative format. See table 11 for a summary of the outcomes measured and reported in the included studies.

Recidivism

All of the studies reported data on recidivism. One small scale (n=16) study (Borduin et al 1990 (-)) found that significantly fewer MST participants were re-arrested at the 3 year follow-up point for sexual offences than in the comparison group (62.5% decrease, $p < .040$). The frequency of re-arrest for nonsexual crimes was also greater for young people in the comparison group (M = 2.25) than the MST adolescents (M = .62), but this difference was not statistically significant. The records of juvenile court, adult court and the state police were searched to determine re-arrest history of each adolescent following referral for treatment. The relatively low rates of re-arrest for the adolescents who received MST was suggested to have resulted from the systemic emphasis of the MST approach.

A larger study (n=48) by the same research team (Borduin et al 2009 (+)) reported that at the 8.9 year follow-up point MST participants had lower recidivism rates than did control participants for sexual (8% vs 46%) and nonsexual (29% vs 59%) crimes. In addition, MST participants had 70% fewer arrests for all crimes and spent 80% fewer days confined in detention facilities than did their counterparts who received cognitive-behavioural group and individual treatment through the local juvenile court. This represented the usual community treatment for juvenile sex offenders. Participants' juvenile and adult criminal records were obtained from within the state where the study was conducted. The participants were located and all were determined to have lived in the state during the follow-up period. The authors suggest that the favourable results of this study may have been due to the comprehensive nature of MST and its ecologically valid delivery.

A larger study (n=127) (Henggeler et al 2009, Letourneau et al 2009 (+)) found at two years follow-up the base rate for sexual offense rearrests was too low to conduct statistical analyses, and a between groups difference did not emerge for other criminal arrests.

Two studies (Borduin et al 2009 (+), Letourneau et al 2009 (+)) used the self-report delinquency scale (SRD) to assess self-reported criminal and delinquent acts during the previous 90 days. This is a 39 item scale which includes a wide variety of criminal and delinquent behaviours. Both studies found that there was a significant reduction between pre and post treatment self reports of delinquent behaviour in the MST group but not in the control groups. Letourneau et al (2009) report a decrease by 60% in the percentage of youth reporting delinquent behaviour in the MST group compared with 18% in the usual care group. In the Bourduin et al (2009) study those in the control groups receiving usual care reported a significant increase in self reported crimes against people and property when compared with baseline scores. Scores for those in the MST groups reduced by 72% (crimes against people) and 79% (crimes against property) compared with increased scores reported by those in the

usual care groups; 43% (crimes against people) and 34% (crimes against property) (see table 11).

Individual adjustment

Borduin et al (2009) assessed individual adjustment using the 53 item self report Global Severity Index of the Brief Symptom Inventory (BSI-GSI). The items are rates on a scale ranging from 0 (not bothered in the previous week by the symptom) to 4 (extremely bothered by that symptom). The views of parents or caregivers on behaviour problems in youths were assessed using the 89 item Revised Behaviour Problem Checklist (RBPS) (Quay and Peterson., 1987). Item scores range from 0 (no problem) to 2 (severe problem).

The results of the BSI-GSI found that participants in the MST group showed decreases in their symptoms from pre-to post treatment, whereas their counterparts in the usual care groups showed increases in their symptoms.

A significant effect emerged for parents reports of youth behaviour problems, as measured by the RBPS, from pre to post treatment where parents of usual care youths reported an increase in behaviour problems. Parents in the MST group, however, reported a decrease in youth behaviour problems from pre to post treatment.

Problem Sexual Behaviour

Letourneau et al (2009) assessed inappropriate adolescent sexual behaviours using two subscales of the Adolescent Sexual Behaviour Inventory (ASBI) (Friedrich et al 2004). The 5 item (youth version) and 9 item (parent version) deviant sexual interests subscale taps youth behaviours such as owning pornography, use of phone sex lines, and voyeurism. The 10 item (youth version) and 8 item (parent version) sexual risk/misuse subscale assesses overt sexual behaviours such as having unprotected sex, being sexually used by others and pushing others into having sex.

Youths in the MST group showed significantly greater reduction in problem sexual behaviour over time, relative to those in the usual care groups. For example, caregiver reports of youth sexual risk/ misuse declined from pre to post treatment by about 77% for adolescents in the MSG intervention, compared with minimal decline for youth in the usual care group.

Mental Health Symptoms

Letourneau et al (2009) assessed mental health symptoms using the parent reported Child Behaviour Checklist (CBCL) (Achenback 2001). Baseline scores were all within normal ranges

and although there was a reduction from baseline scores, the change was similar in both the MST and usual care groups.

Peer relations

Borduin et al (2009) measured parent, youth and teacher perceptions of the youth's peer relations with the 13 item Missouri Peer Relations Inventory (MPRI) (Borduin et al 1989). It measures three dimensions of peer relations: emotional bonding; aggression and social maturity. Item scores range from 1 (rarely) to 5 (often). Parents and youths reported increases in emotional bonding and social maturity and decreases in aggression from pre to postrreatment for participants in the MST group. In contrast peer bonding and social maturity decreased and aggression increased over time for youths in the usual care groups.

School performance

Borduin et al (2009) measured school performance of participants. Parent and teacher reports of youth grades were obtained across five content areas (English, maths, social studies, science and other) using a 5 point Likert scales ranging from 0 (grade of fail) to 4 (A grade). Grades were averaged across content areas. Parents and teachers of youths in the MST group reported increases in youths' grades at post treatment, whereas parents and teaches of those in the usual care group reported decreases in grades.

Out-of-home placement

Letourneau et al (2009) collected youth placement data. Caregivers were asked whether the youth resided outside the home since the last assessment. If a change in residence was noted, the nature of the change was recorded (e.g. detention, foster care, residential sexual offender treatment). For participants in the MST group, the probability that they were in an out-of-home placement during the past 30 days remained approximately 7% through 12 months post recruitment. For youth in the usual care group, the probability of being placed increased from 8% to 17% during the course of follow-up.

Table 11: Outcomes reported for MST Studies

Outcome	Borduin et al (1990) Follow up ranged from 21-49 months n=16	Borduin et al (2009) Follow up: mean 8.9 years for arrest andincarceration n=51	Letourneau et al (2009, 2013) Follow up: 12 m and 2 y n=127
Criminal activity measures			
Recidivism (sexual crimes)	MST: 12.5% IT: 75% P= <0.0040	Arrests Intervention group 0.13 (0.34), (8% reported in abstract) Usual care: 0.79 (1.02), (46% reported in abstract) P= < 0.001	2 years Sexual offense rearrest was too low to conduct statistical analysis
Recidivism (non-sexual crimes)	MST: 24% IT: 75%	Arrests Intervention group: 1.46 (3.27), (29% reported in abstract) Usual care: 4.88 (8.24), (58 reported in abstract)	2 years No difference between groups
Incarceration	NR	**Days of Incarceration (mean (SD))** Intervention group: 393.42 (1221.11) Usual care: 1942.50 (3121.04)	NR
SRD[2]	NR	Final score Mean and SD Person MST: 1.4 (1.8) (sig decrease from pretreatment) UCS: 8.0 (9.4) (sig increase from pretreatment) Property MST: 2.9 (3.3) (sig decrease from pretreatment) UCS: 30.9 (46.1) (sig increase from pretreatment)	MST: /67 (29.7%) TAU: /60 (42.3%
Individual adjustment			
BSI-GSI[4] (SR) **RBPC (PR)**	NR	**BSI-GSI[4] (SR)** Final score MST: 0.40 (0.41) US: 0.82 (0.51) **RBPC (PR)** Final score MST: 21.11 (17.19) IT: 42.21 (26.17)	NR

Problem sexual behaviour			
ASBI[1]	NR	NR	% responding positive to deviant sexual interest SR: MST: 7/ 67 (10.9%); TAU: 9/60 (15.4%) PR: MST: 24/67 (36.5%); TAU: 32/60 (52.9%) Sexual risk/misuse SR: MST: 7/ 67 (10.9%); TAU: 9/60 (15.4%) PR: MST: 5 /67 (7.9%); TAU: 12 /60 (19.2%)
Mental health symptoms			
CBCL[3]	NR	NR	SR Externalising (T-score) I: 40.3 (10.0) n=67 C: 44.9 (9.7) n=60 Internalising (T-score) I: 40.3 (10.0) n=67 C: 44.9 (9.7) n=60
Peer relations			
MPRI (SR)	NR	Final scores Youth report Emotional bonding: MST: 14.05 (1.61); US: 12.27 (2.44) Aggression: MST: 10.89 (2.14); IT: 12.84 (2.12) Social maturity: MST: 12.30 (1.77); IT: 9.81 (2.27) Parent/care giver report MST: 15.2 (3.0); MST: 9.1 (3.2); MST: 10.8 (2.3) US: 11.0 (3.0); US: 14.2 (3.7); US:8.1 (2.2)	NR
Pro-social outcomes			
School grades	NR	Final score MST: 2.49 (0.99) US: 1.22 (1.06)	NR

Out of home placements			Probability of an out of home placement during 12 months postrecruitment: MST: 7% Usual care: 17%

[1]Adolescent Sexual Behaviour Inventory; [2]Self Report Delinquency Scale; [3]Child Behaviour Checklist; [4] Global Severity index of the Brief Symptom Inventory; SR = self report PR = parent or care giver report; TAU = treatment as usual; IT = individual therapy; US = usual care; NR= not measured or reported.

Assessment of risk of bias

The three trials (Borduin et al 1990, Borduin et al 2009, Letourneau et al 2009) evaluating the effectiveness of MST for juvenile sex offenders were each described as randomised, however the method of randomisation was not described. Two of the trials (Bordiun et al 2009, Letourneau et al 2009) did use opaque envelopes to prevent bias at allocation of treatment group. Although there was some attempt to blind to group allocation in two trials (Bordiun et al 2009, Letourneau et al 2009), this was practically difficult and research assistants gathering outcome data were aware of group allocation. Only one study (Letourneau et al 2009) ensured balanced groups at baseline by adopting block randomization. This was also the largest study (n=127). Given the small numbers in the other two studies Borduin et al 1990 (n=16) and Bordiun et al (n=48) there is a high risk that the groups were not balanced across important prognostic factors. The studies were considered at low risk of bias that results from loss to follow-up of study participants as there was equal loss to follow-up in both intervention and control groups and a small rate of participants were loss to follow-up (less than 5%). A significant potential risk of bias in these studies is a risk to their external validity. The intervention was designed by the trialists, implemented and evaluated by the trialists and the process of delivering the intervention was also overseen by the trialists. This raises the question about the extent to which the intervention results might be replicated if the intervention was delivered in another setting. This was to some extent addressed by Letourneau et al (2009) which evaluated community based MST services provided by an existing private provider agency. The developers of the MST programme provided clinical oversight and training. See table 12 for a summary of quality assessment.

Table 12: Quality of MST studies

Study (date)	Randomisation and Allocation concealment	Baseline outcome measures and characteristics similar	Blinding	ITT	Additional comments	Quality ratings (++,+,-)
Borduin et al (1990) N=16	Not described	Not described	Not described	Not described		-
Borduin et al (2009) N=48	Random number table and sealed envelope	Groups did not differ on arrest histories or demographic characteristics. Averaged care-giver reports indicated that MST youths had more behaviour problems than the control group. No other between group differences were observed.	Some outcomes were measured blind to intervention group (teacher assessment)	Not described	Not clear if the outcomes were measured at the same time points for both groups.	+
Henggeler et al (2009) Letourneau et al (2009) Letourneau et al (2013) N=127	Block randomisation based on index victim age Sealed envelopes	yes	Practically difficult for researcher assistants gathering data to remain blind to treatment allocation.	Yes	•Research assistants were often not blind to the families treatment conditions. •External validity of the MST interventions and quality assurance protocol. Developers of the MST adaptations for juvenile sexual offenders provided clinical oversight and training in the role of expert consultants. Therefore the findings may not be replicable in another setting.	+

Strengths based approaches

One study (Gillis and Gass 2010), undertaken in the USA used a matched control group to evaluate the effectiveness of an adventure based programme (LEGACY) to treat young sex offenders.

Participants

The participants (n=285) were all males, aged between from 8 and 18 years. Their mean age at first offence was 13.8 (SD: 1.4) years. Approximately two-thirds of the participants were described as White (65.3%) and one-third were Black (34.7%). The young people in the LEGACY programme were matched, one to one, with a male youth in other specialised treatment programmes (OSPs) and male youth incarcerated in a state operated institution (youth development centres/YDCs). They were matched on; age when the first offense was committed, the most serious arresting offense types, and race. The net result was 95 youth from each placement setting creating a matched design across the three groups.

Intervention

The LEGACY programme incorporates the Behaviour Management through Adventure approach (BMtA) with a combination of group process and therapeutic techniques to promote positive change with juvenile sex offenders who live and sleep in homes within the community owned and staffed by the programme. The average length of stay is one year in this full-time residential programme.

The Behaviour Management through Adventure approach centres on treatment focused on changing clients' thinking, feeling and behaving with the outcome of decreasing dysfunctional behaviour and increasing functional behaviour.

The six goals of the LEGACY programme are to: 1) identify and eliminate sexually inappropriate thoughts and behaviour through educationally appropriate workbooks and classroom discussion, 2) foster sexually appropriate behaviours through action-oriented approaches that involve consequences for behaviour, 3) promote responsibility for one's behaviour, 4) develop equal relationships with same-sex and opposite-sex peers rather than relationships based on power and control, 5) foster the development of self-control using adventure based activities and 6) develop health and appropriate sexual roles and social roles. A typical programme day included household responsibilities, practicing good hygiene, preparing meals, setting group and individual goals, a group discussion of the evening and morning spent in the group home, academics, adventure experiences, and the continuous evaluation of group and individual goals.

The core element is the use of adventure experiences, these are intentional guided experiences. The activities are developmental in structure, e.g. designed to build trust incrementally through activities designed to increase amounts of safe touch. Activities are often fun, and require skills that appropriately challenge. They are designed to develop listening, seeing another's point of view, leading, following, planning, and recognizing the consequences of actions. Adventures are designed to frame the experiences youth face in real life (e.g. thinking errors, ostracism, and lack of support). This allows the young person to explore how they might deal with these in a safe environment.

All of the programmes led by licensed or licensed eligible masters level professional counsellors or social workers who provide the therapy.

Adventure based therapy (ABT) focuses on group development activities through problem solving initiatives alone, or in combination with low and high challenges ropes course experiences. It has a number of components which include:

1. Conducting treatment in a therapeutic group, led by skilled counsellors to confront inappropriate behaviours and reinforce appropriate behaviours.

2. Placing participants in environments that are new, unique and simplified yet still supportive, creating a contrasting environment where clients can gain new and more functional perspectives

3. Presenting the role of the therapist as a facilitator focused on actively designing and framing interventions for specific treatment outcomes, where clients see themselves as the catalyst for their own positive change.

4. Using therapeutic processes centered on action-oriented experiences, turning passive therapeutic analysis and interaction into active and multidimensional experiences.

5. Taking advantage of enriched and unique opportunities where clients unfamiliarity with BMtA processes provide rich, observable assessment information for therapists to implement treatment interventions and strategies.

6. Producing a climate of functional change through the appropriate use of activities where clients use positive problems solving abilities to reach desired objectives.

7. Constructing choices with a solution-oriented focus where clients are presented with opportunities to focus on their abilities rather than their inabilities.

Outcomes

Archive data was gathered from juvenile and adult courts to determine rearrest rates. Rearrest was counted as the first indication of a re-offense and included technical violations and status offenses but excluded informal adjustments and revocations. The follow-up period was three years.

Re-arrest rates for violent sex offenses were no different between group; LEGACY (5.3%), YDC (5.3%) and OSP (8%). However there were significant differences in rearrest rates for nonsexual offenses; LEGACY (13.7%), YDC (29.5%) and OSP (24.2%).

Assessment of bias

Although this study has strengths in terms of its large sample size, compared with other included studies in this review, it is limited by the method of sample selection and a lack of allocation concealment. Selection of the sample attempted to provide a one to one match of LEGACY participants with participants in the YDC and OSP programmes. The state where the programme was conducted considers it to be a specialized programme so those matched participants may have been more similar to one another. However, those in the YDC programme who were in a lock up facility may have been more pathological and antisocial than either of the other samples. No variables indicating mental health status or educational ability were available so matching did not occur on these potentially important factors.

There are no data regarding dropout rates so no indication of the acceptability of the programme to young people.

DISCUSSION

The quantitative evidence review identified 13 studies for inclusion in the review (5 RCTs, 2 controlled studies and 6 before and after studies). The studies evaluated a limited range of interventions including: cognitive behavioural therapies (CBT) based approaches, multi-systemic therapy (MST) and one exploring the use of an adventure based programme. It is evident from the case studies and from the views of professionals in the field that there are many different types of approaches that have been developed in practice but not rigorously evaluated with results subsequently published. It is possible, therefore, that the best published evidence does not equate to the best intervention currently available. Hackett, Masson and Phillip's (2006) Delphi study of 78 expert practitioners working in the field of HSB goes some way towards identifying the professional consensus about intervention aims, models, approaches and components that have significant support in practice across the UK but which may not yet have been subject to rigorous evaluation.

CBT based approaches comprise of a range of components delivered to both individuals and in group settings and focus on the sexually abusive behaviour. These approaches have their origins in models of sex offence specific treatment for adult men who have sexually offended, developed originally in the US, but which came to prominence in the UK probation and prison services from the late 1980s. Typically these types of interventions include; psycho-education related to sexual arousal and cycles, identification of antecedents for sexual arousal, accepting responsibility for offensive behaviour, identification of cognitive distortions pertaining to sexually offensive behaviour, social skills training, empathy and relapse prevention (Marshall and Laws, 2003). In four studies (Weinrott et al 1997, Becker et al 1988, Becker and Kaplan et al 1993, Kaplan et al 1993) they were also combined with additional specialised treatment to address deviant sexual impulses. The techniques included: vicarious sensitization, verbal satiation, covert sensitization and/or cognitive restructuring. The study by Worling and Curwen (2000) used a CBT approach incorporated into the SAFE-T Programme which also took a broader more holistic view of the young person's behaviour, seeking to work closely with the family and including treatment goals such as the enhancement of social skills, self-esteem, appropriate anger expression, and building trust.

The participants in these included studies were all, except in one study, adolescent males who had committed abusive sexual offense against another person. The exception was the Bonner et al (1999) and Carpentier et al (2006) study which focused on young children aged 5-12, where participants were both male and female.

Three RCTs evaluated CBT interventions (Bonner et al 199, Carpentier 2006, Worling and Curwen 2000, Weinrott et al 1997).

One study (Bonner et al 199, Carpentier 2006) evaluated a CBT approach versus play therapy in younger children (aged 5-12 years). At one and two years follow up, both approaches were found to be effective in reducing children's inappropriate or aggressive sexual behaviour and neither intervention was found to be more effective than the other. At two years follow-up approximately equal numbers of children in each group had an additional report of sexual behaviour problems. This study also reported the problem of subject attrition. Only one child was ordered by the juvenile court to attend, while other children and caregivers were encouraged to participate by their child protection caseworkers. Only 63% of participants attended the required number of sessions to be counted as research participants. Further analysis of data at 10 years follow-up (Carpentier et al 2010) reported a significant difference in recidivism rates for sexual offenses. However, the actual numbers of participants who had reoffended was very small (CBT: 1/63 (2%), PT: 7/64 (11%)) and given the large number who never completed the treatment, it would be incautious to attribute this to the intervention group.

Worling and Curwen (2000) reported significantly lower recidivism rates in participants who participated in the SAFE-T programme when compared with adolescents who received assessment only. Follow-up ranged from 2 to 10 years. Sexual recidivism was 3/58 (5%) in the intervention group compared with the assessment only group 6/46 (13%). Recidivism for nonsexual offenses were; SAFE-T programme 23/58(40%) versus assessment only 39/46 (85%). There was again a large attrition rate in the intervention group with 34% of participants withdrawing or refusing treatment. The authors also report that sexual recidivism was predicted by sexual interest in children. Nonsexual recidivism was related to factors commonly predictive of general delinquency such as history of previous offenses, low self-esteem and antisocial personality. The study findings are limited in their validity due to the lack of randomisation and allocation concealment used in its design. Consequently, it is possible that the groups are not equally matched. As a result, it may be that changes seen cannot be attributed entirely to the intervention, but may reflect group differences instead.

Weinrott et al (1997) evaluated a three month intervention of vicarious sensitization as an adjunct to specialised CBT compared with young sex offenders who were on a waiting list. Phallometric assessment showed a statistically significant reduction in deviant arousal to prepubescent females after three months of treatment. Those in the waiting list, who were continuing in weekly CBT showed no improvement. The decreases in arousal applied solely to

composites of young girls and not their teenage counterparts. Changes in same sex arousal to males were more difficult to interpret.

Becker et al (1988), Kaplan et al (1993), Hunter and Santos (1990) and Hunter and Goodwin (1992) all assessed the effectiveness of verbal satiation, cognitive restructuring and covert sensitization as part of the CBT based programme. All of these studies used a pre and post-test design without a control group. Each reported some success in terms of reducing arousal to deviant cues. Becker et al (1988) found, however, that the decrease in arousal post-treatment was statistically significant for those subjects who had engaged in inappropriate HSB with males, but that the decrease in arousal was no statistically significant in those who had engaged in inappropriate HSB with females. Hunter and Santos (1999) also found a reduction in overall arousal to deviant cues although the reduction was slightly greater for those perpetrators of sexual offenses against prepubescent males (39.2%) compared with the reduction in overall arousal in perpetrators of offenses against prepubescent females (33.6%). Hunter and Goodwin (1992) found that there was only a significant effect for those who remained in treatment for nine months. However, a lack of a comparison group means it is impossible to ascertain the relative impact of treatment on outcomes.

The included CBT studies, suggest that for younger children, CBT has no benefits over therapist led play therapy. CBT when part of a programme that seeks to reduce the risk of recidivism by enhancing family and peer relationships in addition to targeting more offense specific goals such as victim empathy, cognitive distortions and relapse prevention appears to have some benefits in reducing sexual but in particular nonsexual recidivism. Attrition from programmes is a major problem and this is particularly critical if the very small effects are influenced by duration in the programme. Those that leave treatment or refuse to take up treatment seem particularly at risk of recidivism and identifying factors that promote treatment adherence should be subject to further research.

MST draws upon systems theory and the theory of social ecology (Bronfenbrenner, 1979), the primary purpose being to understand the fit between identified behavioural problems and their broader systemic context. MST is an intensive community and home-based approach that has generated support in response to a broad set of adolescent problem behaviours, including harmful sexual behaviour (Borduin et al, 1990; Swenson et al, 1998; Henggeler et al, 2009; Letourneau et al, 2009). Central to the approach is the emphasis on interventions that are present-focused and action-oriented, targeting specific and well-defined problems. Interventions are delivered in the community or family environment and are designed to require daily or weekly effort by family members. The aim is to promote treatment

generalisation and long-term maintenance of therapeutic change by empowering caregivers to address family members' needs across multiple systemic contexts.

A modified version of MST has been developed specifically for work with young people with harmful sexual behaviour, known as Multi-Systemic Therapy (Problem Sexual Behaviour) or MST-PSB. The approach explicitly uses elements of other intervention modalities, notably drawing on CBT, humanistic and psychodynamic approaches, but rather than focusing exclusively on 'offence-specific' work in a clinical setting, the approach engages with the young person's broader social ecology, including school and educational achievement, and actively encourages family contributions to the young person's supervision as well as involving the young person's peer group.

Five published papers (Borduin et al 1990, Borduin et al 2009, Letourneau et al 2009, Henggeler et al 2009, Letouneau et al 2013) drawing on three research studies evaluate the effectiveness of an MST approach to treating HSB. The number of participants ranges from 16 to 127 with a total of n=191. In the smallest study (n=16) all of the participants were male (Bordiun et al (1990) and in the two later studies with larger sample sizes there were a small percentage of females (2-4%). The mean age of the participants in the studies ranged from 14 -14.6 years. In two studies the majority of the participants were of White ethnicity (62.5% and 72.9%) (Borduin et al 1990, Borduin et al 2009). In the most recent study there were more Black participants (54%) (Letrouneau et al 2009). The participants were adolescents whose harmful sexual behaviour was abusive, involving criminal convictions.

Two of the studies (Borduin et al 1990, Borduin et al 2009) reported that there were lower recidivism rates in the MST groups compared with the control participants for both sexual and nonsexual offenses. In the larger of these studies (n=48) (Borduin et al (2009) reported that at the 8.9 year follow-up point MST participants had lower recidivism rates than did control participants for sexual (8% vs 46%) and nonsexual (29% vs 59%) crimes. The studies were carried out by the same team, who also designed the intervention. In the Letourneau et al study (2009) the intervention is delivered by existing providers rather than the same team in order to evaluate its effectiveness in a 'real world' setting. Participants in the MST group also showed improvements in other outcome measures including indications of individual adjustment, reduced problem sexual behaviour, improved mental health symptoms, improved school performance and reduced risk of an out of home placement.

A feature of MST is its overriding goal to reduce the risk of recidivism by enhancing family and peer relationships. A large benefit of the MST intervention has been attributed to caregivers being better at identifying friends who were having a negative influence on their adolescents and advising them to stop associating with such friends. These caregiver behaviours, in turn,

were viewed as leading to decreased antisocial behaviour and deviant sexual interest/risk behaviours on the part of the young people. It is argued that the findings support a central emphasis of MST to empower caregivers to provide more consistent discipline and to attempt to extract these youth from their deviant peers. It is notable, however, that wider research on typologies and sub groups of young people with HSB would indicate a particularly strong association between the influence of antisocial peer groups and young people whose HSB, often accompanied by other non-sexual criminality, is directed towards peers, as opposed to young people whose HSB targets younger pre-pubescent children. This latter group has been seen to be more likely to be under-socialised and without strong peer friendship groups and general peer group influence. It is possible, then, that the central claim for MST in mediating the negative influence of antisocial peer groups, could apply most strongly to particular sub groups of young people with HSB. This in itself is not surprising given that MST-PSB grew out of a more general intervention proposed to address general delinquency and antisocial behaviour in youth. This underlines how even better evaluated intervention may not necessarily be as effective with all sub types of HSB.

One study (Gillis and Gass 2010), undertaken in the USA, used a matched control group to evaluate the effectiveness of an adventure based programme (LEGACY) to treat young sex offenders. The participants (n=285) were all males, aged between from 8 and 18 years. Their mean age at first offence was 13.8 (SD: 1.4) years. Approximately two-thirds of the participants were described as White (65.3%) and one-third were Black (34.7%). The young people in the LEGACY programme were matched, one to one, with a male youth in other specialised treatment programmes (OSPs) and male youth incarcerated in a state operated institution (youth development centres/YDCs). They were matched on; age when the first offense was committed, the most serious arresting offense types, and race. The net result was 95 youth from each placement setting creating a matched design across the three groups.

The LEGACY programme incorporates the Behaviour Management through Adventure approach (BMtA) with a combination of group process and therapeutic techniques to promote positive change with juvenile sex offenders who live and sleep in homes within the community owned and staffed by the programme. The average length of stay is one year in this full-time residential programme.

Re-arrest rates for violent sex offenses were no different between group; LEGACY (5.3%), YDC (5.3%) and OSP (8%). However there were significant differences in re-arrest rates for nonsexual offenses; LEGACY (13.7%), YDC (29.5%) and OSP (24.2%).

To conclude; there is very limited evidence from 13 studies that supports the use of specialized interventions for young people with HSB. It is impossible to say which programme or

intervention has superiority over another due to the weak study designs and a lack of comparable outcomes. It is also evident that there are interventions that we have not included due to a lack of evaluation data. It is also apparent that the existing evaluation of interventions has focused on interventions that target adolescent males with offending harmful behaviours. There is a lack of research guiding practice for younger children with HSB, treating problematic behaviours, treating girls and adolescent females with HSB and children and young people with learning disabilities.

In this review we excluded studies that were evaluating interventions to treat children and young people who were victims of sexual abuse. We also excluded studies that focused on treating non-sexual antisocial behaviours. As both of these are important antecedents in HSB it may be that there are wider bodies of literature which can inform the treatment of HSB.

It is also difficult to entirely separate the interventions into 'types'. The interventions are comprised of many components, and it is unclear whether within the general guidance of the programme individual therapists may adapt the process to meet the particular needs of the child. The process of comparing 'types' of interventions also ignores what may be far more important mediators of treatment effectiveness such as, the therapeutic relationship that the child or young person develops with the therapist themselves.

It would appear that interventions are developing in response to a better understanding of children and young people with HSB and the simple transfer of treatment models used in adult care to children is no longer seen as appropriate. Future research should focus on eliciting a better understanding of what components of the interventions are most effective, why and for which children and young people. It needs to explore how various programme elements promote and contribute to the prosocial orientation and self-regulation of participants. Research also needs to focus on the many gaps identified in this evidence review including; younger children, those with problematic behaviours, adolescents who continue to reoffend, girls and adolescent females, and the needs of children and young people with learning difficulties. Despite the growing concern and awareness of the accessibility of online pornography we also did not identify any evaluated interventions that target problematic behaviours that relate to the compulsive and harmful use of this type of material. There also needs to be a greater understanding on how what processes, mechanisms and supports may assist children and young people in sustaining improvements beyond programme completion. Hackett and colleagues unique study of long-term outcomes for children and young people with HSB between 10 and 20 years following the end of interventions (2012; 2013) suggests a range of factors that may be associated with long-term desistance from sexually abusive behaviours, including the critical role played by: stable partner relationships and positive experiences as a

parent; enduring supportive professional relationships; educational achievement and employment; and, good physical and mental health. Such factors mirror findings in the broader research relating to desistance from general crime (Maruna, 2001) but have not been traditionally associated with orthodox sexual abuse specific interventions offered to young people with HSB. The development of newer models of interventions such as the Good Lives Model (Ward et al., 2007) grounded in the principles of positive psychology, seek to shift the emphasis from the management of deviant behaviour to the development of pro-social life goals, though such approaches have not to date been subject to rigorous evaluation.

Therefore, having considered the evidence, it would perhaps seem more fruitful to explore the different components of the interventions and which of these might be important to incorporate into a package of potential interventions that can be used by a skilled professional in a flexible manner. It would seem that some elements of interventions, for example the close working with the family in MST approaches might usefully inform the development of effective interventions.

A qualitative evidence synthesis of attitudes, barriers and facilitators when delivering interventions to children and young people who display harmful sexual behaviour.

AIMS AND BACKGROUND

Objectives and Rationale

It is estimated that between 23 and 40% of children and young people who sexually harm others have suffered abuse and neglect themselves. Numerous factors make it difficult to measure accurately the true scale of the problem yet official statistics and existing research suggest children and young people account for a significant minority of all sexual abuse perpetrated in the UK.

Evidence suggests that children and young people can be rehabilitated before harmful sexual behaviour becomes entrenched. A range of specialist assessment and intervention services has been established in the voluntary, private and statutory sectors across the UK. Those who display such behaviour often have many psychosocial problems and educational needs and these must be addressed by multiple and diverse intervention components. Little attention has focused specifically on the acceptability of specific intervention components to children and adolescents. Evidence is similarly missing with regard to considerations to be addressed by health and social care practitioners when implementing such interventions.

This qualitative evidence synthesis (qualitative systematic review) seeks to complement an effectiveness review by examining existing published and unpublished qualitative research to establish what intervention components are viewed as acceptable or useful by children or adolescents who display harmful sexual behaviour, their parents or carers, health or social care professionals and health or social care managers and what considerations should be addressed when seeking to implement such interventions.

Review Questions

The overall review question, quantitative and qualitative evidence combined was:

What types of interventions, including family and carer interventions, are effective and acceptable for children and young people who display harmful sexual behaviour (HSB)?

Within this overall question the qualitative review component sought to identify data on the acceptability of the interventions from diverse stakeholder perspectives (i.e. young people, their family and carers, health and social care professionals and service managers). This would include, but not be limited to:

- Barriers and facilitators to the uptake of interventions
- Barriers and facilitators to ongoing engagement with interventions
- Issues relating to feasibility and implementation
- Issues relating to cost implications were not included in the qualitative evidence synthesis in recognition of the separate economic analysis being conducted as part of the NICE guidance programme.

METHODS

Identification of evidence

Searches have been conducted across a range of multi-disciplinary bibliographic databases (See below). Following the findings of the initial scoping search and in discussions with the NICE, a two stranded approach was applied to the searches, whereby a specific search naming particular interventions was conducted, followed by a more sensitive search using generic intervention terms. All references from the specific search were screened. The references from the sensitive search were screened using the "progressive fractions" technique. In the case of the qualitative evidence synthesis the progressive fractions approach required manual scanning of any references using markers of qualitative research (i.e. "qualitative", "focus group(s)" or "interview(s)") as retrieved from the sensitive search results set.

Search terms were developed from the scoping search and in discussion with the NICE team. Thesaurus and free-text terms were utilised, relating to the population (children and young people who demonstrate harmful sexual behaviour) combined with terms relating to interventions. Intervention terms were not required for implementation of the qualitative research set. The presence of an intervention or programme was established at a subsequent stage of title and abstract screening. All searches were limited to English Language, Humans, and the publication time span of 1990-present.

Databases searched

The following databases were searched in March 2015 for evidence to inform either the effectiveness or acceptability components of the review:

MEDLINE via Ovid 1946-March Week 4 2015
Ovid MEDLINE In-Process & Other Non-Indexed Citations March 26, 2015
Embase via Ovid 1974 to 2015 March 26
Cochrane Database of Systematic Reviews via The Cochrane Library: Issue 3 of 12, March 2015
Database of Abstracts of Reviews of Effect via The Cochrane Library: Issue 1 of 4, January 2015
Cochrane Central Register of Controlled Trials via The Cochrane Library: Issue 2 of 12, February 2015
Health Technology Assessment Database via The Cochrane Library : Issue 1 of 4, January 2015
NHS Economic Evaluation Database via The Cochrane Library: Issue 1 of 4, January 2015

Science Citation Index Expanded (SCI-EXPANDED) --1900-present and Social Sciences Citation Index (SSCI) --1956-present via Web of Science
Social Care Online 1980-March 2015
PsycINFO via Ovid 1806 to March Week 4 2015
Social Policy and Practice via OvidSP 201503
EPPI-Centre - Bibliomap (mostly pre-2011), Dopher (2006-March 2015), TRoPHI (2004-March 2015)
The Campbell Library 2004-2015 (Volume 11)

Inclusion of relevant evidence

For inclusion in the qualitative evidence synthesis a paper either had to (1a) represent a qualitative research study, using accepted methods of qualitative data collection and analysis or (1b) represent a survey seeking to elicit views on qualitative aspects of the intervention. Studies should either (2a) directly examine the experiences of adolescents, parents or carers, health or social care professionals or managers during the delivery of interventions for adolescents with harmful sexual behaviour (intervention studies) or (2b) examine aspects of the treatment process as part of a qualitative exploration of the experiences of adolescents with harmful sexual behaviour. In this way data could inform an understanding of either specific treatment provision or of the experience of treatment more generally. The elements to be covered in the qualitative evidence synthesis are tabulated in table 13.

Methods of analysis/synthesis

To enable data to be processed in an efficient manner the team decided to use a best fit framework synthesis approach. This requires identification of a suitable pre-existing analytical framework from the literature, that offers an approximation of the phenomenon of interest (in this case factors relating to the treatment of adolescents with harmful sexual behaviour), for use as an initial analytical lens. Any data not fitting within this a priori framework is then examined in a separate inductive phase with appropriate new themes being created.

Quality assessment

Quality Assessment was conducted in accordance with the current version of the NICE manual procedures for assessment of qualitative studies. All questions were coded in a Google Form which was completed during data extraction. The combined assessment of each study was then used to inform the allocation of overall study quality, indicated using the agreed ++, + and – notation.

Data extraction

Data was initially extracted against a generic data extraction form, handled via Google Forms, which included fields relating to study characteristics together with fields relating to aspects of the intervention including Accessibility, Acceptability, Barriers relating to Uptake, Facilitators of Uptake, Barriers relating to Delivery and Facilitators for Delivery. Data was exported to an Excel spreadsheet to facilitate manipulation of the data and identification of patterns to inform the synthesis.

Table 13 - Review Elements to be covered by the Qualitative Evidence Synthesis

	Children	Parents	Families	Carers	Health Professionals	Social Care Professionals	Criminal Justice Professionals
Intervention							
Evaluates Diagnostic Intervention	To be included in Review 2						
Evaluates Therapeutic Intervention	X	X	X	X	X	X	X
Context	X	X	X	X	X	X	X
Implementation					X	X	X
Appropriateness	X	X	X	X	X	X	X
Acceptability	X	X	X	X			
Need	X	X	X	X	X	X	X
Uptake							
Barriers to Uptake	X	X	X	X	X	X	X
Facilitators of Uptake	X	X	X	X	X	X	X
Delivery							
Barriers to Delivery	X	X	X	X	X	X	X
Facilitators of Delivery	X	X	X	X	X	X	X

X: indicates that this element is covered by the qualitative evidence synthesis

Data analysis and synthesis

Extracted data was examined against a framework derived from an earlier qualitative evidence synthesis, in adults only, identified at a subsequent stage of the review process. In accordance with the best fit framework synthesis method, data was initially handled deductively, to the extent that it could be accommodated within the a priori framework. In a subsequent inductive stage, data that could not be accommodated within the original framework was analysed thematically with new themes being documented.

SUMMARY OF INCLUDED STUDIES

Identified studies

Following a sift of all of the references identified in the search of electronic databases, 171 potentially relevant papers were retrieved for further consideration. An additional 16 studies were identified from the bibliographies of relevant reviews of the topic. Of these citations 8 studies met the inclusion criteria. Citation searching of the initially included studies, both quantitative and qualitative, on Google Scholar and searches of a "feeder database" of items retrieved using non-core terms revealed a further eighteen qualitative studies. This means that 26 papers are included in the qualitative evidence synthesis. Thirty eight papers were excluded as abstracts containing insufficient detail of qualitative data, dissertations or other items that were unavailable or items that, on close inspection of the full text, were not eligible. Other references were excluded as they did not meet the pre-specified criteria for inclusion.

Included studies

Study characteristics

- Included papers covered the period from 1992-2015. The 26 included papers report initiatives from the following six countries, presented in order of frequency:
- United States (9 papers - Cheung & Brandes, 2011; Jones, 2014; Lawson, 2003; Martin, 2004; Miller, 2011; Muster, 1992; Pierce, 2011; Yoder, 2013; Yoder & Ruch, 2015)
- United Kingdom (8 papers - Belton et al, 2014; Brogi & Bagley, 1998; Deacon, 2015; Farmer & Pollock, 2003; Green & Masson, 2002; Griffin et al, 1997; Hall, 2006; Ladwa-Thomas & Sanders, 1999)
- Australia (3 papers - Allan, 2004; Allan, 2006; Halse et al, 2012)
- New Zealand (3 papers - Geary et al, 2011; Lambie et al, 2000; Somervell & Lambie, 2009)
- Ireland (2 papers – Duane et al, 2002; Slattery et al 2012)
- South Africa (1 paper – Draper et al, 2013)

All papers sampled were from either children/adolescents (12 studies), parents/carers (6 studies), health and/or social care professionals (11 studies) and/or managers (2 studies). The distribution of perspectives by study is indicated in Table 14:

Table 14 - Perspectives captured in Included Studies

Study Identifier	Children/ Adolescents	Parents/Carers	Health or Social Care Professionals	Managers
Allan (2004)			✓	
Allan (2006)			✓	
Belton et al (2014) [T]	✓	✓		
Brogi & Bagley (1998)				✓
Cheung & Brandes (2011) [T]			✓	
Deacon (2015)			✓	
Draper et al (2013)	✓	✓		
Duane et al (2002)		✓		
Farmer & Pollock (2003)	✓			
Geary et al (2011) [T]	✓	✓		
Green & Masson (2002)	✓		✓	✓
Griffin (1997)			✓	
Hall (2006)			✓	
Halse et al (2012) [T]	✓			
Jones (2014)		✓		
Ladwa-Thomas & Sanders (1999)			✓	
Lambie et al (2000)	✓			
Lawson (2003)	✓			
Martin (2004)	✓			
Miller (2011)	✓			
Muster (1992)			✓	
Pierce (2011)		✓		
Slattery et al (2012)	✓			
Somervell & Lambie (2009)	✓			
Yoder (2013)			✓	
Yoder & Ruch (2015)			✓	
	12	6	11	2

The large majority of studies (n = 21) used semi-structured interviews. Three studies combined qualitative methods with quantitative methods such as closed-question surveys; only qualitative data was extracted from these studies (Brogi & Bagley, 1998; Cheung & Brandes, 2011; Muster, 1992). Four studies used focus groups, always in conjunction with individual interview approaches. Case notes, observation and other documentary analysis were used in five studies, including access to recordings of case files in one instance (Deacon, 2015). See Table 15 for a summary of data collection methods used in the included studies.

Table 15 - Data Collection Methods used in Included Studies

Study Identifier	Semi-Structured Interviews	Questionnaires/Surveys	Focus Groups	Observation (Other)
Allan (2004)	✓			
Allan (2006)	✓			
Belton et al (2014)	✓			
Brogi & Bagley (1998)		✓		
Cheung & Brandes (2011)		✓		
Deacon (2015)				✓ (i.e. Recordings)
Draper et al (2013)	✓		✓	
Duane et al (2002)	✓			
Farmer & Pollock (2003)	✓			✓ (Review of case files)
Geary et al (2011)	✓			
Green & Masson (2002)	✓			✓ (+ Documentary analysis)
Griffin (1997)				✓
Hall (2006)	✓			✓ (Review of case files)
Halse et al (2012)	✓			
Jones (2014)	✓		✓	
Ladwa-Thomas & Sanders (1999)	✓			
Lambie et al (2000)	✓			
Lawson (2003)	✓	✓		✓ Charts
Martin (2004)	✓			
Miller (2011)	✓			
Muster (1992)		✓		
Pierce (2011)	✓		✓	
Slattery et al (2012)	✓			
Somervell & Lambie (2009)	✓			✓ (Observations)
Yoder (2013)	✓			
Yoder & Ruch (2015)	✓		✓	
	21	4	4	5

The majority of studies (excepting the four focus group studies and those that used documentary analysis) used one single method of data collection so triangulation across methods was not possible.

The details of the methodology and populations of the included studies are summarised in Table 16. Full study details are presented in the evidence tables (Appendix Two).

Table 16 - Populations, Aims and Settings of Included Studies

Study Identifier	Aim	Method and population	Location	Programme
Allan (2004)	Which therapeutic approaches would be most effective with sexually violent children and how these approaches would inform practitioners about reasons children became sexually violent and what role parents played in intervention	Social workers, psychologists, counsellors, psychiatrists and therapists.	Australia	Not specified
Allan (2006)	To investigate experiences of therapeutic practitioners who worked with children identified as sexually violent.	Social workers, psychologists, counsellors, psychiatrists and therapists.	Australia	Not specified
Belton et al (2014)	To understand how manualised treatment programme for males aged 12-18 with harmful sexual behaviour (HSB) is used and experienced in a social care context.	Young people and their parents or carers	United Kingdom	Change for Good
Brogi & Bagley (1998)	To establish if Utting recommendations (Children in the Public Care, 1991) had been adopted, locally or nationally; and to investigate whether child and young adolescent victims of sexual abuse continue to be held along with disturbed and assaultive children and adolescents,	Managers of secure residential centres for young people	United Kingdom	Not specified
Cheung & Brandes (2011)	To examine factors that service providers consider as effective components in programs that help young male sexual offenders to achieve rehabilitation.	Service and treatment professionals	United States	Not specified
Deacon (2015)	How CSCS deal with referrals of children with SHB; Reflections of social work (SW) practitioners when working with these families; User (parent/carer) views about how cases were managed; Parent/carer experience of SW interventions. Best practice recommendations to inform effective intervention by SW practitioners, and training to be offered	Social work practitioners	United Kingdom	Not specified

Draper et al (2013)	To qualitatively evaluate the Fight with Insight (FWI) programme using a case-study approach	FWI participants, parents of FWI participants, and comparison group of youth offenders who had only participated in CBT sessions, but not in alternative therapies, such as boxing.	South Africa	Fight With Insight
Duane et al (2002)	To document changes in a group of parents' psychological adjustment over the course of the NIAP Parents Group Programme and to explore the psychological processes that underpin these changes.	Parents attending psycho-educational support group for parents of adolescents who have committed a sexual offence	Ireland	NIAP Parents Group Programme
Farmer & Pollock (2003)	To draw out key themes about management of problematic sexual behaviours in foster and residential care.	Sexually abused and/or abusing young people aged 10 or over	United Kingdom	Not specified
Geary et al (2011)	To identify consumer perspectives of strengths and weaknesses of programme delivery at three community treatment programmes for sexually abusive youth	Adolescents plus a range of caregiver roles (parent, extended family member, step-parent, placement caregiver)	New Zealand	Not specified
Green & Masson (2002)	To analyse a wide range of knowledge, attitudes and sexual behaviours of children in residential care	Children, residential workers, managers and social workers	United Kingdom	Not specified
Griffin et al (1997)	To describe how group-based work with potentially isolated local professionals may help treatment program to maintain systemic perspective	Group leaders participating in 30-week treatment programme	United Kingdom	Young Abusers Project' Group based programme
Hall (2006)	To see how one social services department had responded to national guidance, issued in Working Together (DoH, 1991),	Social Workers	United Kingdom	Not specified
Halse et al (2012)	To gain better understanding of treatment components that IASOs considered effective in eliciting positive changes, both personally and within family environment.	Intrafamilial Adolescent Sex Offenders'	Australia	Not specified
Jones (2014)	to identify how parents of ASOs felt when they provided support to their child after his sexual	Parents and parental figures of adolescents	United States	Not specified

	offense to identify their lived experience and describe ways in which they coped with the emotional toll.	who have sexually offended (ASOs)		
Ladwa-Thomas & Sanders (1999)	To explore social worker definitions of abusive behaviour, views as to the causes of young people abusing others, social work intervention and personal resources needed to work with young abusers.	Social workers	United Kingdom	Not specified
Lambie et al (2000)	To gather detailed information about clients' experiences of the Wilderness programme	Adolescent sexual offenders who had attended a community treatment programme	New Zealand	Outdoor wilderness group programme
Lawson (2003)	To explore treatment from the perspective of youths who have molested children.	Youths who have molested children	United States	Not specified
Martin (2004)	To explore the experience of participants in a treatment program to obtain a better understanding of individual, interpersonal, and social factors	Male adolescents (15-18), having completed treatment program for adolescent sexual offenders	United States	Not specified
Miller (2011)	To explore the process by which cultural meaning systems have been made available to residents in their interactions with the adult 'experts' (i.e. the correctional staff) in this particular setting.	Young women who have perpetrated sexual abuse	United States	Think It Over program
Muster (1992)	To accumulate information on attitudes to confrontational versus sympathetic treatment methods	Counselors and psychologists	United States	Not specified
Pierce (2011)	To describe the lived experience of parents of adolescents who had sexually offended.	Parents/parental figures of adolescents legally adjudicated for sexual offenses and currently involved in sex offender-specific treatment.	United States	Family Treatment Program (FTP)
Slattery et al (2012)	To assess risks and needs of young males convicted of sexual offences, and piloted interventions to address these needs while in custody and following release in to community	Convicted prisoners and remand prisoners (16-20 years)	Ireland	Not specified

Somervell & Lambie (2009)	To explore the function of the WT camps and to theorize about the processes underlying this function.	Male adolescents from 1318 years	New Zealand	Wilderness Therapy (WT)
Yoder (2013)	To understand the process of family-inclusive treatment and to understand how families contribute to positive outcomes	Approved Colorado treatment providers	United States	Functional Family Therapy (FFT)
Yoder & Ruch (2015)	What strategies do service providers use to engage families in treatment of youth who have sexually offended?	Treatment providers and probation officers	United States	Functional Family Therapy (FFT)

Study methodology and quality appraisal

The results of quality assessment are presented in Table 17. Only six papers were rated high (++), nine medium (+) and eleven low (-). Areas where papers received low ratings include: the unclear role of the researcher; the thin description of context; the uncertain reliability of analysis; and the lack of 'richness' of the data reported. Of the eight UK studies three were judged as medium quality (Belton et al, 2014; Deacon, 2015; Green & Masson, 2002) and the remaining five were assessed as low quality (Brogi & Bagley, 1998; Hall 2006, Farmer & Pollock, 2003; Griffin, 1997; Ladwa-Thomas & Sanders, 1999). The low/medium quality of the UK studies, and their consequent lack of contribution to the resultant synthesis, may indicate issues relating to the applicability of the study findings (see evidence statements). The quality assessment for each study is given in table 18.

Table 17 - Overview of the study quality of the included qualitative studies.

Study design	**N identified**	**Quality Rating**		
		++	**+**	**-**
Qualitative Studies	26	6	9	11

Table 18: Quality Assessments for Included Qualitative Studies

Reference	Qualitative approach	Data Collection	Study Purpose	Study Design	Role of Researcher	Context	Reliable Methods	Rigorous Data Analysis	Rich Data	Reliable Analysis	Convincing Findings	Relevant Findings	Conclusions
Allan (2004)	Appropriate	Appropriate	Clear	Defensible	Partially Clear	Clear	Reliable	Not Sure	Poor	Not Sure	Not Sure	Relevant	Not Sure
Allan (2006)	Appropriate	Appropriate	Mixed	Defensible	Clear	Clear	Reliable	Not Sure	Rich	Not Sure	Not Sure	Relevant	Adequate
Belton et al (2014) [T]	Appropriate	Appropriate	Clear	Defensible	Unclear	Not Sure	Reliable	Rigorous	Rich	Not Sure	Convincing	Relevant	Adequate
Brogi & Bagley (1998)	Not Sure	Appropriate	Clear	Defensible	Partially Clear	Not Sure	Reliable	Not Sure	Poor	Not Sure	Not Sure	Relevant	Adequate
Cheung & Brandes (2011) [T]	Not Sure	Appropriate	Mixed	Defensible	Unclear	Not Sure	Not Sure	Rigorous	Poor	Not Sure	Not Sure	Relevant	Adequate
Deacon (2015)	Appropriate	Appropriate	Clear	Defensible	Partially Clear	Clear	Reliable	Rigorous	Rich	Not Sure	Convincing	Relevant	Adequate
Draper et al (2013)	Appropriate	Appropriate	Clear	Defensible	Clear	Clear	Reliable	Rigorous	Rich	Reliable	Convincing	Relevant	Adequate
Duane et al (2002)	Appropriate	Not Sure	Mixed	Not Sure	Partially Clear	Not Sure	Not Sure	Not Sure	Poor	Reliable	Convincing	Relevant	Adequate
Farmer & Pollock (2003)	Appropriate	Appropriate	Mixed	Not Sure	Unclear	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Relevant	Adequate
Geary et al (2011) [T]	Appropriate	Appropriate	Clear	Defensible	Partially Clear	Clear	Reliable	Rigorous	Poor	Reliable	Convincing	Relevant	Adequate
Green & Masson (2002)	Appropriate	Appropriate	Mixed	Defensible	Partially Clear	Clear	Reliable	Not Sure	Rich	Not Sure	Convincing	Relevant	Adequate
Griffin (1997)	Not Sure	Not Sure	Mixed	Indefensible	Unclear	Not Sure	Not Sure	Not Sure	Poor	Not Sure	Not Sure	Relevant	Not Sure
Hall (2006)	Appropriate	Appropriate	Mixed	Defensible	Partially Clear	Clear	Reliable	Not Sure	Rich	Not Sure	Convincing	Relevant	Adequate
Halse et al (2012) [T]	Appropriate	Appropriate	Clear	Defensible	Clear	Clear	Reliable	Rigorous	Not Sure	Reliable	Convincing	Relevant	Adequate

Jones (2014)	Appropriate	Appropriate	Clear	Defensible	Partially Clear	Clear	Reliable	Rigorous	Not Sure	Reliable	Convincing	Relevant	Adequate	
Ladwa-Thomas & Sanders (1999)	Appropriate	Appropriate	Mixed	Not Sure	Unclear	Not Sure	Not Sure	Not Sure	Poor	Not Sure	Not Sure	Relevant	Adequate	
Lambie et al (2000)	Appropriate	Appropriate	Clear	Defensible	Clear	Clear	Reliable	Rigorous	Not Sure	Reliable	Convincing	Relevant	Adequate	
Lawson (2003)	Appropriate	Appropriate	Clear	Defensible	Clear	Clear	Reliable	Rigorous	Not Sure	Reliable	Convincing	Relevant	Adequate	
Martin (2004)	Appropriate	Appropriate	Clear	Defensible	Partially Clear	Clear	Reliable	Rigorous	Not Sure	Reliable	Convincing	Relevant	Adequate	
Miller (2011)	Appropriate	Appropriate	Clear	Defensible	Partially Clear	Clear	Reliable	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Adequate	
Muster (1992)	Appropriate	Appropriate	Clear	Defensible	Clear	Clear	Reliable	Rigorous	Not Sure	Reliable	Convincing	Relevant	Adequate	
Pierce (2011)	Appropriate	Appropriate	Clear	Not Sure	Unclear	Clear	Reliable	Rigorous	Rich	Reliable	Convincing	Relevant	Adequate	
Slattery et al (2012)	Appropriate	Not Sure	Mixed	Not Sure	Unclear	Clear	Reliable	Not Sure	Not Sure	Not Sure	Not Sure	Relevant	Not Sure	
Somervell & Lambie (2009)	Appropriate	Appropriate	Clear	Defensible	Clear	Clear	Reliable	Rigorous	Not Sure	Reliable	Convincing	Not Sure	Adequate	
Yoder (2013)	Appropriate	Appropriate	Clear	Defensible	Unclear	Clear	Reliable	Rigorous	Rich	Reliable	Convincing	Relevant	Adequate	
Yoder & Ruch (2015)	Appropriate	Appropriate	Clear	Defensible	Unclear	Clear	Reliable	Rigorous	Rich	Reliable	Convincing	Relevant	Adequate	

Applicability

Of the 26 included studies only eight were conducted in the UK. Generally speaking the UK studies focused on circumstantial aspects of the treatment programmes as a whole rather than specifically on the components of the treatment programme (Contrast richer studies by Geary et al, 2011; Halse et al 2012).

Concern has been expressed at the predominance of the Juvenile Sex Offender (JSO) category of studies that frequents the U.S. literature. Studying this population primarily within the judicial and penal system runs the risk of overlooking important features of family-level interventions and may make this population unrepresentative of the wider target population to be addressed by this synthesis.

Studies originating within the 1990s, even those within a UK context, appear dislocated from current therapeutic emphases and approaches. While they offer a valuable insight into the background that underpins delivery of existing services they appear to carry important limitations with regard to applicability. In this connection it is not unusual to see a mismatch between the utility of time periods covered by the effectiveness and acceptability syntheses, respectively, with the latter appearing more vulnerable to changes in both overall context and in specific settings.

STUDY FINDINGS

We used a best fit framework based on a previous meta-synthesis conducted on the topic of experiences of engaging in psychotherapeutic interventions for sexual offending behaviours (Walji et al, 2014). Although this previous meta-synthesis focused exclusively on adult offenders it was believed that structural elements may share similarities across populations while substantive differences would be easily identified and would emerge from the inductive phase of the best fit framework synthesis methodology. Two principal differences emerged from this comparative framework; first, the key role of family engagement in perceived therapeutic success, and, second, the interpretation of a "safe place" in primarily physical characteristics in an adolescent population in contrast to a more metaphorical sense perceived by many adult offenders.

Intervention components

The thematic analysis revealed a strong presence of what Geary et al (2011) characterise as the "traditional" components of a treatment programme:

- relapse prevention
- sexual abuse cycle
- victim empathy
- anger management and
- communication and social skills training

Indeed Geary et al (2011) report that adolescents, parents and caregivers attributed significance to these same components. We must however be cautious given the potential element of self-fulfilment about the prominence attributed to these elements. Draper et al (2013) included these traditional cognitive behavioural therapy elements alongside a social activity, specifically boxing.

The role of activities

Given the adolescent orientation of the review and the included treatment programmes it is perhaps unsurprising to see an emphasis on activities within many of the included studies. Many interviewees in the Australian study (85%) suggested that the success of the programmes was attributable largely to family and caregiver involvement, and the adolescents' involvement in school, work, sports teams, church youth groups and other community activities (Geary et al, 2011). Cheung & Brandes (2011) established a large degree of agreement among therapists with the statement that "a male juvenile with a history of sexual behaviour problems should

participate for 2 months in at least 1 weekly age-appropriate adult-supervised social activity (no social isolation)." Farmer & Pollock (2003) report a need for "caregivers to work actively with these young people…to involve them in activities which would enhance their self- esteem in more socially appropriate ways". Two of the pending studies take this aspect further in describing "wilderness therapy". Wilderness therapy is the use of wilderness expeditions for the purpose of therapeutic intervention. There are a range of different types of wilderness therapy programs, with a range of models and approaches. Their aim is to guide participants toward self-reliance and self-respect.

The need to manage flexibility and manualised treatment

Several commentators observe on the importance of being able to have the flexibility to adapt the delivery of the sessions to meet the individual needs of young people is important in maintaining their engagement. Clearly a one-size fits all intervention approach is not considered appropriate. Tensions between this flexibility and the requirements for manualised treatment approaches are particularly addressed in the study by Belton et al (2014) who report that:

> Practitioners felt they had followed the manual quite closely and met the objectives for the session, but used more creative methods to deliver the material. Where practitioners had moved away from the manual, this was a result of responding to individual problems faced by young people.

The same study goes on to describe how, in practice, "Practitioners used a range of creative methods to help engage young people with the programme material. Having the flexibility to adapt the delivery method to each young person and respond to individual needs was important in helping maintain young people's level of interest" (Belton et al, 2014).

Relapse prevention

Relapse prevention is a component typically associated with psychosocial and cognitive behavioural approaches. Programme theory suggests that relapse prevention enhances safety. In the study by Geary the majority of adolescents gave detailed comments about safety plans and the rules they needed to abide by to prevent re-offending. However in the study by Halse et al (2012) conflicting evidence reported that offenders were unable to recount specific details about their safety plans and, indeed, only mentioned them when specifically prompted by the interviewer to do so:

"Although most of the participants were able to provide some plans it required considerable prompting to tease out what exactly the plans were."

In the study by Slattery et al (2012) one participant reported the impact of the treatment module on their own attitudes: ‘‘It make(s) you think about the things, the negative effects of it and all, and where it’s getting you and where you are at’’.

Sexual abuse cycle

Another important traditional treatment component was considered to be creation of recognition of what led to the harmful sexual behaviour in the first place. This was seen in the study by Halse et al (2012) who reports that:

> “Participators were able to describe how it felt for them to be caught committing a sexual offence. These emotions were considered important because they were integral to their relapse prevention plans.”

In the same study (Halse et al, 2012) most participants stated that they “thought it was absolutely necessary to attend the treatment program to avoid further offending. Those participants who felt that it was necessary to attend treatment recognised that they would have been unable to stop offending without help. "Yes if I didn't come here it would have happened again and again and again".

However Allan (2006) suggests that the concept of the cycle of abuse may become a prevailing narrative among therapists that can then become part of a self-fulfilling prophecy:

> “When it’s a more middle class family there is generally a tighter response, more concern and a better outcome over a longer period. I think that helps them break the cycle”, and

> “The failure of therapeutic intervention with poor clients (who could not break the cycle of abuse) was frequently attributed to intergenerational experiences of abuse and neglect”.

Victim empathy

Programme theory for the treatment programmes suggests that they may contribute to victim empathy. In the study by Geary et al (2011) victim empathy received the greatest mention by adolescents, parents and caregivers across all sites. Geary and colleagues (2011) report that “when young people recalled what they learnt about victim empathy, they mentioned putting themselves in the victim’s shoes, the wider impact of their offending, apologizing and showing remorse to victims, thinking errors, minimizing, and exerting power over others”.

In this connection Geary et al (2011) cite a study by Longo and Prescott (2006) that found that "fewer than 7% of adolescent programmes incorporated empathy training".

However it should be noted that Halse et al (2012) report that participants felt that there had been no change in their empathy towards others. Draper et al (2013) also report no improvement in empathy from their intervention group. Clearly however empathy plays an important part in what the adolescents are experiencing. Slattery et al (2012) give experiences of feelings of empathy:

> ''It was good. It gave me a chance to reflect instead of just blowing up. You think about what they (the victim) are going through."

Experiences of receiving empathy:

> ''In the past, no one (behaved empathically towards him). And at the minute my Dad is showing me a bit of empathy because I am locked up away from my two children.''

At the same time they were aware of negative experiences of not showing empathy towards others:

> ''I haven't shown empathy to my Mam or Dad because they used to be drunk a lot so anytime I seen them hurting each other or hurting themselves I wouldn't bother going near them''

And of not receiving empathy from others:

> ''My family. They feel I will be okay without them.''

Empathy is also required as an engagement strategy between therapists and adolescents. It is conceivable that taking a genuine interest in the adolescent and in the family may have a collateral positive effect on the empathetic behaviour of the adolescent. This certainly fits with the idea that a therapist may operate as a role model, and that a male therapist in particular may compensate for the absence of the father as a role model:

> I really think the men's presence [as workers] is so valuable, because they bring knowledge about normality of sexual development and also for the children to have a man to be taught by, to explore things with. It's a big problem for kids to have a missing father figure. They need a role model. It is very useful for them to work with a man. (Allan 2004)

Draper et al (2013) describe how the boxing coach from a combined CBT/boxing intervention was also seen to exert a positive influence:

> Some FWI participants and key informants spoke very positively about the main boxing coach. Key informants described him as a role model whom the participants respected. They mentioned the discipline and boundaries that he instilled, and the fact that he taught them that they could be men without being violent towards others.

Anger management

In the study by Geary et al (2011) a large percentage (58%) of young people referred to problems with anger and violence directed at parents, siblings and peers. Anger has been found to be associated to both sexual and non-sexual recidivism. Treatment programmes seek to provide adolescents with the concepts and skills to understand and develop prosocial attitudes and behaviours. Although sexually harmful behaviour is characterised by its sexual component the included studies most frequently focused on intervention for anger management:

> "I reckon it will be beneficial for the outside. It will help me control my anger in situations, in certain situations. I think it'll always help'' (Slattery et al, 2012).

It is interesting to note anger management here being described as a transferable skill that will consequently carry some "currency" in the outside world. Together with communication skills (mentioned below), participants perceive a discernible increase in self-efficacy in being able to communicate more effectively and in being better able to manage their anger.

Family members also communicated a great deal of anger on their part and they were only able to come to terms with the offence their adolescent has committed once they are able to let go of this anger. Draper et al (2013) describe how parents were better able to deal with this anger as a result of training encountered in their parent support group:

> "For me it has helped me a lot because now even if like the child has done a wrong thing, I am able to talk to the child without anger, even if like the child is angry, for me I'm able to be really consistent, not show that anger. And sometimes I laugh and the child also ends up laughing with me. (FWI parent participant)."

This suggests that intervention with anger management at a family level may yield additional benefits. Implicitly, engaging in a group environment may encourage a degree of restraint that contributes to a perception of parental support:

> "One parent commented: It helped my child most that I was there to support him. I listened to him. I didn't display anger or disgust or negative emotion, but gave him the

opportunity to talk. He knew someone was sticking up for him" (Geary et al, 2011).

Just as one study in residential homes recognised that sexually harmful behaviour may result from an attitude where sex was seen as a commodity some studies suggested that sexually harmful behaviour expressed a perceived need to exert power or control over others in the form of anger or aggression (Green & Masson, 2002). So, for example, patterns of initiation rituals reported in residential homes might or might not have an overtly sexual component.

Communication and social skills training

Geary et al (2011) described the benefits derived from improved communication skills for both adolescent and family:

> "Most adolescents (71%) described learning how to communicate more effectively while attending the programmes and many parents and caregivers noticed striking improvements in this area."

In the study by Halse et al (2012) participants spoke of a general improvement in family relationships as a result of participation in the treatment programme:

> "I know it's changed in a good way because everyone's actually talking to each other now...and just communication lines yeah and respect".

As with anger management and conflict resolution the need to develop communication skills is often a shared need for both adolescents and families. Again this suggests the benefits of intervention at a family level. The study by Geary et al (2011) observed that several parents and caregivers (26%) made comments about staff who assisted them to develop strategies for improving communication and resolving conflicts.

Role of the Family

The importance of the family in providing support is seen as crucial by young people (Geary et al 2011, Martin 2004, Jones 2014, Lawson 2003). Geary et al (2011) found that for most adolescents (83%), irrespective of ethnicity, the participation and support of family members made a significant contribution to their involvement in treatment. Family involvement was viewed by most participants (85%) as integral to successful engagement because it provided the adolescent with support. Similarly Thornton et al (2008) reported that improvements as a result of a community treatment programme were more likely when at least one parent was engaged in treatment. Families also were described as having a vital role in clemency, by showing mercy to young people who have violated social norms. Often the young person with HSB fears loosing family support, but the support of family and community was seen as vital to

'becoming a success story' (Lawson 2003). Allan (2004) reports how the mothers of adolescents have a significant role to play in ensuring that the adolescents appear for their scheduled sessions. She also points out the asymmetry of the fact that generally fathers were unsupportive of therapy but, when they actually attended their contribution was valued by the therapists disproportionately highly. Several studies report that parents who are unable to support their children when going through treatment may experience a sense of guilt. On the other hand parents who did engage in the programme welcomed the opportunity to demonstrate their own sense of responsibility towards the family. The responsibility for being involved in treatment also could place a great burden on families. This might involve them having to talk to their child about sex, which in the context of an offending situation could be difficult for some (Jones 2014). Parents of children with HSB also have to cope with feeling responsible for their child's offense. They could feel angry with themselves, feeling that they had failed as parents. This was greatly helped when, as part of the treatment the young person takes full responsibility for their behaviour (Jones 2014, Pierce 2011).

Notwithstanding the strong presence of the five traditional components as itemised above, the most substantive theme to emerge across the studies was the role of the family in the treatment programme. This was a component specific to this age group and was not found in the meta-synthesis of the older age group reported by Walji et al (2014). Recent studies have looked at interventions operating at a family level and at using the family as a resource with which to address the adolescent's issues. Harnessing family strengths provides a potential route by which to sustain the effects of an intervention beyond the lifespan of a formal treatment programme. In this context family engagement is key:

> ""I found that including families into treatment is very powerful. I found that it created a support system that would outlive me, which is the original thought, but it was much more than that." (John, 35 in Yoder, 2015)

Geary et al (2011) report that "although there were no negative comments about family therapy, a need was identified to expand family work, particularly in the area of family education and support, and for greater inclusion of the wider family system". They further observed that "several parents (27%) reported they would have liked the option of attending a parent support group". Duane et al (2002) reported positive and negative experiences of attendance at a psycho-educational support group for parents. All parents reported finding attendance at the group beneficial, particularly in achieving a strong sense of support and solidarity among parents. The group was considered a secure place where parents could discuss, reflect and learn. Attendance at the group was described as "helpful", "comforting" and

sometimes “enjoyable”. Negative experiences related to the initiation of the programme when two parents found it difficult to attend reporting it as “intrusive” and stressful. However subsequently both reported finding it easier to attend. Other parents reported that the programme was sometimes like a “parent-teacher” meeting or that the group sometimes wandered off topic. However all parents reported that there was nothing they would change about the way the group programme was run and reported great personal benefits from attendance.

Other studies have looked at the roles of individual members of the family. Most notably the study by Allan (2004) employs a feminist perspective to critique the stance whereby the mother, who is typically the most influential in the treatment programme is tainted by a culture of “mother-blaming”.

We can conclude that the support of parents and carers is a key factor in engaging young people in the programme and helps them to reinforce the messages outside the sessions.

Changes in oneself

In contrast to adult sex offenders who may have proved unable to break the offender cycle adolescent offenders are experiencing personal development and growth. In the study by Halse et al (2012) it was reported changes to growing maturity together with therapist effects, not the content of the programme that was attributed success in treatment achievements. This growth and development further emphasises a requirement for flexibility in approach, further emphasising that a one-size fits all intervention approach is not appropriate.

Difficulties in engaging/ negative emotions

According to Yoder & Brown (2015) engagement is determined by such contexts and circumstances as stress, preparedness, and subjective barriers. These subjective barriers are described as principally being: resources and living situation.

Many families of sexually abusive youth lack the necessary resources to become engaged in treatment. “Lack of money, time, ability to change, lack of support, lack of resources” are all cited as barriers (Yoder, 2013). Parents may occupy full time employment or have other extenuating circumstances. Frequently, they are unable to take time off to attend treatment meetings or therapy, typically scheduled Monday through Friday during typical working hours. The offenders themselves may resent exclusion from school or other socialisation activities as a consequence of having to attend treatment sessions.

Providers noted that families who live in rural areas are less likely to be involved, given that it is substantially more difficult to attend weekly meetings or therapy appointments. Providers

report that even families that live in the city have difficulty attending, perhaps due to a lack of transport or the lack of money for fuel. Providers also noted that families with youth living outside of the home might be less involved than those living in the home because it would be easier to withdraw and avoid contact. They report a different dynamic when an offender is placed outside the home, requiring "so much energy from the family system".

Difficulties in Initiating Treatment

Several participants, parents and adolescents reported initial difficulties when initially engaging with the programme. This serves to emphasise that the need for communication between service providers in the delivery of interventions to children and young people with HSB should occur before the delivery of interventions. In this way those referring can create realistic expectations of what is to be expected upon onset of the treatment programme, and indeed through its continuance.

Geary et al (2011) observed that the "Importance of engagement from the first point of contact with the programmes went beyond a focus on the client therapist relationship. It included the provision of good pre-entry information to reduce barriers to participation; actively engaging adolescents and their families from the intake phase through to post-treatment transition; using culturally appropriate communication; incorporating active and physical activities; and aftercare services".

Halse et al (2012) reports that, initially, participants were "concerned about discussing sexual issues with strangers." Consequently they were often reluctant to commence group therapy. Notwithstanding this initial reluctance, participants in this study (Halse et al, 2012) felt unequivocally that group treatment was a good thing. This suggests that those referring a family for therapy should perhaps spend a little time overcoming these initial fears at the point of referral. Those delivering services should particularly be aware that "Entering the programmes' premises and meeting staff for the first time was...difficult for many parents and caregivers, especially for those who were survivors of sexual abuse..." (Geary et al, 2011).

Difficulties in Ongoing Treatment

In some cases the ongoing process of attending the programme were reported as being very challenging:

> "For some parents (36%), talking about their child's offending and listening to other people's stories was very difficult ..." Geary et al (2011)

Some participants appeared to resent having to neglect their school based activities in order to attend the programme thus inhibiting their participation in normalising social activities.

Identity as sex offender

Several studies commented on the stigma associated with being labelled as a sex offender. Some commentators pointed out the dual victim/perpetrator status occupied by many clients within the treatment programmes. A residential environment that chose not to differentiate between offenders and other children was seen as a positive ethos (Brogi & Bagley, 1998):

Young people do not know the reasons for the admission of other residents and can mix together freely, without the need to mention offending, etc. This creates an atmosphere/ethos where they can gain self esteem and create a new image for themselves rather than identify with other offenders.

Martin (2004) describes how positive it can be during the treatment process for adolescents to receive interventions in group settings with other young people with HSB and how this enables them to really understand and help one another.

Self esteem is reported as an important outcome for treatment programmes for the offenders themselves (Draper et al, 2013) and for parents participating in a support group (Duane et al, 2002).

Slattery et al (2012) recommended that "where young people who have committed sexual offences are not segregated from other non-sexual offenders, the approach of inviting all prisoners to engage in group modular programmes may be the safest and most effective method of offering treatment". This avoids the potential for stigma and ostracism reported in many studies. Geary et al (2011) report that participation in group based approaches was destigmatizing for adolescents and reduced their sense of isolation.

However this situation was paradoxically seen as offering additional problems (Brogi & Bagley, 1998) whereby a sex offender may find themselves with access to past or potential victims of similar abuse who need protection. Allan (2004) describes how practical difficulties within families may lead to victim and offender turning up at therapy sessions together even though the therapist has admonished against this. Concerns revolve not simply around safety issues but also with regard to the learning of negative skills.

Miller et al's (2011) research with female adolescent females, described the role treatment professionals play in the construction of identities, where the young people are socialized into a process of 'talking orientation ' in which one's openness to talking is considered evidence of positive engagement in treatment. The process of talking about, and offering a narrative to describe their HSB is important in seeing themselves as offenders, and being able to talk about it, an indication that they are putting it behind them.

Motivations/ reasons for not/ engaging

Peer aspects/ group processes

A reported benefit of the group approach was that it occasioned adolescents to express relief "to find that they were not the only ones and that help was available:

> "I thought I was the only one who did stuff like that" How did it feel thinking that you were the only one with this problem. "It felt really bad like. I don't really know how to explain it. Yeah it hurt me in some way".

According to Geary et al (2011) participants reported "mixed experiences of education groups". On the one hand education groups were a significant component of treatment for parents and caregivers. To this extent these group sessions served as an induction for parents, providing them with information on sexual abuse and ''how it affects the whole community, not just the abuser''. Some parents (56%) described how sharing their experiences reduced their feelings of isolation and guilt. In addition several parents (27%) talked about how listening to the stories of adolescents who had completed the programme engendered ''hope for the future'' (Geary et al, 2011).

Paradoxically group therapy is viewed as both helpful and potentially harmful. Most adolescents, parents and caregivers shared similar views about group therapy. In the study by Geary et al (2011) a majority of adolescents (58%) valued the support of group members and learnt from being challenged, A similar majority (62%) expressed the view that group therapy was the most difficult and the most helpful form of therapy for them - Difficult because they were asked to talk about their sexual abusing and personal problems in front of others.

In a residential context it was considered particularly unhelpful to house abused young people with sexual offenders and several commentators report the similar inappropriateness of placing different categories of offenders together. In particular Geary et al (2011) specify a need for programmes to take greater account of developmental and risk levels of youth when assessing their suitability for group therapy. They signal how this "supports the research on iatrogenic treatment effects which raises the possibility that uninformed mixing of disturbed youth with less impaired youth in therapy groups for sexual offending may be harmful" (Geary et al, 2011).

Therapeutic relationships/ therapist characteristics

In a more general study about the effects of group processes with both adult and juvenile offenders Marshall & Burton (2010) identified four process issues associated with the effectiveness of treatment for offenders: (1) Therapist characteristics; (2) Clients' perceptions of the therapist; (3) The therapeutic alliance; and (4) The group climate of treatment. Geary et al

(2011) document many instances where adolescents, parents and caregivers referred to the bond or friendship that developed between some therapists and adolescents. Many adolescents (79%) talked about how individual therapy provided them with opportunities to ''talk privately'' about topics they were struggling with, learn problem-solving skills and carry out in-depth work on personal issues which was not possible in a group setting.

Yoder & Ruch (2015) identify promising strategies (empathy, trust and connection, and feeling safe) for generating a therapeutic relationship. These all contribute to a key overarching theme of Developing Rapport.

Most interviewees (81%) in the study by Geary et al (2011) made positive comments about therapists and identified "therapist features that helped to generate good alliances and enhance engagement in the treatment process". Participants valued therapists who were understanding, caring, encouraging, challenging and supportive, and respectful and non-judgemental. They also appreciated therapists who were available outside session times, had a sense of humour and who showed a genuine and personal interest in the young person. For many adolescents (62%) it was particularly important that therapists were trustworthy, ''down-to-earth'' and patient by allowing sufficient time so they could progress at their own pace (Geary et al, 2011).

The importance of the therapeutic relationship is emphasised by the symmetrical nature of its impact (i.e. positive or negative) on adolescents. The study by Geary et al (2011) reported that negative therapist behaviours identified, albeit by a minority (17%) of interviewees, included the expression of anger, lateness for appointments, swearing, using difficult language, and failure to notify parents and caregivers about changes of session times and appointments. We can therefore conclude that a strong therapeutic relationship between young people and practitioners is important in helping to motivate and engage young people in the programme.

Skills/ insight developed

In addition to the anger management and communication skills acquired by adolescents, and the insights afforded by victim empathy, participants in treatment programmes also reported learning "the benefits of sharing their problems with a third party. They were able to discuss their problems with their therapists or members of their family". (Halse et al, 2012)

A safe and welcoming space

Geary and colleagues (2011) observe how physical surroundings matter: In the context of adolescents and young people the physical environment can have an impact on the way in which clients respond and participate in a programme. The creation of a safe environment is seen as a key objective of the therapist role:

> Providers described the retribution and stigma so frequently associated with sex offending, and emphasized the need to enable a ‘‘safe zone’’ where families can feel protected. One provider specifically explained how this eases fears. ‘‘Basically to just create a new place where they can, you know just be themselves, be open or be feel safe to address this stuff, because this is the hardest stuff to go through’’ (Larry, 56 in Yoder & Ruch, 2015)

Yoder & Ruch (2015) describe how providers further expressed how a safe space fosters open discourse surrounding feelings of ostracism. They report that:

> “Ultimately, treatment should be a platform encouraging expression of thoughts and ideas while minimizing fears, and promoting safety allows families to have this experience. You know, promoting open communication and promoting the kinds of interactions where families can feel safe, feel safe to really be honest and talk without fearing they are going to be judged or punished is really crucial to helping them have an environment that is going to support their treatment (Terri, 50 in Yoder & Ruch, 2015).

Benefits of such a safe zone include increased trust, improved communication and rapport and the increased likelihood of initiation and continuance of the programme (Yoder & Ruch, 2015). These factors are particularly critical given the difficulties many families have encountered. It is imperative that they feel comfortable and welcomed into the therapeutic setting.

Geary and colleagues (2011) also report how: receiving refreshments is important. They found that “comments about being offered refreshments, irrespective of when, nearly always occurred together with a positive comment about a therapist or another member of staff”.

Future worries/follow-up required

Many families and adolescents looked beyond the initial time period inhabited by the treatment programme to thoughts of how the effects of the treatment might be maintained and sustained. Fear of the "unknown" may extend to not knowing the future outcome of treatment causing families to feel hesitant about involvement with services (Yoder, 2013). Many families identified a need for ongoing support if progress was to be sustained. In this connection the strengthening resource based model seems to offer a possible mechanism by which the effect of the treatment might be extended and promulgated. Specifically Geary and colleagues (2011) report how:

> Families and caregivers raised concerns about the inadequate provision of aftercare services...In view of the finding that adolescents on these programmes were at the

> highest risk of sexual re-offending within the first year of completing treatment…the provision of effective aftercare services appears to be particularly apposite (Geary et al, 2011).

For this reason Geary et al (2011) describe that it is important to ensure that review meetings place treatment into context:

> "When young people talked about the review process, they valued being kept informed about their personal progress and future direction (Geary et al, 2011)."

This future horizon that is inhabited by some idealised future self view of the rehabilitated adolescent is seen in terms of his renewed socialisation:

> ''(To ask myself) what is the small steps to bring (my) life back the way it should have been. I want to get out and settle down with my family and my son'' (Slattery et al 2012)

and in terms of the future course of their treatment:

> Plans/strategy for future ''Attend sessions like these, and I should be going to a treatment centre at the end of the next month'' (Slattery et al 2012)

Comparison with Previous Qualitative Synthesis

As previously mentioned the use of a common analytical framework facilitates comparison with a previous qualitative evidence synthesis, albeit in an adult sexual offenders group that excludes our specific population. Both syntheses attest to the importance of the therapeutic relationship and to the therapeutic environment. Initiation of group activity is seen as challenging but ultimately rewarding. Peers can benchmark their own situation against those of other participants. However the iatrogenic possibility of adolescents being influenced by other more serious offenders is also reported.

A contrast exists between the role of the family in adult studies, which is primarily seen as part of the rehabilitation process to which the adult offender might return, compared with that in adolescent offenders where the family is instrumental in the delivery of the actual intervention itself. A further difference is in the idea of the creation of a safe and welcoming environment. This is primarily seen in more metaphorical terms by adult offenders whereas adolescent offenders envision this in more of a concrete practical context – the welcoming environment, the disposition of administrative and therapist staff and in the trappings of "home" such as the provision of biscuits.

DISCUSSION

Statement of principal findings

Question 1: What factors help when intervening with adolescents with harmful sexual behaviour?

While there is some confirmation in the qualitative research evidence base of the value of the components that have been traditionally delivered in adolescent programmes one can detect a clear sense in which the treatment programme is primarily a structure within which the adolescent can re-orientate himself, for example through activities, improved family relationships etcetera. For this reason participants do not overplay the actual content of the programmes when ranged against their socialisation activities and the role of the family. The therapeutic environment and the therapeutic relationship are regarded as being particularly important to the success of treatment. Group approaches are welcomed as a source of information and normalisation and these may extend to activities such as boxing or wilderness approaches. The acquisition of communication skills and social skills is particularly valued particularly in the sense that such skills symbolise the adolescent's passage towards reintegration within society.

Question 2: What factors hinder intervention with adolescents with harmful sexual behaviour?

Unsurprisingly the factors that contribute to an impaired effect for the adolescent who has displayed harmful sexual behaviour include negative therapist behaviours, concerns with initiation and ongoing engagement with the group process, adverse effects resulting directly from involvement in the group process or by being in proximity, the impairment of ongoing participation with school or other social activities, with different types of offenders and ongoing dysfunctionality of the family situation.

Methodological considerations

The qualitative evidence synthesis is dominated by the rich, thick descriptions from two studies in particular, those by Geary et al (2011) and by Halse et al (2012). These studies are of quite recent provenance and appear to offer a reasonable representation of current therapeutic approaches, particularly with regard to the involvement of the family in the treatment process. Nevertheless a qualitative evidence synthesis with an interpretive focus is particularly vulnerable to the disproportionate influence of a small number of rich studies. A cursory examination reveals that many of the themes identified from these two studies are supported,

albeit in minimal detail, by the thinner qualitative descriptions. However specific findings that are singly, or largely, based on these studies should be viewed with caution. The dominance of these studies is further indicated by the findings of the quality assessments. While quality assessment of qualitative studies is not solely dependent upon the contextual richness and conceptual thickness of those studies it has been observed that such characteristics are frequently a marker for better reported studies that include more complete detail of study methods.

The role of surveys evaluating opinions on qualitative statements pre-specified by the authors is contested within qualitative evidence synthesis. For this reason we have preferred to use the two identified surveys (Brogi & Bagley 1998 and Cheung & Brandes) in a more limited confirmatory role rather than giving them equal status as evidence to studies using accepted methods of qualitative data collection and analysis. Fortuitously these surveys are numerically less well represented in the set of included studies and are therefore unlikely to have a disproportionate effect on study findings and analyses.

Finally the last two decades have witnessed considerable advances in thinking and practical delivery of interventions for adolescents with harmful sexual behaviour. We observed that older studies (i.e. from before the year 2000) appeared to imperfectly represent the current state of interventions for adolescents with harmful sexual behaviour. For example the study by Muster (1992) focuses on a debate surrounding the use of confrontational versus sympathetic methods by therapists. While this tension is still present in a subdued form within more recent studies it no longer merits prominence. The effect of the richer thicker studies from the late 2000s, referred to above, has served to mitigate the likelihood that these earlier studies have exerted a disproportionate influence over the findings of the synthesis.

Further research

This qualitative evidence synthesis has identified two specific evidence gaps, both relating to particular sub-populations. First, although the remit was to include adolescents or young adults with learning difficulties we were unable to find any qualitative explorations of the experience of treatment of this specific population group. We might imagine that the dual complexity of conducting studies of adolescent or young people manifesting harmful sexual behaviour and those with learning difficulties might result in many practical difficulties when studying this population. We were also able to find very few qualitative studies of young women who had exhibited harmful sexual behaviour. It is recognised that the prevalence of harmful sexual behaviour is demonstrably less than in an adolescent male population. Nevertheless significant

numbers of adolescent women with harmful sexual behaviour do exist and it remains a priority area for future research.

Conclusion

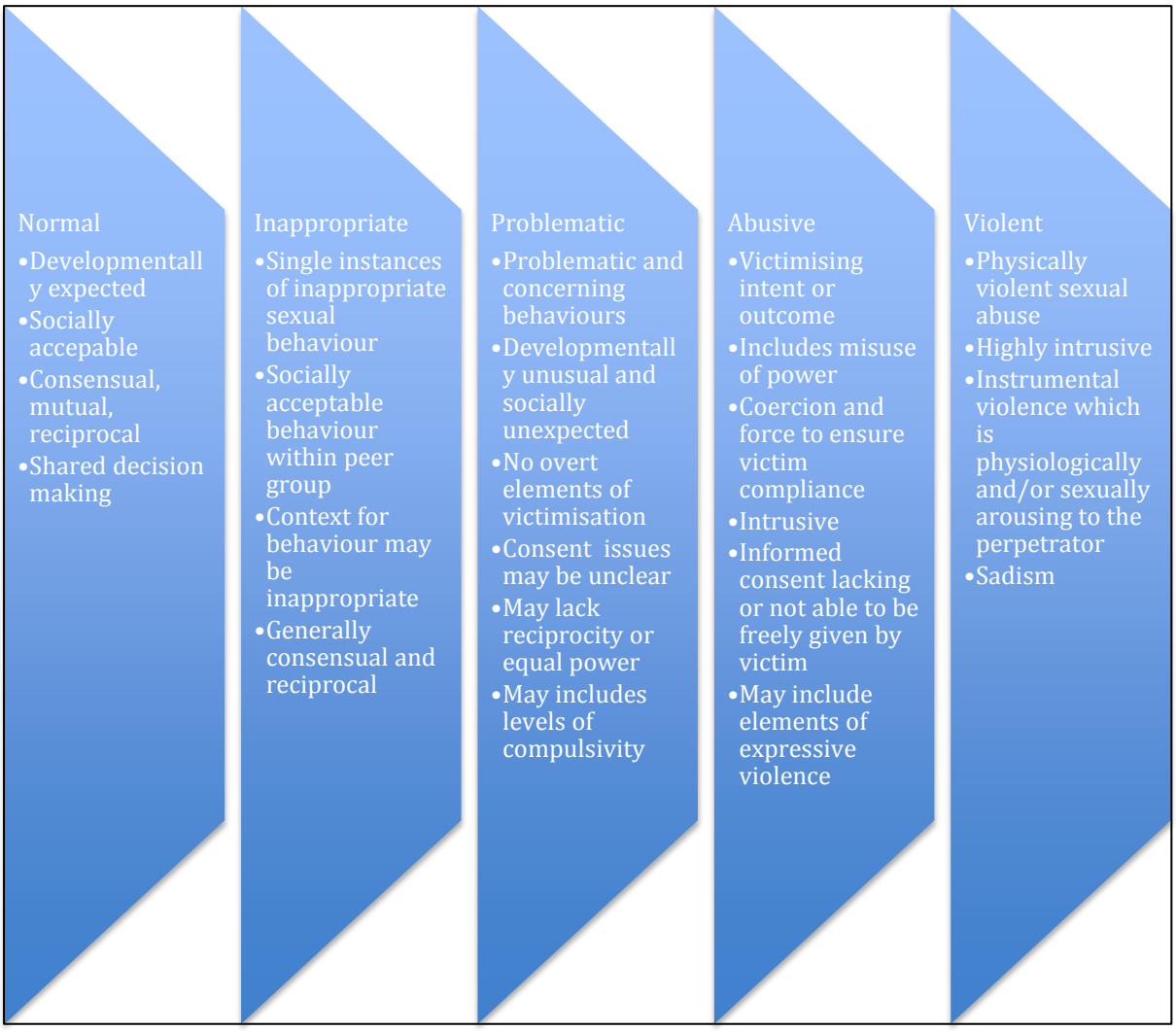
This qualitative evidence synthesis has identified the ongoing presence of traditional intervention programme components such as relapse prevention, anger management, victim empathy, communication and social skills etcetera within published accounts of qualitative intervention research. Nevertheless it has documented the emergence of a particularly important component in terms of intervention at a family level. Other important considerations include the role of the therapeutic relationship and of the therapeutic environment. In the absence of compelling quantitative evidence in support of the effectiveness of particular opportunistic or branded packages of intervention components this synthesis can offer useful insights as to how particular individual components may address particular underlying pathologies and thus offer a tailored individualised response that seeks to meet the particular needs of the target population.

INTEGRATION OF QUALITATIVE AND QUANTIATIVE REVIEWS

The quantitative and qualitative evidence reviews were conducted separately. The process of looking at how the evidence from each review informed the other was through team discussion involving the reviewers (FC, ES, AB) and topic experts within the team (SH, KH). We have used logic models as a way of illustrating the results of these discussions.

Harmful sexual behaviour in children and young people is a term that covers a very wide range of behaviours, from those that are described as problematic (for example behaviours that draw attention to the child such as inappropriate masturbation or addiction to online pornography) to those that are abusive (for example behaviours that are coercive of another individual). Hackett (2010) provides a useful thematic that illustrates this clearly:

Figure 2: A thematic illustration of types of HSB in children and young people



It should be noted that these are not exclusive categories, but represent a continuum of sexual behaviours ranging from the developmentally normal to highly deviant. Any given child or young person may exhibit several of these behaviours.

HSB is an umbrella term encompassing a wide range of behaviours (see figure 2). The underpinning factors that lead to HSB, that interact with numerous potential environmental and social factors also mean that the etiology of the behaviours is also very varied. These different elements i.e. the varied nature of the behaviour, of the potential victims, and of its etiology mean that treatment options must reflect this diversity.

What is very clear from the quantitative evidence review is that most of the treatments that have been evaluated have an extremely narrow focus in terms of the populations they are addressing. The history of the development of interventions would endorse this. Most of the interventions are designed to treat adolescent sex offenders. Most of the published quantitative evidence evaluates interventions that have been offered to clinical samples of young people referred to specialist services and who occupy the more deviant end of the continuum of behaviours. Most of these evaluated interventions are sexual abuse focused and have been adapted from models originating from interventions developed to treat male adult sex offenders. Nearly all of the studies are focused on adolescents who have committed sexual offenses, as opposed to exhibiting behaviours which are problematic but which fall short of thresholds for adjudicated offences within the criminal justice system. Very little evidence is available evaluating interventions for younger, preadolescent children with HSB.

The existing evidence base has very little data on interventions that address problematic rather than abusive HSB behaviours, HSB in girls or adolescent females and HSB in younger children. There is also very little available to address HSB in children and young people with learning difficulties, although adolescent males with learning difficulties and poor mental health were a subset of some of the included evaluation studies. Indeed, in Hackett et al.'s 2013 study, 38% of 700 children and young people referred to services because of HSB were described as having some type of learning disability.

In the logic model (see figure 3) the red text highlights the areas where there are currently gaps in the evidence base.

It is evident from the quantitative review that CBT based interventions, MST and Adventure based interventions all potentially have some benefits for some children. The strength of the evidence is weak, with small studies of poor quality. The studies also have limited generalisability to the UK context. What is unclear is what components of what interventions

are most effective, and what components for which children are most effective. It is in addressing these gaps that the qualitative evidence is particularly helpful.

What we have sought to do in the second logic model is to unpack the components of the interventions and then look at how these map to the evidence from the qualitative review. The qualitative evidence has highlighted those components of interventions that participants, their families and professionals feel have value. They also highlight where existing provision may be lacking. The caveat with the published qualitative evidence is that it has also tended to focus on quite a limited population of young people exhibiting abusive HSB.

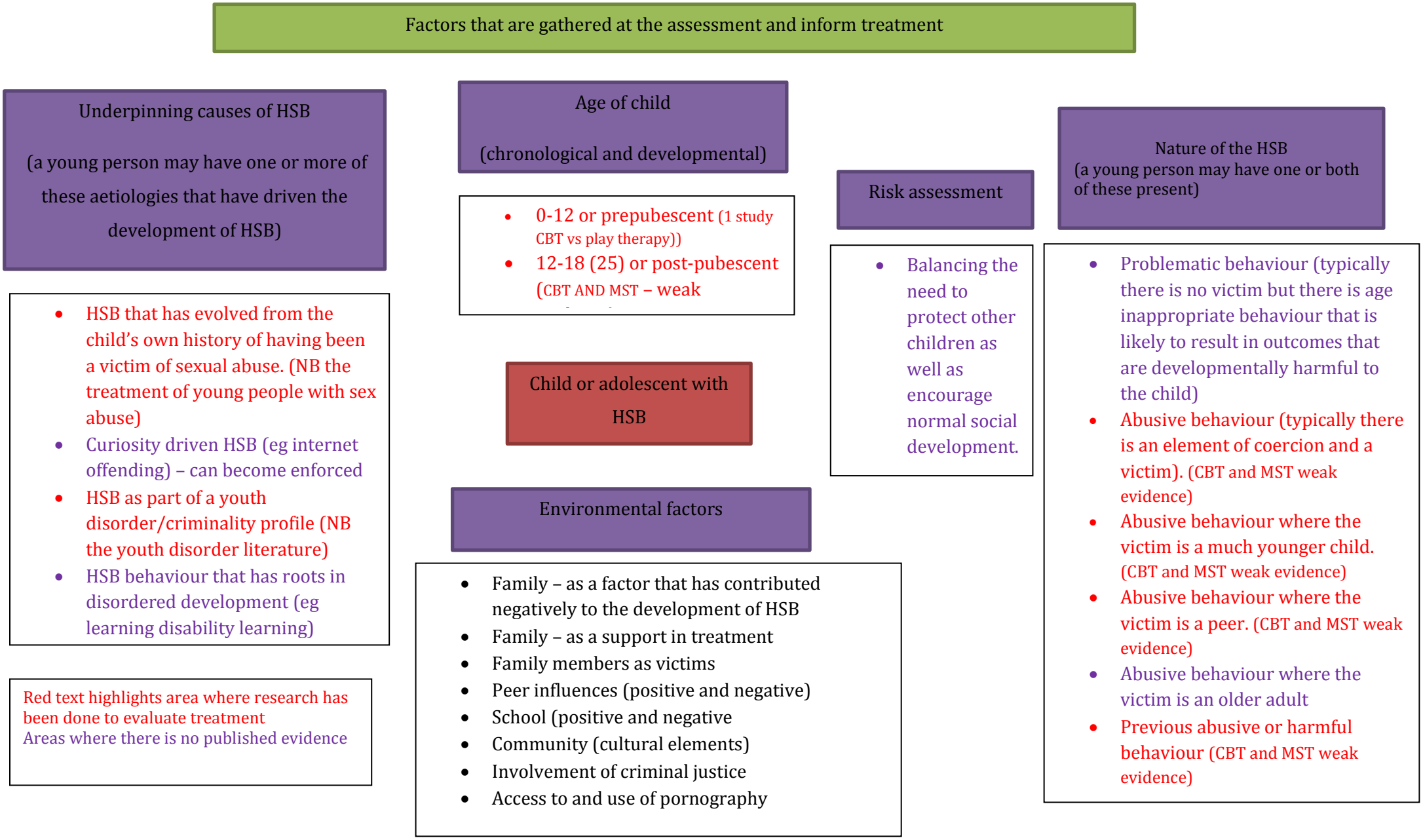
While the evidence supports the value of many traditional components of interventions, i.e: relapse prevention and victim empathy there were other features of interventions that are considered vital to their effectiveness and also are distinctive features of interventions with children and young people, supporting the recognition that it is not always appropriate to apply adult models of treatment to young people. These include the participation of the family which is an essential part of MST interventions. The family as a whole often needs to be part of the treatment, allowing the family to support treatment and also to learn new skills that might themselves support the young person. It recognises that families also need support with dealing with their anger at the young person and to feel they are not themselves isolated and ostracized by the behaviour of the young person with HSB. It is clear that some interventions may not work with the family to the same extent, particularly residential treatments including adventure based therapies.

Increasingly there is recognition of the importance of the developmental aspect to the behaviour. Not only is it likely to change as the young person changes, but also the role of youth disorder that may evolve to include some form of HSB. Recognising and addressing the factors that lead to adolescents adopting antisocial behaviours may be relevant. So helping the young person to develop competency in skills such as anger management and distress and problem solving are features of more recent developments in programmes to treat young people with HSB.

Another feature that is emphasised in the qualitative evidence, is the need for skilled practitioners who are able to develop good relationships with the child or young person and are able to work flexibly, responding to the varying types of behaviours, the varying social and environmental factors, the varying causes and the responses to the intervention. Some interventions that advocate a highly manualized or structured approach, such as MST, may be limiting their effectiveness if they don't enable practitioners to adapt the intervention to suit the circumstances they encounter.

The logic model seeks to show the components of interventions that appear to be considered important or essential to practice, and to highlight where these are incorporated within existing practice. The picture that appears to be emerging is that innovations in practice interventions incorporate elements that are considered important in the treatment of HSB and may have been absent in earlier abuse focused interventions. However, there are elements of these approaches that also appear to have value. Only two components appear to be consistently part of the interventions and these include; skilled practitioners and addressing distortions about sex and relationships. Many essential components are used in some but not all of the interventions. Therefore there needs to be greater consideration of the components of interventions, and to what extent do they allow the practitioners to skilfully and flexibly utilise those most appropriate for the child and their family.

Figure 3: Logic model showing the linkages between theories of HSB and how these map to intervention components



Components of existing interventions

CBT
Skilled practitioners
Relapse prevention
Empathy training
Address deviant sexual urges
Some family involvement

MST
Skilled practitioners
Heavily structured
School involvement
Family involvement

Adventure based therapy
Skilled counsellors
Learning positive life skills
Building self esteem
Confront inappropriate behaviours

Colour guide

Blue: some interventions have this element
Green: all the intervention have this element
Red: none of the interventions have these
Orange: unclear

Components for 'Effective interventions'

- Family involvement, both in treatment and in providing support
- Treatment of the family
- Effective assessment of all of the factors that led to the HSB
- School involvement
- Building self-esteem of child
- Practitioner flexibility
- Skilled practitioners
- Acceptability of intervention
- victim empathy
- When appropriate it involves treatment of experiences of abuse.
- Developmentally appropriate

From Hackett (2006)
Essential components

- Emotional competence skills including management of anger and distress
- General developmental assessment
- Changing distortions about sex and relationships
- Pro-social emotional cognitive and behavioural skills
- Risk assessment
- Gaining an understanding of the child's cycles and/or pathways to sexually harmful behaviours
- Sex education
- Life-space work (boundaries, interaction, social skills)
- Relapse preventions work
- Consequences of further abusive behaviour
- The development of empathy

Desirable components

- Dealing with deviant sexual urges
- Problem-solving as a 'lifetime skill'
- Detailed behavioural analysis of the sexual abusive behaviours

Additional components

- Changing abusive fantasies and promoting appropriate positive sexual fantasies

References

Allan, J. (2004). Mother blaming: a covert practice in therapeutic intervention. Australian Social Work, 57(1), 57-70.

Allan, J. (2006). Whose job is poverty? The problems of therapeutic intervention with children who are sexually violent. Child Abuse Review, 15(1), 55-70.

Apsche, J. A., Evile, M. M., & Murphy, C. (2004) The thought change system an empirically based cognitive behavioral therapy for male juvenile sex offenders: A pilot study. [References] not reported 5[1], 101-107.

Ayland, L. & West, B. (2006) The Good Way model: A strengths-based approach for working with young people, especially those with intellectual difficulties, who have sexually abusive behaviour. [References]38. 12[2], 189-201.

Bates MJ (1989) The design of browsing and berrypicking techniques for the online search interface. Online Information Review 1989, 13; 407-424

Becker J.V.; Kaplan M.S; Kavoussi R. (1988) Measuring the Effectiveness of Treatment for the Aggressive Adolescent Sexual Offender. Annals New York academy of Sciences, 215 - 222

Becker J.V. & Kaplan M.S. (1993) Cognitive behavioural treatment of the juvenile sex offender. 64, 264-277. Chapter 14 The Juvenile Sexual Offender. In H.E.Barbaree, Marshall W.L., Laws D.R. (Eds). New York

Belton, E., Barnard, M. and Cotmore, R. (2014) Turn the page: learning from a manualised approach to treating harmful sexual behaviour. London: NSPCC.

Booth A, Harris J, Croot E, Springett J, Campbell F, Wilkins E, (2013) Towards a methodology for cluster searching to provide conceptual and contextual “richness” for systematic reviews of complex interventions: case study (CLUSTER) BMC Medical Research Methodology. 13; 118

Bonner B.L., Walker E., Berliner L. (1999) Children with sexual behaviour problems: Assessment and treatment. Washington, DC: Administration of Children, Youth and Families, DHHS

Borduin, C. M., Henggeler, S. W., Blaske, D. M., & Stein, R. J. (1990) Multisystemic treatment of adolescent sexual offenders. International Journal of Offender Therapy and Comparative

Criminology 34 (2), 105-113

Borduin, C. M., Schaeffer, C. M., & Heiblum, N. (2009) A randomized clinical trial of multisystemic therapy with juvenile sexual offenders: Effects on youth social ecology and criminal activity. [References] 83. Journal of Consulting and Clinical Psychology 77[1], 26-37.

Brogi, L., & Bagley, C. (1998). Abusing victims: detention of child sexual abuse victims in secure accommodation. Child Abuse Review, 7(5), 315-329.

Calder M (2001) Juveniles and Children Who Sexually Abuse: Frameworks for assessment. (2nd edition) Lyme Regis: Russell House Publishing

Calley, N. G. & Gerber, S. (2008) Empathy-promoting counseling strategies for juvenile sex offenders: A developmental approach. [References] 122. 28[2], 68-85.

Campbell F, Johnson M, Messina J, Guillaume L, Goyder E. (2011) Behavioural interventions for weight management in pregnancy: A systematic review of quantitative and qualitative data. *BMC Public Health*, 11: 491.

Carpentier, M.Y., Silovsky, J.F., & Chaffin, M. (2006) Randomized trial of treatment for children with sexual behavior problems: ten-year follow-up Journal of Consulting & Clinical Psychology, 74, (3) 482-488

Carroll, C., Booth, A., & Lloyd-Jones, M. (2012). Should we exclude inadequately reported studies from qualitative systematic reviews? An evaluation of sensitivity analyses in two case study reviews. Qualitative Health Research, 22(10), 1425-1434.Cochrane Collaboration. Review Manager (RevMan) Version 5.0 [computer program]. 2008.

Chaffin M, Letourneau E and Silovsky J. (2002) 'Adults, Adolescents and Children Who Sexually Abuse Children: A developmental perspective' in Myers J, Berliner L, Briere, J, Hendrix C, Jenny C and Reid T (eds) The APSAC Handbook on Child Maltreatment. (2nd edition) Thousand Oaks, CA: Sage

Cheung, M., & Brandes, B. J. (2011). Enhancing treatment outcomes for male adolescents with sexual behavior problems: Interactions and interventions. Journal of Family Violence, 26(5), 387-401.

Child and Adolescent Mental Health.Conference: 1st Excellence in Child Mental Health Conference Istanbul Turkey.Conference Start: 20111130 Conference End: 20111203.Conference Publication: (var.pagings), 16, (pp 18) December

Criminal Justice Joint Inspection (2013) Examining Multi-Agency Responses to Children and Young People Who Sexually Offend: A joint inspection of the effectiveness of multi-agency work with children and young people in England and Wales who have committed sexual offences and were supervised in the community. London: HM Inspectorate of Probation

Deacon L (2013) Children's Social Care Services' Response to Children Who Display Sexually Harmful Behaviour. (Unpublished PhD thesis.)

Deacon, L A (2015) Children's Social Care Services' Response to Children who Display Sexually Harmful Behaviour. Doctoral thesis, Durham University.

Draper CE, Errington S, Omar S, Makhita S (2013) The therapeutic benefits of sport in the rehabilitation of young sexual offenders: A qualitative evaluation of the Fight with Insight programme. Psychology of Sport & Exercise 4:519.

Duane, Y., Carr, A. Cherry, J., McGrath, K. & O'Shea, D. (2002). Experiences of parents attending a programme for Families of adolescent CSA perpetrators in Ireland. Child Care in Practice, 8 (1), 46-57.

Eldridge, H. & Wyre, R. (1998) The Lucy Faithfull Foundation residential program for sexual offenders 251. 79-92.

Epps, K. J. (1996) Sexually abusive behaviour in an adolescent boy with the 48, XXYY syndrome: A case study 256. 26, 3-11.

Erooga M and Masson H (eds) (1999) Children and Young People Who Sexually Abuse Others: Challenges and responses. London: Routledge

Erooga M and Masson H (eds) (2006) Children and Young People Who Sexually Abuse Others: Current developments and practice responses. (2nd edition) Abingdon, Oxon: Routledge

Farmer and Pollock, S. (1998) Sexually abused and abusing children in substitute care Chichester, Wiley.

Farmer, E., & Pollock, S. (2003). Managing sexually abused and/or abusing children in substitute care. Child & Family Social Work, 8(2), 101-112.

Finkelhor D and Berliner L (1995) 'Research on the Treatment of Sexually Abused Children: A review and recommendations' Journal of the American Academy of Child and Adolescent Psychiatry 34 (11) 1408-1423

Finkelhor D, Ormrod R and Chaffin M (2009) 'Juveniles Who Commit Sex Offenses Against Minors' *Juvenile Justice Bulletin* (December) Office of Juvenile Justice and Delinquency Prevention, US Department of Justice

Geary, J., Lambie, I., & Seymour, F. (2011). Consumer perspectives of New Zealand community treatment programmes for sexually abusive youth. Journal of sexual aggression, 17(2), 181-195.

Gillis, H.L. & Gass, M.A. 2010. Treating juveniles in a sex offender program using adventure-based programming: a matched group design 492. Journal of Child Sexual Abuse, 19, (1) 20-34

Green, L., & Masson, H. (2002). Adolescents who sexually abuse and residential accommodation: Issues of risk and vulnerability. British Journal of Social Work, 32(2), 149-168.

Griffin, S., Williams, M., Hawkes, C., & Vizard, E. (1997). The professional carers' group: supporting group work for young sexual abusers. Child abuse & neglect, 21(7), 681-690.

Griffin, S., Williams, M., Hawkes, C., & Vizard, E. 1997. The Professional Carers' Group: Supporting group work for young sexual abusers120. Child Abuse and Neglect, 21, (7) July

Hackett S (2004) *What Works for Children and Young People with Harmful Sexual Behaviours?* Barkingside: Barnardo's

Hackett S, Carpenter J, Patsios D and Szilassy E (2013a) 'Interprofessional and Interagency Training for Working with Young People with Harmful Sexual Behaviours: An evaluation of outcomes' *Journal of Sexual Aggression* 19 (3) 329-344

Hackett S, Masson H and Phillips S (2005) *Services for Young People Who Sexually Abuse*. London: NSPCC, Youth Justice Board and NOTA

Hackett, S. (2014). Children and young people with harmful sexual behaviours. Research Review. Dartington: Research in Practice.

Hall S (2006) Children with harmful sexual behaviours—what promotes good practice? a study of one social services department. Child Abuse Review 15: 273–84. doi:10.1002/car.926.

Halse, A., Grant, J., Thornton, J., Indermaur, D., Stevens, G., & Chamarette, C. (2012).

Intrafamilial adolescent sex offenders' response to psychological treatment. Psychiatry, Psychology and Law, 19(2), 221-235.

Harden A, Oakley A., Oliver S: Peer-delivered health promotion for young people: s systematic review of different study designs. *Health Education Journal* 2009, 60: 1-15.

Harvey, M. Experiences of young offenders involved in multisystemic therapy 366. 73[2-A], 765. 2012.

Henggeler, S.W. 2011. Multisystemic therapy (MST) for treating adolescent antisocial behavior: The journey from efficacy research to international transport

Henggeler, S.W., Letourneau, E.J., Chapman, J.E., Borduin, C.M., Schewe, P.A., & McCart, M.R. 2009. Mediators of Change for Multisystemic Therapy With Juvenile Sexual Offenders 127. Journal of Consulting and Clinical Psychology, 77, (3) June

Hunter J.A., Goodwin D.W., (1992). The clinical utility of satiation therapy with juvenile sexual offenders: Variations and efficacy. Annals of Sex Research, 5, 71-80

Hunter, J. A. & Santos, D. R. (1990) The use of specialized cognitive-behavioral therapies in the treatment of adolescent sexual offenders. International Journal of Offender Therapy and Comparative Criminology 34[3], 239-247.

Hunter, J.A., Ram, N., & Ryback, R. 2008. Use of satiation therapy in the treatment of adolescent-manifest sexual interest in male children: A single-case, repeated measures design 139. Clinical Case Studies, 7, (1) February

International Journal of Offender Therapy and Comparative Criminology 34[2], 105-113. 1990.

International Journal of Offender Therapy and Comparative Criminology 34[3], 239-247. 1990.

Joffe M and Mindell J (2006) Complex causal process diagrams for analysing the health impacts of policy interventions. Am J Public Health Mar 96 (3): 473-479

Jones, S. (2014). Parents of Adolescents Who Have Sexually Offended Providing Support and Coping With the Experience. Journal of interpersonal violence, 0886260514540325. http://jiv.sagepub.com/content/early/2014/07/02/0886260514540325.full.pdf+html

Kaplan, M.S., Morales, M., & Becker, J.V. 1993. The impact of verbal satiation on adolescent sex

offenders: A preliminary report 159. Journal of Child Sexual Abuse, 2, (3) 1993

Kolko, D.J., Noel, C., Thomas, G., & Torres, E. 2004. Cognitive-behavioral treatment for adolescents who sexually offend and their families: individual and family applications in a collaborative outpatient program537. Journal of Child Sexual Abuse, 13, (3-4) 157-192

Ladwa-Thomas U, Sanders R (1999) Juvenile sex abusers: perceptions of social work practitioners. Child Abuse Review 8:55–62.

Lambie I, Hickling L, Seymour F, Simmonds L, Robson M, Houlahan C (2000) Using wilderness therapy in treating adolescent sexual offenders. Journal of Sexual Aggression 5: 99–117. doi:10.1080/13552600008413302

Lambie, I. & McCarthy, J. 2005. Interviewing strategies with sexually abusive youth179. Journal of Child Sexual Abuse, 13, (3-4) 2005

Larimer, D. (1996). Treatment and relapse prevention for adolescent sexual offenders474. 2[1], 53-56.

Lawson L (2003) Becoming a success story: how boys who have molested children talk about treatment. Journal of Psychiatric and Mental Health Nursing 10:259–68. doi:10.1046/j.1365-2850.2003.00554.x.

Letourneau, E.J., Henggeler, S.W., Borduin, C.M., Schewe, P.A., McCart, M.R., Chapman, J.E., & Saldana, L.(2009) Multisystemic therapy for juvenile sexual offenders: 1-year results from a randomized effectiveness trial240. Journal of Family Psychology, 23, (1) 89-102

Letourneau, E.J., Henggeler, S.W., McCart, M.R., Borduin, C.M., Schewe, P.A., & Armstrong, K.S. (2013). Two-year follow-up of a randomized effectiveness trial evaluating MST for juveniles who sexually offend147. Journal of Family Psychology, 27, (6) 978-985

Lindsay, W.R., Olley, S., Baillie, N., & Smith, A.H. (1999) Treatment of adolescent sex offenders with intellectual disabilities 567. Mental Retardation, 37, (3) 201-211

Loar, L. (1994) Child sexual abuse: several brief interventions with young perpetrators585. Child Abuse & Neglect, 18, (11) 977-986

Longo, R.E. (2005) An integrated experiential approach to treating young people who sexually offend 509. Journal of Child Sexual Abuse, 13(3/4), 2005, pp.193-213, 2005,

Martin S (2004) CYC-Net: CYC-Online. Sex offender treatment: An uphill journey.

http://www.cyc-net.org/cyc-online/cycol-1104-sexoffender.html (accessed 16 July 2015).

Maruna, S. (2001) Making Good: How Ex-Convicts Reform and Rebuild Their Lives. Washington, DC: American Psychological Association

Masson H (2001) *Children and Young People Who Sexually Abuse Others. A report to inform the initial work of NOTA's National Committee on Sexual Abuse by Young People.* (Unpublished report.)

McKibbin, G., Humphreys, C., & Hamilton, B. (2015). Prevention-enhancing interactions: a Critical Interpretive Synthesis of the evidence about children who sexually abuse other children. Health & social care in the community.

Miller DL (2011) Being Called to Account Understanding Adolescents' Narrative Identity Construction in Institutional Contexts. Qualitative Social Work 2011;10:311–28. doi:10.1177/1473325011409479.

Ministry of Justice (2013a) *An Overview of Sexual Offending in England and Wales*. London: Ministry of Justice, Home Office and Office for National Statistics

Muster, N. J. (1992). Treating the adolescent victim-turned-offender. Adolescence, 27(106), 441.

NCH (1992) The Report of the Committee of Enquiry into Children and Young People Who Sexually Abuse Other Children. London: NCH

NEUSTATTER, A. 2002. Locked in - locked out: the experience of young offenders out of society and in prison

New M, Stevenson J and Skuse D (1999) 'Characteristics of Mothers of Boys Who Sexually Abuse' *Child Maltreatment* 4 (1) 21-31

Pearson M, Moxham T, and Ashton K (2011) Effectiveness of Search Strategies for Qualitative Research About Barriers and Facilitators of Program Delivery. Evaluation & the Health Professions 34 (3) 297 to 308

Pierce S (2011) The lived experience of parents of adolescents who have sexually offended: I am a survivor. J Forensic Nurs. 2011 Dec;7(4):173-81. doi: 10.1111/j.1939-3938.2011.01116.x.

POLLOCK, P. H., Stowell-Smith, M., & Gopfert, M. (2006) Cognitive Analytic Therapy for Offenders: A New Approach to Forensic Psychotherapy653.

Radford L, Corral S, Bradley C, Fisher H, Bassett C, Howat N and Collishaw S *(2011)* Child Abuse and Neglect in the UK today*. London: NSPCC*

Seabloom W, Seabloom M, Seabloom E, Barron R and Hendrickson S (2003) 'A 14- to 24-year Longitudinal Study of a Comprehensive Sexual Health Model Treatment Program for Adolescent Sex Offenders: Predictors of successful completion and subsequent criminal recidivism' *International Journal of Offender Therapy and Comparative Criminology* 47 (4) 468-481

Shenk, C. & Brown, I.A. (2007) Cognitive-behavioral treatment of an adolescent sexual offender with an intellectual disability: A novel application of exposure and response prevention301. Clinical Case Studies, 6, (4) August

Slattery, P., Cherry, J., Swift, A., Tallon, M., & Doyle, I. (2012). From custody to community: Development of assessment and treatment for juveniles serving sentences for sex offences in an Irish context. Journal of Sexual Aggression,18(1), 81-90.

Smith C, Allardyce S, Bradbury-Jones C, Hackett S, Lazenbatt A and Taylor J (2014) Practice and Policy in the UK with Children and Young People Who Display Harmful Sexual Behaviour: An analysis and critical review. Journal of Sexual Aggression (published online first)

Smith C, Bradbury-Jones C, Lazenbatt A and Taylor J (2013) *Provision for* Young People Who have Displayed Harmful Sexual Behaviour: An understanding of contemporary service provision for young people displaying harmful sexual behaviour in a UK context. London: NSPCC

Somervell J, Lambie I (2009). Wilderness therapy within an adolescent sexual offender treatment programme: A qualitative study. Journal of Sexual Aggression, 15: 161–77.

Thomas J, Harden A, Oakley A, Oliver S, Sutcliffe K, Rees R et al. (2004): Integrating qualitative research with trials in systematic reviews. BMJ , 328: 1010-1012.

Vizard E, Hickey N, French L and McCrory E (2007) 'Children and Adolescents Who Present with Sexually Abusive Behaviour: A UK descriptive study' *Journal of Forensic Psychiatry & Psychology* 18 (1) 59-73

Walji, I., Simpson, J., & Weatherhead, S. (2014). Experiences of engaging in psychotherapeutic interventions for sexual offending behaviours: A meta-synthesis. Journal of sexual aggression, 20(3), 310-332.

Weinrott, M. R., Riggan, M., & Frothingham, S. (1997) Reducing deviant arousal in juvenile sex

offenders using vicarious sensitization 861. Journal of Interpersonal Violence 12[5], 704-728. 1997.

Worling J.R., Curwen T., (2000). Adolescent Sexual Offender Recidivism: Success of Specialized Treatment and Implications for Risk Prediction. Child Abuse and Neglect. Vol 24, No. 7, pp 965- 982

Yoder, J. R. (2013). Applying a Mixed Methods Approach to Understanding and Evaluating the Effects of Family Treatment among Sexually Abusive Youth (Doctoral dissertation, University of Denver).

Yoder J.R, Brown S (2015) Challenges Facing Families of Sexually Abusive Youth: What Prevents Service Engagement? *Victims & Offenders* 10; 29-50

Yoder J., Ruch D. (2015) Youth Who Have Sexually Offended: Using Strengths and Rapport to Engage Families in Treatment. Journal of Child and Family Studies. 24, 2521-2531

Excluded studies with reasons

Alexander, R. Collaborative supervision strategies for sex offender community management. [References] 15. 74[2], 16-19. 2010.	review article
Ashfield, S., Brotherston, S., Eldridge, H., & Elliott, I. Working with female sexual offenders: Therapeutic process issues. [References] 30. 161-180. 2010.	review
BARNARDO'S SCOTLAND 2014. Lessons for Scotland from the Jay report into child sexual exploitation in Rotherham: a Barnardo's Scotland discussion paper Edinburgh, Barnardo's Scotland.	report
Beech, A. R. & Fisher, D. D. The rehabilitation of child sex offenders. [References]5. 37[3], 206-214. 2002.	Review article
Beier, K.M., Grundmann, D., Kuhle, L.F., Scherner, G., Konrad, A., & Amelung, T. 2015. The German Dunkelfeld Project: A Pilot Study to Prevent Child Sexual Abuse and the Use of Child Abusive Images 28. Journal of Sexual Medicine, 12, (2) 01	Adult offenders
Bosley, J. T. Review of Current Perspectives: Working with sexually aggressive youth and youth with sexual behavior problems 87. 34[1], 73-77. 2006.	Review article
Bourke, M. L. & Donohue, B. Assessment and treatment of juvenile sex offenders: An empirical review 91. 5[1], 47-70. 1996.	Review article
Braga, A. & Weisburd, D. The Effects of "Pulling Levers" Focused Deterrence Strategies on Crime 96. Campbell Systematic Reviews [6]. 3-4-2012.	Systematic review
Brown, S. Treating sex offenders: An introduction to sex offender treatment programmes. [References]102. 2005.	No/Book
Calafat, A., Juan, M., & Duch, M.A. 2009. Preventive interventions in nightlife: a review. [Review] [103 refs] 53. Adicciones, 21, (4) 387-413	Addressing risk behaviour
Camp, B. H. & Thyer, B. A. Treatment of adolescent sex offenders: A review of empirical research124. 17[2], 191-206. 1993.	Not found
Caruthers, A.S., Van Ryzin, M.J., & Dishion, T.J. 2014. Preventing high-risk sexual behavior in early adulthood with family interventions in adolescence: outcomes and developmental processes 142. Prevention Science, 15, Suppl-69	Addressing risk behaviours
Champion, J.D. & Collins, J.L. 2013. Conceptualization of sexual partner relationship steadiness among ethnic minority adolescent women: implications for evidence-based behavioral sexual risk reduction interventions 421. Journal of the Association of Nurses in AIDS Care, 24, (3) 242-255	Addressing risk behaviour
Chen, X., Lunn, S., Deveaux, L., Li, X., Brathwaite, N., Cottrell, L., & Stanton, B. 2009. A cluster randomized controlled trial of an adolescent HIV prevention program among Bahamian youth: effect at 12 months post-intervention 237. AIDS & Behavior, 13,	Risk behaviours

(3) 499-508	
Cornelius, J.B., Dmochowski, J., Boyer, C., St, L.J., Lightfoot, M., & Moore, M. 2013. Text-messaging-enhanced HIV intervention for African American adolescents: a feasibility study 368. Journal of the Association of Nurses in AIDS Care, 24, (3) 256-267	Addressing risk behavioru
Coyle, K.K., Kirby, D.B., Robin, L.E., Banspach, S.W., Baumler, E., & Glassman, J.R. 2006. All4You! A randomized trial of an HIV, other STDs, and pregnancy prevention intervention for alternative school students 268. AIDS Education & Prevention, 18, (3) 187-203	Addressing risk behaviour
Coyle, K.K., Kirby, D.B., Marin, B.V., Gomez, C.A., & Gregorich, S.E. 2004. Draw the line/respect the line: a randomized trial of a middle school intervention to reduce sexual risk behaviors 293. American Journal of Public Health, 94, (5) 843-851	Intervention to reduce risk behaviours
Coyle, K.K., Glassman, J.R., Franks, H.M., Campe, S.M., Denner, J., & Lepore, G.M. 2013. Interventions to reduce sexual risk behaviors among youth in alternative schools: a randomized controlled trial 155. Journal of Adolescent Health, 53, (1) 68-78	Addressing risk behaviours
Craig, L.A. 2010. Assessment and treatment of sexual offenders with intellectual disabilities: a handbook186.	review
Craissati, J. & McClurg, G. 1997. The Challenge Project: a treatment program evaluation for perpetrators of child sexual abuse 407. Child Abuse & Neglect, 21, (7) 637-648	Adult offenders
Craissati, J. Child sexual abusers: A community treatment approach 187. 1998. Ref Type: Generic	No/Book
Creeden, K. Taking a developmental approach to treating juvenile sexual behavior problems. [References] 190. 8[3-4], 12-16. 2013. Ref Type: Generic	Review article
Crolley, J., Roys, D., Thyer, B. A., & Bordnick, P. S. "Evaluating outpatient behavior therapy of sex offenders: A pretest-posttest study": Erratum 192. Behavior Modification 23[1], 169. 1999. Ref Type: Generic	Adult offenders
DAVIS, R. 2008. Stage set for performers with a past. (11.12.08) 16-17 available from: http://www.communitycare.co.uk/articles/0000/00/00/110220/;http://www.communitycare.co.uk/Home/	Young offenders – not specific to sex offenders
Deblinger, E. & Hall, D.M. 2000. The case of Ryan: A child who suffered multiple episodes of sexual abuse 71. Cognitive and Behavioral Practice, 7, (3) 2000	Case conference report
Dermen, K.H. & Thomas, S.N. 2011. Randomized controlled trial of brief interventions to reduce college students' drinking and risky sex 184. Psychology of Addictive Behaviors, 25, (4) 583-594	Risk behviours
Dodge, K.A., Bierman, K.L., Coie, J.D., Greenberg, M.T., Lochman, J.E., McMahon, R.J., Pinderhughes, E.E., & Conduct Problems Prevention Research Group 2015. Impact of early intervention on psychopathology, crime, and well-being at age 25.[Erratum appears in Am J Psychiatry. 2015 Jan;172(1):100] 132. American Journal of Psychiatry, 172, (1) 59-70	In file
Drapeau, M. 2005. Research on the processes involved in treating sexual offenders	Adult offenders

437. Sexual Abuse: Journal of Research & Treatment, 17, (2) 117-125	
Duehn, W. D. Cognitive-behavioral approaches in the treatment of the child sex offender 239. 125-134. 1994. Ref Type: Generic	No/Section of book
Eccleston, L. & Owen, K. Cognitive treatment "just for rapists": Recent developments. [References] 246. 135-153. 2007.	unavailable
Eldridge, H. & Wyre, R. The Lucy Faithfull Foundation residential program for sexual offenders 251. 79-92. 1998.	unavailable
Fagan, P.J., Wise, T.N., Schmidt, J., & Berlin, F.S. 2002. Pedophilia 93. Journal of the American Medical Association, 288, (19) 20	Review article
Fanniff, A.M. & Becker, J.V. 2006. Specialized assessment and treatment of adolescent sex offenders 95. Aggression and Violent Behavior, 11, (3) May/June	Review article
Fanniff, A. M. & Letourneau, E. J. Another piece of the puzzle: Psychometric properties of the J-SOAP-II. [References] 264. 24[4], 378-408. 2012. Ref Type: Generic	Assessment tool
Fanniff, A.M. 2014. Keep testing the waters: Fanniff and Letourneau reply 265. Sexual abuse.Early online view, 2014	letter
FARMER, E.a. & POLLOCK 2003. Managing sexually abused and/or abusing children in substitute care 267., 8, (2:(May) May-112	Review article
FARMER, E. & POLLOCK, S. 1998. Sexually abused and abusing children in substitute care Chichester, Wiley.	No/book
Farr, C. N. The utility of the J-Soap-II and the PCL:YV in the prediction of institutional sexual misconduct 269. 75[1-B(E)], No. 2014.	Assessment tool
Ferrer, R.A., Fisher, J.D., Buck, R., & Amico, K.R. 2011. Pilot test of an emotional education intervention component for sexual risk reduction 186. Health Psychology, 30, (5) 656-660	Adult offenders
Fisher, D., Beech, A., & Browne, K. 1998. Locus of control and its relationship to treatment change and abuse history in child sexual abusers 100. Legal and Criminological Psychology, 3, (1) 1998	Theory paper
Fisher, D., Beech, A., & Browne, K. The effectiveness of relapse prevention training in a group of incarcerated child molesters 284. 6[3], 181-195. 2000.	Adult offenders
Gray, A., Pithers, W.D., Busconi, A., & Houchens, P. 1999. Developmental and etiological characteristics of children with sexual behavior problems: treatment implications 401. Child Abuse & Neglect, 23, (6) 601-621	Theory paper
Harkins, L. & Beech, A.R. 2008. Examining the impact of mixing child molesters and rapists in group-based cognitive-behavioral treatment for sexual offenders 390. International Journal of Offender Therapy & Comparative Criminology, 52, (1) 31-45	Adult offenders
Jenkins, S. 1999. An argument for early and appropriate intervention with juvenile sexual offenders 154. Psychiatry Psychology and Law, 6, (1) 1999	Discussion paper
Johnson, B.R. & Becker, J.V. 1997. Natural born killers?: The development of the sexually sadistic serial killer	Review article

156. Journal of the American Academy of Psychiatry and the Law, 25, (3) 1997	
(97) Khan, O., Ferriter, M., Huband, N., Powney, M.J., Dennis, J.A., & Duggan, C. 2015. Pharmacological interventions for those who have sexually offended or are at risk of offending 166. Cochrane Database of Systematic Reviews, 2, CD007989	Systematic review
Lin, M.C., Maxwell, S.R., & Barclay, A.M. 2000. The proportions of different types of sex offenders and the degree of difficulty in treating them: A comparison of perceptions by clinicians in Taiwan and in Michigan 192. International Journal of Offender Therapy and Comparative Criminology, 44, (2) April	Targeting adults
Lindsay, W.R. & Smith, A.H. 1998. Responses to treatment for sex offenders with intellectual disability: a comparison of men with 1- and 2-year probation sentences 404. Journal of Intellectual Disability Research, 42, (Pt 5) 346-353	Targeting adults
Lindsay, W.R., Neilson, C.Q., Morrison, F., & Smith, A.H. 1998. The treatment of six men with a learning disability convicted of sex offences with children 329. British Journal of Clinical Psychology, 37, (Pt 1) 83-98	Targeting adults
Longo, R.E. 2004. An integrated experimental approach to treating young people who sexually abuse 536. Journal of Child Sexual Abuse, 13, (3-4) 193-213	unavailable
Longo, R.E. 2005. An integrated experiential approach to treating young people who sexually offend 509. Journal of Child Sexual Abuse, 13(3/4), 2005, pp.193-213, 2005,	unavailable
Lund, C. A. Long-term treatment of sexual behavior problems in adolescent and adult developmentally disabled persons 513. 5[1], 5-31. 1992.	In file
Maletzky, B.M. & Steinhauser, C. 2002. A 25-year follow-up of cognitive/behavioral therapy with 7,275 sexual offenders 399. Behavior Modification, 26, (2) 123-147	Adult offenders
Marques, J.K., Wiederanders, M., Day, D.M., Nelson, C., & van, O.A. 2005. Effects of a relapse prevention program on sexual recidivism: final results from California's sex offender treatment and evaluation project (SOTEP)81. Sexual Abuse: Journal of Research & Treatment, 17, (1) 79-107	adults
Marvasti, J. A. Cognitive behavioral therapy with sexual offenders 538. 83-96. 2004. Ref Type: Generic	No/Book Section
Marvasti, J. A. Psychological treatment of paraphilia and sexual offenders 539. 65-81. 2004. Ref Type: Generic	No/Book Section
McAlinden, A. M. The Use of 'Shame' With Sexual Offenders. [References] 549. 45[3], 373-394. 2005. Ref Type: Generic	Review article
McGuire, T.J. 2000. Correctional institution based sex offender treatment: A lapse behavior study 211. Behavioral Sciences and the Law, 18, (1) 2000	Targeting adults
McKibben, A., Proulx, J., & Lussier, P. 2001. Sexual aggressors' perceptions of effectiveness of strategies to cope with negative emotions and deviant sexual fantasies 555. Sexual Abuse: Journal of Research & Treatment, 13, (4)	Adult offenders

257-273	
Morgan, J.F. & Mezey, G.C. 1999. Surgery experienced as sexual abuse: A case of pre-pubescent sexual offending and hypospadias 224. Clinical Child Psychology and Psychiatry, 4, (4) October	Not an intervention
Nangle, D.W., Hecker, J.E., Grover, R.L., & Smith, M.G. 2003. Perspective taking and adolescent sex offenders: From developmental theory to clinical practice 229. Cognitive and Behavioral Practice, 10, (1) Winter	Review paper
NEUSTATTER, A. 2002. Locked in - locked out: the experience of young offenders out of society and in prison 598.	No/Book
Oz, S. 2013. Parents of minors who have sexually abused: legal liability and clinical interventions 465. Journal of Child Sexual Abuse, 22, (1) 90-102	Review article
Petersen, I., Bhana, A., & McKay, M. 2005. Sexual violence and youth in South Africa: the need for community-based prevention interventions 436. Child Abuse & Neglect, 29, (11) 1233-1248	Risk behaviours
Polaschek, D.L.L., Ward, T., & Hudson, S.M. 1997. Rape and rapists: Theory and treatment 259. Clinical Psychology Review, 17, (2) 1997	Theory paper
POLLOCK, P. H., Stowell-Smith, M., & Gopfert, M. Cognitive Analytic Therapy for Offenders: A New Approach to Forensic Psychotherapy 653. 2006. Ref Type: Generic	No/Book
Price, D. 2004. Youth with problems sexual behaviors: Integrating diverse models of treatment 262. Sexual Addiction and Compulsivity, 11, (4) 2004	Clinical review
Pullman, L. & Seto, M.C. 2012. Assessment and treatment of adolescent sexual offenders: Implications of recent research on generalist versus specialist explanations 265. Child Abuse and Neglect, 36, (3) March	Discussion paper
Quayle, E. & Taylor, M. 2003. Model of problematic internet use in people with a sexual interest in children 270. Cyberpsychology and Behavior, 6, (1) February	Not intervention
Quayle, E., Vaughan, M., & Taylor, M. 2006. Sex offenders, Internet child abuse images and emotional avoidance: The importance of values 271. Aggression and Violent Behavior, 11, (1) January/February	Not intervention
Ricci, R.J., Clayton, C.A., & Shapiro, F. 2006. Some effects of EMDR on previously abused child molesters: Theoretical reviews and preliminary findings 279. Journal of Forensic Psychiatry and Psychology, 17, (4) December	theory
Rosen, R. C. & Hall, K. S. K. Behavioral treatment approaches for offenders and victims 708. 301-330. 1992.	adult
Schewe, P.A. & O'Donohue, W. 1996. Rape prevention with high-risk males: short-term outcome of two interventions 335. Archives of Sexual Behavior, 25, (5) 455-471	Working with victims
Schober, J.M., Kuhn, P.J., Kovacs, P.G., Earle, J.H., Byrne, P.M., & Fries, R.A. 2005. Leuprolide acetate suppresses pedophilic urges and arousability 293. Archives of Sexual Behavior, 34, (6) December	Targeting adults

Sermabeikian, P. & Martinez, D. 1994. Treatment of adolescent sexual offenders: theory-based practice 586. Child Abuse & Neglect, 18, (11) 969-976	theory
Serran, G.A., Firestone, P., Marshall, W.L., & Moulden, H. 2007. Changes in coping following treatment for child molesters.[Erratum appears in J Interpers Violence. 2008 Mar;23(3):416] 521. Journal of Interpersonal Violence, 22, (9) 1199-1210	Adult offenders
SHARLAND, E. & et, a. 1996. Professional intervention in child sexual abuse London, HMSO.	No/Book
Strohmaier, H., Murphy, M., & DeMatteo, D. Youth sexting: Prevalence rates, driving motivations, and the deterrent effect of legal consequences. [References] 794. 11[3], 245-255. 2014.	Risk behaviours
Swaffer, T., Hollin, C., Beech, A., Beckett, R., & Fisher, D. 2000. An exploration of child sexual abusers' sexual fantasies before and after treatment 316. Sexual Abuse: Journal of Research & Treatment, 12, (1) 61-68	Adults
SWENSON Cynthia Cupit & et al 1998. Changing the social ecologies of adolescent sexual offenders: implications of the success of multisystemic therapy in treating serious antisocial behavior in adolescents 800. Child Maltreatment, 3(4), November 1998, pp.330-338, 1998,	Review article
Terry, K.J. & Mitchell, E.W. 2001. Motivation and sex offender treatment efficacy: Leading a horse to water and making it drink? 327. International Journal of Offender Therapy and Comparative Criminology, 45, (6) 2001	Targeting adults
VALE OF GLAMORGAN LOCAL SAFEGUARDING CHILDREN BOARD 2011. Serious case review: children 'C' and 'D': the executive summary Barry, Vale of Glamorgan Local Safeguarding Children Board.	report
Van Eys, P.P. 1997. Group treatment for prepubescent boys with sexually aggressive behavior: Clinical considerations and proposed treatment techniques 333. Cognitive and Behavior Practice, 4, (2) 1997	Review article
Visher, C., Coggeshall, M. B., & Winterfield, L. Systematic Review of Non-Custodial Employment Programs: Impact on Recidivism Rates of Ex-Offenders839. Campbell Systematic Reviews [01]. 3-7-2006.	Systematic review
Walker, C.E. & McCormick, D. 2005. Current practices in residential treatment for adolescent sex offenders: A survey 340. Journal of Child Sexual Abuse, 13, (3-4) 2005	survey
WATERHOUSE, L. 1990. Investigating child sexual abuse - towards inter-agency cooperation 853. Adoption and Fostering, 14(4), 1990, pp.7-12, 1990,	Not juvenile sex offenders
WATERHOUSE, L. 1991. Research note: social work and police response to child sexual abuse in Scotland 854. British Journal of Social Work, 21(4), August 1991, pp.373-379, 1991,	Review article
Watson, R. J. & Stermac, L. E. Cognitive group counselling for sexual offenders 857. International Journal of Offender Therapy and Comparative Criminology 38[3], 259-270. 1994. Ref Type: Generic	Targeting adults

Willis, G. M. & Ward, T. Striving for a good life: The good lives model applied to released child molesters. [References] 879. 17[3], 290-303. 2011.	Targeting adults
Withecomb, J. The young offender 885. 77-85. 2010.	Book section

Alexander, R. Collaborative supervision strategies for sex offender community management. [References] 15. 74[2], 16-19. 2010.	review article
Ashfield, S., Brotherston, S., Eldridge, H., & Elliott, I. Working with female sexual offenders: Therapeutic process issues. [References] 30. 161-180. 2010.	review
BARNARDO'S SCOTLAND 2014. Lessons for Scotland from the Jay report into child sexual exploitation in Rotherham: a Barnardo's Scotland discussion paper Edinburgh, Barnardo's Scotland.	report
Beech, A. R. & Fisher, D. D. The rehabilitation of child sex offenders. [References]5. 37[3], 206-214. 2002.	Review article
Beier, K.M., Grundmann, D., Kuhle, L.F., Scherner, G., Konrad, A., & Amelung, T. 2015. The German Dunkelfeld Project: A Pilot Study to Prevent Child Sexual Abuse and the Use of Child Abusive Images 28. Journal of Sexual Medicine, 12, (2) 01	Adult offenders
Bosley, J. T. Review of Current Perspectives: Working with sexually aggressive youth and youth with sexual behavior problems 87. 34[1], 73-77. 2006.	Review article
Bourke, M. L. & Donohue, B. Assessment and treatment of juvenile sex offenders: An empirical review 91. 5[1], 47-70. 1996.	Review article
Braga, A. & Weisburd, D. The Effects of "Pulling Levers" Focused Deterrence Strategies on Crime 96. Campbell Systematic Reviews [6]. 3-4-2012.	Systematic review
Brown, S. Treating sex offenders: An introduction to sex offender treatment programmes. [References]102. 2005.	No/Book
Calafat, A., Juan, M., & Duch, M.A. 2009. Preventive interventions in nightlife: a review. [Review] [103 refs] 53. Adicciones, 21, (4) 387-413	Addressing risk behaviour
Camp, B. H. & Thyer, B. A. Treatment of adolescent sex offenders: A review of empirical research124. 17[2], 191-206. 1993.	Not found
Caruthers, A.S., Van Ryzin, M.J., & Dishion, T.J. 2014. Preventing high-risk sexual behavior in early adulthood with family interventions in adolescence: outcomes and developmental processes 142. Prevention Science, 15, Suppl-69	Addressing risk behaviours
Champion, J.D. & Collins, J.L. 2013. Conceptualization of sexual partner relationship steadiness among ethnic minority adolescent women: implications for evidence-based behavioral sexual risk reduction interventions 421. Journal of the Association of Nurses in AIDS Care, 24, (3) 242-255	Addressing risk behaviour
Chen, X., Lunn, S., Deveaux, L., Li, X., Brathwaite, N., Cottrell, L., & Stanton, B. 2009. A cluster randomized controlled trial of an adolescent HIV prevention program among Bahamian youth: effect at 12 months post-intervention 237. AIDS & Behavior, 13, (3) 499-508	Risk behaviours
Cornelius, J.B., Dmochowski, J., Boyer, C., St, L.J., Lightfoot, M., & Moore, M. 2013. Text-messaging-enhanced HIV intervention for African American adolescents: a feasibility study 368. Journal of the Association of Nurses in AIDS Care, 24, (3) 256-267	Addressing risk behavioru
Coyle, K.K., Kirby, D.B., Robin, L.E., Banspach, S.W., Baumler, E., & Glassman, J.R. 2006. All4You! A randomized trial of an HIV, other STDs, and pregnancy prevention intervention for alternative school students 268. AIDS Education & Prevention, 18, (3) 187-203	Addressing risk behaviour
Coyle, K.K., Kirby, D.B., Marin, B.V., Gomez, C.A., & Gregorich, S.E. 2004. Draw the line/respect the line: a randomized trial of a middle school intervention to reduce sexual risk behaviors 293. American Journal of Public Health, 94, (5) 843-851	Intervention to reduce risk behaviours
Coyle, K.K., Glassman, J.R., Franks, H.M., Campe, S.M., Denner, J., & Lepore, G.M. 2013. Interventions to reduce sexual risk behaviors among youth in alternative schools: a randomized controlled trial 155. Journal of Adolescent Health, 53, (1) 68-78	Addressing risk behaviours
Craig, L.A. 2010. Assessment and treatment of sexual offenders with intellectual disabilities: a handbook186.	review

Craissati, J. & McClurg, G. 1997. The Challenge Project: a treatment program evaluation for perpetrators of child sexual abuse 407. Child Abuse & Neglect, 21, (7) 637-648	Adult offenders
Craissati, J. Child sexual abusers: A community treatment approach 187. 1998. Ref Type: Generic	No/Book
Creeden, K. Taking a developmental approach to treating juvenile sexual behavior problems. [References] 190. 8[3-4], 12-16. 2013. Ref Type: Generic	Review article
Crolley, J., Roys, D., Thyer, B. A., & Bordnick, P. S. "Evaluating outpatient behavior therapy of sex offenders: A pretest-posttest study": Erratum 192. Behavior Modification 23[1], 169. 1999. Ref Type: Generic	Adult offenders
DAVIS, R. 2008. Stage set for performers with a past. (11.12.08) 16-17 available from: http://www.communitycare.co.uk/articles/0000/00/00/110220/;http://www.communitycare.co.uk/Home/	Young offenders – not specific to sex offenders
Deblinger, E. & Hall, D.M. 2000. The case of Ryan: A child who suffered multiple episodes of sexual abuse 71. Cognitive and Behavioral Practice, 7, (3) 2000	Case conference report
Dermen, K.H. & Thomas, S.N. 2011. Randomized controlled trial of brief interventions to reduce college students' drinking and risky sex 184. Psychology of Addictive Behaviors, 25, (4) 583-594	Risk behviours
Dodge, K.A., Bierman, K.L., Coie, J.D., Greenberg, M.T., Lochman, J.E., McMahon, R.J., Pinderhughes, E.E., & Conduct Problems Prevention Research Group 2015. Impact of early intervention on psychopathology, crime, and well-being at age 25.[Erratum appears in Am J Psychiatry. 2015 Jan;172(1):100] 132. American Journal of Psychiatry, 172, (1) 59-70	In file
Drapeau, M. 2005. Research on the processes involved in treating sexual offenders 437. Sexual Abuse: Journal of Research & Treatment, 17, (2) 117-125	Adult offenders
Duehn, W. D. Cognitive-behavioral approaches in the treatment of the child sex offender 239. 125-134. 1994. Ref Type: Generic	No/Section of book
Eccleston, L. & Owen, K. Cognitive treatment "just for rapists": Recent developments. [References] 246. 135-153. 2007.	unavailable
Eldridge, H. & Wyre, R. The Lucy Faithfull Foundation residential program for sexual offenders 251. 79-92. 1998.	unavailable
Fagan, P.J., Wise, T.N., Schmidt, J., & Berlin, F.S. 2002. Pedophilia 93. Journal of the American Medical Association, 288, (19) 20	Review article
Fanniff, A.M. & Becker, J.V. 2006. Specialized assessment and treatment of adolescent sex offenders 95. Aggression and Violent Behavior, 11, (3) May/June	Review article
Fanniff, A. M. & Letourneau, E. J. Another piece of the puzzle: Psychometric properties of the J-SOAP-II. [References] 264. 24[4], 378-408. 2012. Ref Type: Generic	Assessment tool
Fanniff, A.M. 2014. Keep testing the waters: Fanniff and Letourneau reply 265. Sexual abuse.Early online view, 2014	letter
FARMER, E.a. & POLLOCK 2003. Managing sexually abused and/or abusing children in substitute care 267., 8, (2:(May) May-112	Review article
FARMER, E. & POLLOCK, S. 1998. Sexually abused and abusing children in	No/book

substitute care Chichester, Wiley.	
Farr, C. N. The utility of the J-Soap-II and the PCL:YV in the prediction of institutional sexual misconduct 269. 75[1-B(E)], No. 2014.	Assessment tool
Ferrer, R.A., Fisher, J.D., Buck, R., & Amico, K.R. 2011. Pilot test of an emotional education intervention component for sexual risk reduction 186. Health Psychology, 30, (5) 656-660	Adult offenders
Fisher, D., Beech, A., & Browne, K. 1998. Locus of control and its relationship to treatment change and abuse history in child sexual abusers 100. Legal and Criminological Psychology, 3, (1) 1998	Theory paper
Fisher, D., Beech, A., & Browne, K. The effectiveness of relapse prevention training in a group of incarcerated child molesters 284. 6[3], 181-195. 2000.	Adult offenders
Gray, A., Pithers, W.D., Busconi, A., & Houchens, P. 1999. Developmental and etiological characteristics of children with sexual behavior problems: treatment implications 401. Child Abuse & Neglect, 23, (6) 601-621	Theory paper
Harkins, L. & Beech, A.R. 2008. Examining the impact of mixing child molesters and rapists in group-based cognitive-behavioral treatment for sexual offenders 390. International Journal of Offender Therapy & Comparative Criminology, 52, (1) 31-45	Adult offenders
Hlavka, H. R. Review of Children as victims, witnesses, and offenders: Psychological science and the law 388. 45[1], 234-236. 2011. Ref Type: Generic	Review article
Jenkins, S. 1999. An argument for early and appropriate intervention with juvenile sexual offenders 154. Psychiatry Psychology and Law, 6, (1) 1999	Discussion paper
Johnson, B.R. & Becker, J.V. 1997. Natural born killers?: The development of the sexually sadistic serial killer 156. Journal of the American Academy of Psychiatry and the Law, 25, (3) 1997	Review article
Khan, O., Ferriter, M., Huband, N., Powney, M.J., Dennis, J.A., & Duggan, C. 2015. Pharmacological interventions for those who have sexually offended or are at risk of offending 166. Cochrane Database of Systematic Reviews, 2, CD007989	Systematic review
Lin, M.C., Maxwell, S.R., & Barclay, A.M. 2000. The proportions of different types of sex offenders and the degree of difficulty in treating them: A comparison of perceptions by clinicians in Taiwan and in Michigan 192. International Journal of Offender Therapy and Comparative Criminology, 44, (2) April	Targeting adults
Lindsay, W.R. & Smith, A.H. 1998. Responses to treatment for sex offenders with intellectual disability: a comparison of men with 1- and 2-year probation sentences 404. Journal of Intellectual Disability Research, 42, (Pt 5) 346-353	Targeting adults
Lindsay, W.R., Neilson, C.Q., Morrison, F., & Smith, A.H. 1998. The treatment of six men with a learning disability convicted of sex offences with children 329. British Journal of Clinical Psychology, 37, (Pt 1) 83-98	Targeting adults
Longo, R.E. 2004. An integrated experimental approach to treating young people who sexually abuse 536. Journal of Child Sexual Abuse, 13, (3-4) 193-213	unavailable
Longo, R.E. 2005. An integrated experiential approach to treating young people who sexually offend 509. Journal of Child Sexual Abuse, 13(3/4), 2005, pp.193-213, 2005,	unavailable
Maletzky, B.M. & Steinhauser, C. 2002. A 25-year follow-up of cognitive/behavioral therapy with 7,275 sexual offenders	Adult offenders

399. Behavior Modification, 26, (2) 123-147	
Marques, J.K., Wiederanders, M., Day, D.M., Nelson, C., & van, O.A. 2005. Effects of a relapse prevention program on sexual recidivism: final results from California's sex offender treatment and evaluation project (SOTEP)81. Sexual Abuse: Journal of Research & Treatment, 17, (1) 79-107	adults
Marvasti, J. A. Cognitive behavioral therapy with sexual offenders 538. 83-96. 2004. Ref Type: Generic	No/Book Section
Marvasti, J. A. Psychological treatment of paraphilia and sexual offenders 539. 65-81. 2004. Ref Type: Generic	No/Book Section
McAlinden, A. M. The Use of 'Shame' With Sexual Offenders. [References] 549. 45[3], 373-394. 2005. Ref Type: Generic	Review article
McGuire, T.J. 2000. Correctional institution based sex offender treatment: A lapse behavior study 211. Behavioral Sciences and the Law, 18, (1) 2000	Targeting adults
McKibben, A., Proulx, J., & Lussier, P. 2001. Sexual aggressors' perceptions of effectiveness of strategies to cope with negative emotions and deviant sexual fantasies 555. Sexual Abuse: Journal of Research & Treatment, 13, (4) 257-273	Adult offenders
Morgan, J.F. & Mezey, G.C. 1999. Surgery experienced as sexual abuse: A case of pre-pubescent sexual offending and hypospadias 224. Clinical Child Psychology and Psychiatry, 4, (4) October	Not an intervention
Nangle, D.W., Hecker, J.E., Grover, R.L., & Smith, M.G. 2003. Perspective taking and adolescent sex offenders: From developmental theory to clinical practice 229. Cognitive and Behavioral Practice, 10, (1) Winter	Review paper
NEUSTATTER, A. 2002. Locked in - locked out: the experience of young offenders out of society and in prison 598.	No/Book
Oz, S. 2013. Parents of minors who have sexually abused: legal liability and clinical interventions 465. Journal of Child Sexual Abuse, 22, (1) 90-102	Review article
Petersen, I., Bhana, A., & McKay, M. 2005. Sexual violence and youth in South Africa: the need for community-based prevention interventions 436. Child Abuse & Neglect, 29, (11) 1233-1248	Risk behaviours
Polaschek, D.L.L., Ward, T., & Hudson, S.M. 1997. Rape and rapists: Theory and treatment 259. Clinical Psychology Review, 17, (2) 1997	Theory paper
POLLOCK, P. H., Stowell-Smith, M., & Gopfert, M. Cognitive Analytic Therapy for Offenders: A New Approach to Forensic Psychotherapy 653. 2006. Ref Type: Generic	No/Book
Price, D. 2004. Youth with problems sexual behaviors: Integrating diverse models of treatment 262. Sexual Addiction and Compulsivity, 11, (4) 2004	Clinical review
Pullman, L. & Seto, M.C. 2012. Assessment and treatment of adolescent sexual offenders: Implications of recent research on generalist versus specialist explanations 265. Child Abuse and Neglect, 36, (3) March	Discussion paper
Quayle, E. & Taylor, M. 2003. Model of problematic internet use in people with a sexual interest in children 270. Cyberpsychology and Behavior, 6, (1) February	Not intervention
Quayle, E., Vaughan, M., & Taylor, M. 2006. Sex offenders, Internet child abuse images and emotional avoidance: The importance of values 271. Aggression and Violent Behavior, 11, (1) January/February	Not intervention
Ricci, R.J., Clayton, C.A., & Shapiro, F. 2006. Some effects of EMDR on	theory

previously abused child molesters: Theoretical reviews and preliminary findings 279. Journal of Forensic Psychiatry and Psychology, 17, (4) December	
Rosen, R. C. & Hall, K. S. K. Behavioral treatment approaches for offenders and victims 708. 301-330. 1992.	adult
Schewe, P.A. & O'Donohue, W. 1996. Rape prevention with high-risk males: short-term outcome of two interventions 335. Archives of Sexual Behavior, 25, (5) 455-471	Working with victims
Schober, J.M., Kuhn, P.J., Kovacs, P.G., Earle, J.H., Byrne, P.M., & Fries, R.A. 2005. Leuprolide acetate suppresses pedophilic urges and arousability 293. Archives of Sexual Behavior, 34, (6) December	Targeting adults
Sermabeikian, P. & Martinez, D. 1994. Treatment of adolescent sexual offenders: theory-based practice 586. Child Abuse & Neglect, 18, (11) 969-976	theory
Serran, G.A., Firestone, P., Marshall, W.L., & Moulden, H. 2007. Changes in coping following treatment for child molesters.[Erratum appears in J Interpers Violence. 2008 Mar;23(3):416] 521. Journal of Interpersonal Violence, 22, (9) 1199-1210	Adult offenders
SHARLAND, E. & et, a. 1996. Professional intervention in child sexual abuse London, HMSO.	No/Book
Strohmaier, H., Murphy, M., & DeMatteo, D. Youth sexting: Prevalence rates, driving motivations, and the deterrent effect of legal consequences. [References] 794. 11[3], 245-255. 2014.	Risk behaviours
Swaffer, T., Hollin, C., Beech, A., Beckett, R., & Fisher, D. 2000. An exploration of child sexual abusers' sexual fantasies before and after treatment 316. Sexual Abuse: Journal of Research & Treatment, 12, (1) 61-68	Adults
SWENSON Cynthia Cupit & et al 1998. Changing the social ecologies of adolescent sexual offenders: implications of the success of multisystemic therapy in treating serious antisocial behavior in adolescents 800. Child Maltreatment, 3(4), November 1998, pp.330-338, 1998,	Review article
Terry, K.J. & Mitchell, E.W. 2001. Motivation and sex offender treatment efficacy: Leading a horse to water and making it drink? 327. International Journal of Offender Therapy and Comparative Criminology, 45, (6) 2001	Targeting adults
VALE OF GLAMORGAN LOCAL SAFEGUARDING CHILDREN BOARD 2011. Serious case review: children 'C' and 'D': the executive summary Barry, Vale of Glamorgan Local Safeguarding Children Board.	report
Van Eys, P.P. 1997. Group treatment for prepubescent boys with sexually aggressive behavior: Clinical considerations and proposed treatment techniques 333. Cognitive and Behavior Practice, 4, (2) 1997	Review article
Visher, C., Coggeshall, M. B., & Winterfield, L. Systematic Review of Non-Custodial Employment Programs: Impact on Recidivism Rates of Ex-Offenders839. Campbell Systematic Reviews [01]. 3-7-2006.	Systematic review
Walker, C.E. & McCormick, D. 2005. Current practices in residential treatment for adolescent sex offenders: A survey 340. Journal of Child Sexual Abuse, 13, (3-4) 2005	survey
WATERHOUSE, L. 1990. Investigating child sexual abuse - towards inter-agency cooperation 853. Adoption and Fostering, 14(4), 1990, pp.7-12, 1990,	Not juvenile sex offenders
WATERHOUSE, L. 1991. Research note: social work and police response to child sexual abuse in Scotland	Review article

854. British Journal of Social Work, 21(4), August 1991, pp.373-379, 1991,	
Watson, R. J. & Stermac, L. E. Cognitive group counselling for sexual offenders 857. International Journal of Offender Therapy and Comparative Criminology 38[3], 259-270. 1994. Ref Type: Generic	Targeting adults
Willis, G. M. & Ward, T. Striving for a good life: The good lives model applied to released child molesters. [References] 879. 17[3], 290-303. 2011.	Targeting adults
Artello, K. (2010). *An analysis of Wraparound Barker: Community based holistic treatment for juvenile sex offenders*. University of California, Irvine.	Thesis Unobtainable
Bowers, L. (2002). Unrecognized victims: The parents of child and adolescent offenders. Issues in Forensic Psychology, 3, 49–56.	Item Unavailable
Brannon, J. M., Larson, B., & Doggett, M. (1991). Peer Counseling Strategies: Facilitating Self-Disclosure Among Sexually Victimized Juvenile Offenders.*Journal of Addictions & Offender Counseling*, *11*(2), 51-58.	Item Unavailable
Caruso, A. (2004). A qualitative study of empathy in adolescent sex offenders and non-offending adolescents. Dissertation Abstracts International: Section B: The Sciences and Engineering, 65(1-B), 430 p.	Dissertation Abstract
Chassman , L. (2006). *Therapists' conceptualization, treatment and experience of adolescents with sexual behavior problems.* PhD dissertation. Armidale, NSW, Australia: University of New England.	Thesis Unobtainable
Colton, M., Roberts, S., & Vanstone, M. (2009). Child Sexual Abusers' Views On treatment: A study of convicted and imprisoned adult male offenders.*Journal of Child Sexual Abuse*, *18*(3), 320-338.	Not Juvenile Offenders
Mitchell, J. (2008). *A Qualitative Exploration of Changes in Family Relationships Throughout the Course of Juvenile Sex Offender Treatment* (Doctoral dissertation, Chicago School of Professional Psychology).	Thesis Unobtainable
Montgomery-Devlin, J. (2004). The young people's therapeutic project: an evaluation. *Child Care in Practice*, *10*(1), 7-19.	Item Unavailable
Northey WF. The use of presumptive realities in the treatment of incarcerated juveniles adjudicated on sexual offenses: a grounded theory study /. Thesis (Ph. D.)--Kansas State University, 1995.	Thesis Unobtainable
Oster M. An examination of family dynamics contributing to intrafamily sexual offending by male adolescents [doctoral dissertation]. California School of Professional Psychology. San Diego 1999.	Thesis Unobtainable
Porubsky AL Therapists' experiences with children and adolescents who are victims of sexual abuse - Antioch University New England. Antioch University New England n.d. http://www.antiochne.edu/dissertations/therapists-experiences-with-children-and-adolescents-who-are-victims-of-sexual-abuse/ (accessed 16 July 2015).	Thesis Unobtainable
Rasmussen K Sexually abusive children: treatment recommendations from the literature and therapists. Alliant International University, San Francisco Bay, 2006.	Thesis Unobtainable
Ray J, Smith V, Peterson T, Gray J, Schaffner J, Houff M. A treatment program for children with sexual behavior problems. *Child & Adolescent Social Work Journal* 1995;12:331–43. doi:10.1007/bf01876734	Not Qualitative Research
Romanczuk,S D. The identification of shame as a core issue for the adolescent sexual offender.	Item Unobtainable
Rowe, S. (2010). *The Lived Experience of Parents of Adolescents Who Have Sexually Offended* (Doctoral dissertation, University of Arkansas for Medical Sciences). [Now Pierce S]	Thesis Unobtainable
Rowland A M Changing course: guiding treatment principles to break the child sexual abuse victim-offender cycle in male adolescents. Thesis (Psy. D.)--Massachusetts School of Professional Psychology, 1995.	Thesis Unobtainable
Rudisill, M. (1997). Residential treatment of six-to twelve-year-old sexually	Dissertation

aggressive male youth: Emotional impact on child care workers and clinical staff (Doctoral dissertation, The Chicago School of Professional Psychology, 1997). Dissertation Abstracts International, 58, 2534.	Abstract
Scottish Government, House SA, Road R, ceu 0131 556 8400. Multi-agency inspection: A review of residential services for young people with harmful sexual behaviour 2007. http://www.gov.scot/Publications/2007/12/04155948/0 (accessed 16 July 2015)	Not Qualitative Research
Sheridan A, McKeown K, Cherry J, Donohoe E, McGrath K, O'Reilly K, et al. Perspectives on treatment outcome in adolescent sexual offending: A study of a community-based treatment programme. *The Irish Journal of Psychology* 1998;19:168–80. doi:10.1080/03033910.1998.10558178	Item Unavailable
Thornton, J. A., Stevens, G., Grant, J., Indermaur, D., Chamarette, C., & Halse, A. (2008). Intrafamilial adolescent sex offenders: Family functioning and treatment. *Journal of Family Studies*, 14, 362–375.	Item Unavailable
Vail, B. (2002). An Exploration of the Issue of Sexually Abusive Behaviour among Adolescents who have a Learning Disability. *Child Care in Practice*, *8*(3), 201-215.	Item Unavailable
Yoder JR. The Influence of Living Situations on Family Therapy Involvement Among Youth Adjudicated of a Sexual Crime. Int J Offender Ther Comp Criminol 2014. doi:10.1177/0306624X14556252.	Quantitative data only

Other references

Appendix one: Sample Search Strategy (from Ovid MEDLINE)

Population Terms

1 (sex* adj2 (harm* or risk* or abus* or agress* or unacceptable or offen* or force* or impos* or overly or coer* or inappropriate* or manipulat* or stigma* or shame or victim* or danger* or threat* or assault* or pressure* or violent or violence)).ti,ab.

2 (problem* adj2 sex* adj2 (behavio?r* or conduct*)).ti,ab.

3 *Sex Offenses/

4 *Rape/

5 (rape or rapist).ti,ab.

6 *Unsafe Sex/

7 (unsafe adj2 sex).ti,ab.

8 or/1-7

9 (harm* or unacceptable or force* or impos* or coer* or inappropriate* or danger* or threat* or assault* or pressure* or violent or violence).ti,ab.

10 *Sexual Behavior/

11 (coitus or sexual intercourse).ti,ab.

12 (penetrat* adj2 sex).ti,ab.

13 *Coitus/

14 (masturbat* or self stimulat$).ti,ab.

15 *Masturbation/

16 (sexual interaction or sexual exploration).ti,ab.

17 or/10-16

18 9 and 17

19 inappropriate touching.ti,ab.

20 (harm* or unacceptable or innappropraite*).ti,ab.

21 ((sexual* adj3 (swear* or word* or phrase* or slang or jargon)) or sexual* explicit).ti,ab.

22 20 and 21

23 sexting.ti,ab.

24 ((sex* or nud*) adj2 (message* or image* or picture* or photo*)).ti,ab.

25 23 or 24

26 8 or 18 or 19 or 22 or 25

27 *Child/

28 (child* or girl* or boy*).ti,ab.

29 (young people or young person* or young wom?n or young m?n or young female* or young male* or young adult* or youth*).ti,ab.

30 *Young Adult/

31 *Adolescent/

32 (adolescen* or teenage*).ti,ab.

33 Juvenile Delinquency/

34 delinquen*.ti,ab.

35 *Minors/

36 (minor or minors).ti,ab.

37 *Schools/

38 school*.ti,ab.

39 *"Latency Period (Psychology)"/

40 *Child, Preschool/

41 (preschool* or pre-school*).ti,ab.

42 (infant* or toddler* or youngster* or early adult* or kid or kids or underage or under age or teen* or offspring* or juvenile* or student*).ti,ab.

43 or/27-42

44 26 and 43

Additional terms to be considered for developing the electronic data base search strategy and for 'berry picking' approaches.

AIM

AIM2 initial assessment model

Harmful sexual behaviour HSB

Problematic sexual behaviours

Problem explanation

Brook Sexual Behaviours Traffic Light Tool

Child Behavior Checklist

ChildLine

Chil Sexual Behavior Inventory

Cognitive behaviour therapy

Cognitive Behavioural Therapy Psycho-Educational Programme

Barnardo's

Be Safe Service

Delinquency

Delinquent group

Desistance models

ERASOR (Estimate of Risk Adolescent Sexual Offence Recidivism)

Framework for the Assessment of Children in Need and their Familiies

Girls Project

Glebe House

G-map Services

Good Lives Model (GLM)

Internet-related and technology-facilitated sexual offences

Indecent images of children (IIOC) offenders

Inform Young People Programme

NSPCC

Intellectual disabilities

Inter-agency working

Lucy Faithfull Foundation

Multiple perpetrator abuse

Sexual deviance

Sexual Violence Against Children and Vulnerable People National Group (SVACV)

Sibling abuse

Typology of abused children

Referral routes

Sexual victimisation

Youth justice system

Interventions:

Myltisystemic Therapy

Resilience and desistance models

Abuse specific approaches

Custodial settings

Developmental approaches

Family support approaches

Goal oriented

Holistic approaches

Rehabilitative approaches

Restorative approach

Safe care in residential settings

J-SOAP-II (Juvenile Sex Offender Assessment Protocol-II)

Latency Age-Sexual Adjustment and Assessment Tool

Letting the Future In

Multisystemic therapy for problem sexual behaviour (MST-PSB)

Services for Teens Engaging in Problem Sexual Behaviour (STEPS-B)

psychopathology

Turn the Page project

Strengths based approaches

Young People's Project

Relevant journals

Journal of Sexual Aggression

Key documents

Report of the Committee of Enquiry into Children and Young People who Sexually Abuse other Children (NCH report)

Working Together 2013

Key authors

Simon Hackett

R. Volbert

E. Vizard

T. Johnson

M. Chaffin

Appendix Two: Evidence tables

Study details	Population	Description of interventions	Results	Notes
Authors: Apshche '04 **Country:** USA **Aim of study:** To examine the effect of the Thought Change System on inmate sex offender's belief system. **Study design:** Pilot study Uncontrolled study, before and after study. **Quality Score:** **Method of allocation:**	**Source population/s:** Severely disturbed sexual offending adolescents. **Exclusion criteria:** not described **Selected population:** 10 adolescent inmate sex offenders. Have a history of failed treatment at prior placements or outpatient treatment centers. 6 African-Americans 2 Eskimo-American 1 European-American 1 Hispanic American **Age:** 11-18 years (mean 13.5) **Gender:** male **Previous tx:** none had participated in a CBT based sexual offending treatment program before **Informed consent:** Verbal and written consent was obtained from the participants **History of offending behaviour:** Mean number of victims (2.4 (SD 3.4). Types of offenses included flashing, fondling,	**Intervention/s description:** Behavioural Studies Program at the Pines Residential Treatment Center. The Thought Change concept requires each resident to carry a manual and record all negative thoughts. The individual therapy, and groups revolve around the record of negative thinking and the associated behaviours as a result of their cognition that propels the resident into his sexual offense system. For those residents who have learning disabilities and reading problems, the entire curriculum is available on audiotape. The Thought Change System includes the identification of the functions of the negative thoughts, feelings, behaviours and beliefs, and replacing them with transitional thoughts, feelings, behaviours, beliefs and finally alternative beliefs. **Theoretical basis:** BSP is based on a unique model of cognitive behaviour therapy. The concept is predicated on changing the clusters of dysfunctional beliefs that are prevalent in adolescent sex offenders; this concept is accomplished through BSP's Thought Change Book (Apsche, 1999)	**Follow-up periods:** Admission and at 6 month intervals **Primary outcomes** **Devereuz Scales of Mental Disorders (DSMD)** has a mean of 50 and SD of 10 . Any score over 60 is considered clinically significant. 12 months baseline: 1) externalizing – indicates prevalence of negative overt behaviours Baseline: 54.4 (SD = 10), range 40-75) 12 months: 50.6 (range 41-71). 2) Internalizing, which measures negative internal mood, cognitions, and attitudes Baseline 64 (SD=10, range 43-95) 12 months 52.2 (range 40-73) 3)Critical pathology Baseline 57 (SD 10 range 43 to 84) 12 months 47.50 (42-67). Total score Baseline 59.4 (SD10 range	**Limitations identified by author:** Small sample size **Limitations identified by review team:** No control group **Evidence gaps and/or recommendations for future research:** **Source of funding:** Not described **Author conclusions** The results of this study indicate that a cognitive behavioural methodology that addresses the underlying personality traits may be effective for severely disturbed, previous treatment failure, sexual offending adolescents.

	vaginal and anal penetration or a combination. Child offenders have been defined as those who target children five or more years younger than themselves.	Based on the collected works of Richardson, Kelly, Bhante and Graham (1997); Awad and Suanders (1991); Monto Agourides, and Harris (1998); Becker and Kaplin (1991); Becker & Hunter (1998) and Hunter (1989) **Setting:** Pines Residential Treatment Center. A residential treatment for male and female sex offenders. **Duration of treatment:** Mean estimated length of stay was 18.3 months (SD=3.53 range 12-23)	42-89) 12 months 49.9 (range 42-67) **Child Behaviour Checklist** Total scores Baseline 68.5 (SD 11.2, range 54 to 93) 12 months 57.4 (SD 11.6, range 43-77) **Youth Self Report** Baseline 60.5 (SD 8.44, range 45-70) 12 months 53.6 (SD 6.35, range 48 to 68). **Beliefs Assessments** Beliefs About Victims Baseline: 44.2 (SD 10, range 20 to 72) 12 months 25.9 (SD10, range 20-40) Beliefs About Aggression Baseline: 77.5 (range 44-119) 12 months: 51.3 (SD 10, range 27-77) Beliefs about Intimacy Baseline 23 (SD10, range 12-66) 12 months 43.3 (range 0-78) which represents the desire to engage in an appropriate intimate relationship Beliefs about control Baseline 35.8 (SD 10 range 3 to 81 12 months: 59.7 (range 23 to	

			106) **Juvenile Sexual Offender Adolescent Protocol** Baseline 25.9 (SD 1.67, range 12 to 41) 12 months: 19.9 (SD1.44, range 12-31)	
Authors: Becker et al '88 **Country:** USA **Aim of study:** To describe a community-based outpatient treatment program for male adolescent sexual offenders and therapy outcome for those adolescents who completed treatment and a post-treatment evaluation. **Study design:** **Quality Score:** (-)	**Source population:** Adolescent males who sought evaluation and treatment at the Sexual Behaviour Clinic of the New York state Psychiatric Institute. **Inclusion criteria:** Not described **Exclusion criteria:** Not described **Sample sizes:** N=24 **Gender:** male **Ethnicity:** Black: 16/24 (67%) Hispanic: 7/24 (29%) Caucasian: 1/24 (4%) **Age:** Ranged from 13-18 Mean age 15.6 **Criminal History** First arrest for a sexual crime: 21/24 (88%) Two previous arrests for a sexual crime: 1/24 (4%) No prior arrests for nonsexual	**Intervention/s description:** A structured cognitive behaviour treatment program that is a modified version of the treatment program described by Abel et al. **Component 1:** Each subject underwent eight, 30 minutes sessions of **verbal satiation.** Following the satiations, subjects participated in a group orientation session. During the orientation session, the cotherapists (one male and one female) informed the subjects that during the following sessions they would learn appropriate ways of relating to people. **Component 2:** This consists of four, 75 minutes group sessions held weekly. The sessions focus on **cognitive restructuring**. Subjects are confronted with their cognitive distortions via role playing. Subjects are asked to play the roles of members of the victim's family, the victim or criminal justice personnel. The patient then has to confront the beliefs presented by the therapist. This process of role reversal is highly effective in helping the sex offender to understand the inappropriateness of his thinking.	**Pre and Post treatment Erection response** **Subject who had engaged in inappropriate HSB with males** **N=11** There was a decrease in arousal post-treatment what was statistically significant at the $p<0.01$ level, $F = 9.79$ (1,9), using a repeated measures ANOVA **Subject who had engaged in inappropriate HSB with females (n=13)** There were decreases in arousal using erectile measurement, however decreases in arousal were not statistically significant at the $p < 0.05$ level	**Limitations identified by author:** None **Limitations identified by review team:** Small sample size. No comparison group **Source of funding:** Not described

	crimes: 2/24 (8%) **Psychiatric History** No history of psychiatric hospitalization: 23/24 (96%) No family history of psychiatric hospitalization: 22/24 (92%) All had engaged in a hands-on non-consensual sexual activity with another person. The 24 subjects had victimized a total of 47 victims. The majority of victims were younger than 13 years of age. All subjects were nonpsychotic.	**Component 3:** This consists of one 75 minute group session during which the therapist explains **covert sensitization**. Following the initial group session subjects are required over the next three weeks to complete eight, 15 minutes covert sensitization audio tapes at the clinic during the group time. **Component 4:** This component consists of four, 75 minute sessions of social skills training to help adolescent learn the requisite skills to relate d in a functional manner to peers, and to increase their comfort and skill in interpersonal communication by role playing. **Component 5:** This consists of four, 75 minute sessions of anger control training. The subjects are taught alternative means of problem solving through role-playing. **Component 6:** This consists of sex education and values clarification. Subjects are taught about sexual myths, adolescent sexual development, and appropriate sexual behaviour. **Component 7:** This is two, 75 minute sessions of relapse prevention, which consist of listing the situations that present risks to them and learning to identify and cope with any urges or deviant thoughts they might experience in the future.		

		One week following the completion of treatment, subjects undergo a clinical interview, paper and pencil testing and repeat psychophysiologic assessment. **Underlying theory:** A structured cognitive behaviour treatment program that is a modified version of the treatment program described by Abel et al. **Therapist fidelity:** Not described		
Authors: Becker and Kaplan '93 **Country:** USA **Aim of study:** **Study design:** **Quality Score:**	**Source population:** Adolescents aged between 13-18 years. **Inclusion criteria:** An adolescent must either admit that he has engaged in deviant sexual behaviour, or his sexually deviant behaviour must be documented by a victim statement, a court finding or a reliable valid witness such as a parent.	**Intervention/s description:** Cognitive-behavioural treatment program for adolescent sex offenders. Components: verbal satiation Group treatment **Underlying theory:** Multicomponent program utilizing a cognitive behaviour model that was initially developed for, and evaluated on, an adult sex offender population (Abel et al 1984). After attempting to	300 adolescents were evaluated. , 68.3% (205) entered treatment. Only 27.3% (56) attended 70-100% of the scheduled therapy sessions. Recidivism rates at 1 year posttreament were low. According to self reports and reports from parents and criminal justice agencies only 9% had recommitted sexual crimes.	**No comparison group**

	In addition the following variables are used to assess treatment needs: 1) Distorted cognitions 2) Self-report of deviant sexual fantasies 3) Significant inappropriate sexual arousal during the psycholphysiological assessment 4) Having been found guilty of a sexual offense. 5) Lack of remorse regarding inappropriate sexual behaviour 6) 6) Failure to accept responsibility for the inappropriate sexual behaviour. **Exclusion criteria:** Not described **Sample sizes:** **Gender:** **Ethnicity:** 66% black 23% Hispanic 9% Caucasian **Age:** mean 15.4 years **Socioeconomic status:** Most are from a lower socioeconomic status. **History:** 70% have molested young	utilize this adult model with an adolescent sex offender population, it became apparent that numerous modifications had to be made to make the intervention more appropriate given the level of cognitive, emotional and social development these adolescents displayed. **Therapist fidelity:** Group treatment led by a male and female cotherapist team		

	children 30% have committed sexual assault.			
Authors: Borduin, Henggeler, Blaske, Stein (1990) **Country:** USA **Aim of study:** Evaluation of MST **Study design: RCT** Randomisation and AC – not described. ITT not described Baseline comparability not described. Power calculation not described. Loss to follow-up: 6 (3 in each group) did not fully complete treatment. In 4 because the youth was incarcerated after committing a subsequent offense. Data included in results in this study. **Quality Score:** -	**Source population:** 16 male adolescents, arrested for sexual offenses **Inclusion criteria:** NR **Exclusion criteria:** NR **Sample sizes:** n=16 **Gender:** 100% male **Ethnicity:** 37.5% Black 62.5% White **Age:** 14 years (SD not reported) **Family circumstances:** 31% lived with both natural parents and the remainder lived with their divorced mothers. Predominantly lower SE status **Offending history:** Most had committed multiple sexual offenses. Most met the criteria for conduct disorder Most had presented long-term emotional and interpersonal difficulties. **Baseline comparisons:** NR	**Intervention/s description:** MST n=8 **Provider:** MST was provided by two female and two male doctoral students in clinical psychology. **Duration:** Total number of hours that the adolescent or family was in treatment or in consultation ranged from 21 to 49 (m=37) hours. **Underlying theory:** Based on the MST approach to treating the behaviour problems of youths. It is assumed that behaviour problems are multidimensional and that interventions may need to focus on any one or combination of systems. The exact nature of the therapeutic inventions varied for each family, depending on the strengths and weaknesses of the pertinent systems. In general, however, multisystemic treatment attempted to ameliorate deficits in the adolescent's cognitive processes, family relations, peer relations and school performance. **Therapist fidelity:** Supervision was provided weekly by the first author in a 2.5 hour group meeting. During these supervisory sessions, the goals and progress of each case were reviewed, videotaped	**Follow up duration: years (SD):** Ranged from 21-49 months, average, 3 years following therapy. Records of juvenile court, adult court and the state police were searched to determine rearrests history of each adolescent following referral for treatment. **Rates of recidivism:** Sexual offenses MST group: 12.5% IT group : 75% P<0.040 Nonsexual offenses MST group: 25% IT group: 50%	**Limitations identified by author:** Small sample size **Limitations identified by review team:** Unclear what element of the intervention makes a difference, the providers differed and methods of maintaining treatment fidelity. **Source of funding:** NR

		therapy sessions were observed and discussed and decisions were made about how to facilitate the family's progress. **Control/comparison/s description:** Individual therapy (IT) n=8 Offenders treated by two female and two male MA level professionals who worked for local mental health agencies, including the treatment services branch of the juvenile courts. The adolescents received an average of approximately 45 hours of therapy. All of the offenders in this condition received individual counselling that focused on personal, family and academic issues. The therapists offered support, feedback and encouragement for behaviour change. **Underlying theory:** A blend of psychodynamic (promoting insight), humanistic and behavioural approaches.		
Authors: Borduin, Schaeffer, Heiblum (2009) **Country:** USA	**Sample size:** 51 eligible youths and families referred. 48 consented to participate. Equal numbers were randomised . MST n=24. UCS n=24.	**Intervention/s description:** Multisystemic therapy (MST) **Number of sessions and duration:** 3 hours of interventions per week across family, school, peer and individual systems. Also available 24	**Follow up duration: years (SD):** Average 8.9 years for arrest and incarceration measures **Psychiatric symptoms BSI-GSI (Global Severity**	**Limitations identified by author:** The authors suggest that the favourable results of this study may have been due to two crucial aspects of MST (ie. its comprehensive nature

Aim of study: Evaluate the efficacy and effectiveness of MST with juvenile sexual offenders **Study design:** RCT Pretest-posttest control group design with random assignment **Quality Score:** **Randomisation:** pg. 27 random-number table **Allocation concealment:** pg. 29 sealed envelope **Blinding:** pg. 29 some outcomes were measured blind to intervention group (teacher assessment) **Intention to treat:** not described.	**Gender:** 95.8%boys **Ethnicity:** ; 72.9% white; 27.1% Black. 2.1% Hispanic. **Age:** Mean age 14 (SD 1.9). **Offense history:** previous arrests: mean 4.33 (SD 4.81), for sexual crimes (mean 1.62 (SD =NR), nonsexual (mean 2.71 SD =NR). **Family circumstances:** 31.3% lived with only one parental figure. Primary caretaker - biological mother (91.7). biological fathers 6.3% or stepmothers 2.1%. Families averaged 3.3 children (SD1.3) and 54.5% of the families were of lower SE status. **Baseline comparisons:** Groups did not differ on arrest histories or demographic characteristics. Averaged care-giver reports indicated that MST youths had more behaviour problems than the control group. No other between group differences were observed. **Inclusion criteria:** Youths and their families were referred to the study by juvenile court personnel. Included all families in which the youth a) Had been arrested for a serious sexual offense	hours a day, 7 days per week. Duration not described **Location:** Home, school and/or neighbourhood **Delivered by:** Male and female graduate students (aged 23-30 years, mean =26) in clinical psychology. Each had approximately 1.5 years of direct clinical experience with children or adolescents. **Underlying theory:** Integrate clinical techniques from behavioural and cognitive - behavioural therapies and structural family therapy. It focuses on aspects of a youth's ecology that are functionally related to the problem sexual behaviour. Treatment manual (Henggeler et al 1998) **Therapist fidelity:** Therapists received training in the MST models and ongoing quality assurance. Included: initial orientation, 3-hr weekly group supervision, and individual supervision as needed. Therapist supervision was provided by Borduin throughout the course of the investigation. Therapists and supervisor also observed and discussed selected videotaped therapy sessions each week to promote intervention skills and adherence to MST treatment principles. Completion of treatment occurred when the therapist and family agreed that goals had been	**index of the Brief Symptom Inventory)** **53-self report items** *also reported for mother and father Intervention group: Baseline: 0.82 (0.68) Post: 0.40 (0.41) significant decrease from baseline p<0.001 Control group: Baseline: 0.56 (0.49) Post: 0.82 (0.51) significant increase from baseline p<0.001 **RBPC: Parent Report** Intervention group Baseline: 45.40 (14.88) Post: 21.11 (17.19) significant decrease from baseline p<0.05 Control group Baseline: 31.66 (23.95) Post: 42.21 (26.17) significant increase from baseline p<0.05 **Peer Relations** **MPRI: Youth report** *also reported parent and teacher Intervention group: Emotional bonding Baseline: 12.83 (2.05) Post: 14.05 (1.61)	and ecologically valid deliver), but the design of this study confounds te examination of this issues, as the comparison treatment (ie office based group and individual therapy) was neither comprehensive nor delivered in youths natural ecologies. Second because the therapists were not randomly assigned to treatment conditions it is possible that therapist characteristics such as motivation, commitment, social facility and flexibility were confounded in this study. Third – unable to confirm that youths maintained continuous residence in Missouri throughout the follow-up period and cannot rule out the possibility that a portion of youths may have committed crimes in other states. **Limitations identified by review team:** Not clear if the outcomes were measured at the same time points for both groups. **Conclusions:** MST was more effective than UCS in improving key family, peer, and academic correlates of juvenile sexual offending and in ameliorating adjustment problems in

	b) Was currently living with at least on parent figure c) Showed no evidence of psychosis or serious mental retardation. **Exclusion criteria: NR**	met and that ecological supports to sustain clinical gains were in place. **Control/comparison/s description:** All of the offenders in this group received cognitive-behavioural group and individual treatment through the local juvenile court. The therapy provided in this condition represented the usual community (i.e. outpatient) treatment for juvenile sexual offenders in our judicial district and in many other judicial districts as well. Youths attended group treatment for 90 min twice a week and individual treatment of 60-90 min once a week. Group treatment (4-6 youths) focused on having each youth a) accept personal responsibility for his or her sexual offense(s). , b) eliminate deviant cognitions, c) learn new social skills (including anger management), d) develop victim awareness and empathy, and e) engage in behaviours and the youths that prevent relapse. Youths also kept personal journals to review during their individual therapy meetings to better understand the connection between their thoughts and behaviours. Individual treatment was provided by a different therapist from the group leader and was designed to address barriers and reinforce progress in meeting group treatment goals. The interventions were not manual driven; the therapists had discretion in the selection of material and in deciding when youths had completed treatment.	significant increase from baseline p<0.008 Aggression Baseline: 11.23 (2.26) Post: 10.89 (2.14) Social maturity Baseline: 11.04 (2.34) Post: 12.30 (1.77) significant increase from baseline p<0.008 Control group: Emotional bonding Baseline: 13.10 (2.48) Post: 12.27 (2.44) significant decrease from baseline p<0.008 Aggression Baseline: 11.96 (2.27) Post: 12.84 (2.12) Social maturity Baseline: 10.62 (2.46) Post: 9.81 (2.27) significant decrease from baseline p<0.008 **Parent and teacher reports (school grades)** Intervention group: Baseline: 1.67 (0.77) Post: 2.49 (0.99) significant increase from baseline p<0.001	individual family members. Results from an 8.9 year follow-up showed that MST participants had lower recidivism rates than did UCS participants for sexual (8% vs 46%) and nonsexual)29% vs 59%) crimes. In addition, MST participants had 70% fewer arrests for all crimes and spent 80% fewer days confined in detention facilities than did their counterparts who received UCS.

		Delivered by whom: Male and female therapists (aged 26-36 years, Mean=31). Employed by the treatment services branch of the juvenile court. Each had a master's degree in counselling psychology, clinical psychology, or social work and had approximately 6 years of direct clinical experience with adolescents. **Location:** Services were office based, with little or no community outreach and focused on the individual youth rather than on the systems in which the youth was embedded. **Duration and Number of sessions:** Group, twice per week. Individual treatment once a week. Group treatment - 90 mins. Individual treatment 60-90 mins. **Fidelity:** The therapists were certified sexual offender counsellors through a university based training program. The therapists attended weekly case reviews with the treatment coordinator from the juvenile court. The therapists were also required to provide weekly reports summarizing the nature of therapeutic contacts, who was present at the contacts, and youth progress in meeting treatment goats. Youths completed treatment when the therapists and treatment coordinator judged that treatment goals had been met.	Control group: Baseline: 1.85 (1.06) Post: 1.22 (1.06) significant decrease from baseline p<0.001 **Criminal activity SRD (self report delinquency scale)** Intervention group: Person Baseline: 4.86 (5.53) Post: 1.38 (1.83) significant decrease from baseline p<0.001 Property Baseline: 13.62 (17.20) Post: 2.90 (3.28) Significant decrease from baseline p<0.001 Control group: Person Baseline: 4.55 (7.50) Post: 7.98 (9.35) significant increase from baseline p<0.001 Property Baseline: 20.27 (38.59) Post: 30.85 (46.09) significant increase from baseline p<0.001 **Arrests: sexual crimes**	

			(mean and SD) Intervention group 0.13 (0.34) Control group 0.79 (1.02) **Arrests: other crimes** Intervention group: 1.46 (3.27) Control group: 4.88 (8.24) I**ncarceration (days mean and SD)** Intervention group: 393.42 (1221.11) Control group: 1942.50 (3121.04)	
Authors: **Bonner et al 1999** Carpentier '06 **Country:** USA **Aim of study:** ***10 year follow up study to Bonner et al '93, '99 trial To prospectively follow 135 children with HSB from a RCT comparing group CBT with group play therapy **Study design:** RCT **Quality Score:** **(+)**	**Source population:** **N= 135** Children with HSB were recruited from child welfare, law enforcement and juvenile court, physicians, school personnel, and mental health centers between 1992 and 1995. A total of 178 cases were referred and screened for potential study inclusion. **Inclusion criteria:** • The referred child had clinically significant HSB. • Aged between 5-12 years • Child and caregiver were fluent in English. • Attendance at 9/12 treatment sessions was required to be counted as a treatment subject.	Study was conducted at 2 sites – one in Oklahoma and one in Washington. Parents, foster parents or other adult caregivers were involved in adult groups for both interventions. **Intervention/s description:** CBT: • Manualized session by session protocol • 12 sessions • 60 minutes each • Each session involved separate groups for children and collateral parent groups. • Conducted in same facility • Therapists separate for CBT and PT groups **Underlying theory:**	**Bonner and Walker 1999** **Carpentier et al 2006** Post baseline event reports were drawn in 2005 from juvenile justice, adult criminal justice, and child welfare databases in the state where the study was conducted. The databases were queried for arrests, and the child welfare database was queried for maltreatment perpetration reports. **Follow up duration: years (SD):** CBT group: 11.5 (1.2) PT group: 11.4 (1.0) Clinic comparison: 10 (2.4) **Future sexual offences**	**Limitations identified by author:** Prospective design. The treatments tested were outpatient models, children with unusually severe HSB or unusually severe comorbidities may have been underrepresented in our sample. Not possible to confirm how many children in the sample were still living in the state during the entire follow-up period. Official report data may underestimate actual sex offense rates **Limitations identified by review team:** Is this a comparable group? **Source of funding:** not

Bonner et al (1999) 147 eligible for treatment 110 (75%) agreed to participate 69 (63%) completed the required 9/12 sessions 39 (56%) caregivers completed the follow up 25 (36%) completed the one year telephone follow-up 20 (29%) completed the 2 year follow-up	**Exclusion criteria:** • The child's Kaufman Brief Intelligence Test IQ score was less than 65 for both verbal and matrices. • The child was judged by clinicians as too severe for outpatient treatment. • The child and parent dropped out prior to randomisation or declined to be randomised to treatment. • Siblings of other enrollees. **Comparison group:** 156 children drawn from the same child outpatient clinic. (Carpentier et al 2006) Data was collected from archival chart reviews. **Inclusion criteria:** • The child was seen during the same time frame • The child was between 5 and 12 years of age. • The presenting problem was disruptive behaviour. • The child had no reported history of HSB. • There were no indications in the child's file of a diagnosis of autism, pervasive developmental disorder or childhood psychosis. • The model clinical chart primary diagnosis for children in the comparison group was ADHD (65% of caparison cases), followed	Behaviour modification and psychoeducational principles. Group was highly structured, used a teaching-learning model and addressed topics including acknowledging and identifying the inappropriate sexual behaviour, learning concrete sexual behaviour rules, learning behaviour self-control techniques, and sex education. The CBT caregiver group provided educational material on developmentally normal and atypical childhood sexual behaviour and taught specific behavioural child management skills for preventing and responding to problematic sexual behaviour. Included suggestions for supervision and minimizing opportunities or situations in which HSB tended to occur. **Control/comparison/s description:** Play therapy group was much less structured and was based on a combination of client cantered and psychodynamic play therapy principles. A different set of play therapy activites, such as drawing self-outlines, were included. Therapists were minimally directive, were trained to give reflections, probe into feelings and interpret patterns of play. Each caregiver PT group began with a discussion theme. The themes were similar to those in the CBT caregiver group – sexual behaviour problems, boundaries, parenting strategies, sex education and self-esteem, but rather than providing a structured educational curriculum the PT caregiver group	**Number of future sex offense arrests or reports:** CBT group: 1/64 (1.6%) PT group: 7/ 71 (9.9%) **Non sexual offenses:** Unable to elicit data from paper	described

	by adjustment disorder (10% of comparison cases), oppositional defiant disorder (5%) and a variety of learning, parent-child relationship and school behaviour problems. **Sample sizes:** Total n= 291 Intervention 1: CBT n= 64 Intervention 2: play therapy n=71 Control: clinic comparison n=156 **Gender:** Male: 205/291 (70%) CBT (63%), PT (60%), Control (78%) Female: 86/291 (30%) CBT (37%), PT (40%), Control (22) **Ethnicity:** African American: 32/291 (11%) White, not Hispanic: 249/291 (86%) American Indian: 11/291 (4%) Other: 2/291 (2%) **Age:** Total: CBT group: 8.8 years (SD2) n=64 PT group: 8.1 years (SD 1.6) n=71 Clinic comparison: 8.8 years (SD 2) n=156	was less directive and the therapist followed the caregivers' lead in the group discussion, providing reflections. **Therapist fidelity:** Therapists for both child and parent groups were male/female dyads who were doctoral psychology trainees or postdoctoral psychologists. The same male/female dyad conducted the childrens' and caregivers groups for each condition. All trained in applying the manualized treatments and the underlying treatment theory and were provided with weekly supervision and training to prevent drift throughout the course of the intervention. All sessions were videotapes and reviewed each week by the investigators to ensure adherence to the respective treatment manuals.		

	Child Behaviour Checklist (CBCL) score: CBT group: 69 (11) PT group: 66 (9) Clinic comparison: 70 (9) **Child Sexual Behaviour Inventory (CSBI) score:** CBT group: 20 (17) PT group: 19 (13) Clinic comparison: not relevant for this group **1-7 rating of sexual aggressiveness:** CBT group: 4.7 (1.4) PT group 4.6 (1.5) **Baseline comparisons:** The two randomized HSB groups did not differ at baseline on gender, race, ethnicity, CBCLscores, CSBI scores, or aggressiveness ratings. Overall, the three groups differed slightly but significantly on age and gender**.**			
Authors: Gillis and Gass (2010) Country: USA Aim of study: To examine the effectiveness of a behaviour management model using adventure programming with juvenile sex offenders (JSO) by comparing male juveniles who participated	Source population: Clients in the LEGACY residential programme. Aged between 12 -16 years of age. Inclusion criteria: Exclusion criteria: Sample sizes: LEGACY: n=129 Matched with a male youth in other specialized tx programes	Intervention/s description: Adventure or wilderness therapy. Adventure based therapy (ABT) focuses on group development activities through problem solving initiatives alone, or in combination with low and high challenges ropes course experiences. Wilderness adventure therapy (WAT) is either short in length (less than 60 days) or longer (more than 60 days and may be up to 120 days in length). Components: 1. Conducting treatment in a	Follow up duration: years (SD): 3 years Recidivism The Department of Juvenile Justice provided data. Juvenile and adult courts. Rearrest for violent sex offence after 3 years LEGACY: 5/95 (5.3%) YDC: 5/95 (5.3%) OSP: 8/95 (8.4%) NS	Limitations: The groups were matched rather than randomised, and there were a limited number of factors they were matched on, therefore they may not have been completely comparable groups. The YDC group, who were in a lock up facility may have been more pathological and antisocial than either of the other samples.

in the programme with similar juveniles who participated in two other programmes within the same state during the same time period. Study design: Matched design Quality Score: (-)	or incarcerated in state operated institutions. Matched on age when the first offense was committed, the most serious arresting offense types and race. N = 95 legacy N=95 other specialized programmes(OSP) N= 95 institutional settings (YDC) 65.3% white 34.7% Black Gender: 100% male Ethnicity: Age: Range 8-18 Mean age at first offense was 13.8 (SD 1.4) Child Behaviour Checklist (CBCL) score: Child Sexual Behaviour Inventory (CSBI) score: 1-7 rating of sexual aggressiveness: Baseline comparisons:	therapeutic group, led by skilled counsellors to confront inappropriate behaviours and reinforce appropriate behaviours. 2. Placing participants in environments that are new, unique and simplified yet still supportive, creating a contrasting environment where clients can gain new and more functional perspectives 3. Presenting the role of the therapist as a facilitator focused on actively designing and framing interventions for specific treatment outcomes, where clients see themselves as the catalyst for their own positive change. 4. Using therapeutic processes cantered on action-oriented experiences, turning passive therapeutic analysis and interaction into active and multidimensional experiences. 5. Taking advantage of enriched and unique opportunities where clients unfamiliarity with BMtA processes provide rich, observable assessment information for therapists to implement treatment interventions and strategies 6. Producing a climate of functional change through the appropriate use of eustress where clients use positive problems solving	Rearrest for other nonviolent sex offence after 3 years LEGACY: 13/95 (13.7%) YDC: 28/95 (29.5%) OSP: 23/95 (24.2%) Overall sex offences after 3 years: LEGACY: 18/95 (19%) YDC: 33/95 (34.8%) OSP: 31/95 (32.6%) The number of days between release and rearrests Statistically sig differences between days from release until reassert for the LEGACY Programme and the OSPs	

		abilities to reach desired objectives 7. Constructing choices with a solution-oriented focus where clients are presented with opportunities to focus on their abilities rather than their inabilities. Underlying theory: The Behaviour Management through Adventure approach centres on treatment focused on changing clients' thinking, feeling and behaving with the outcome of decreasing dysfunctional behaviour and increasing functional behaviour. Legacy programme Incorporates the BMtA approach outlined above, with a combination of group process and therapeutic techniques to promote positive change with juvenile sex offenders who live and sleep in homes within the community owned and staffed by the programme. The average length of stay is one year in this full-time residential programme. The core element is the use of adventure experiences, these are intentional guided experiences. The activities are developmental in structure, e.g. designed to build trust incrementally through activities designed to increase amounts of safe touch. Activities are ofen fun, and require skills that appropriately challenge. They are designed to develop listening, seeing another point of view, leading, following,		

		planning, and recognizing the consequences of actions. Adventures are designed to frame the experiences youth face in real life (e.g. thinking errors, ostracism, and lack of support). This allows the young person to explore how they might deal with these in a safe environment. Control/comparison/s description: Two other programmes with similar juveniles within the same state during the same time period Therapist fidelity: All of the programmes led by licensed or licensed eligible masters level professional counsellors or social workers who provide the therapy.		
Authors: Hunter and Santos (1990) **Country:** USA **Aim of study:** To provide data of the efficacy of a such treatment in the context of a specialized residential treatment program for adolescent sexual offenders. **Study design:** Pre and post test design **Quality Score:** (-)	**Source population:** N=27 Adolescents referred for evaluation and treatment by a variety of sources, including juvenile courts, departments of social services, mental health clinicians and families. Each admitted to engaging in sexually inappropriate behaviours. **Inclusion criteria:** Not described **Exclusion criteria:** Not described **Gender:** Male	**Intervention/s description:** Satiation therapy. Key components include the reduction of deviant arousal via satiation therapy and the use of covert sensitization to develop greater control over sexual impulses. Patients were provided with non-behaviour therapies, in addition to the specialized cognitive-behavioural interventions. These included: twice weekly supportive, insight-oriented individual psychotherapy, one time per week insight-oriented group therapy and one to two times per month family therapy. The insight oriented therapies emphasized helping each patient explore and gain a better understand of relevant intrapsychic feelings, needs and	**Baseline – two month treatment interval** **% reduction in measured arousal from combined baseline to treatment conditions:** Adolescent perpetrators of prepubescent females showed a 33.55% reduction in overall arousal to deviant cues from baseline conditions, with a 39.15% reduction in overall deviant arousal shown by those adolescents who molested prepubescent males. Both groups of adolescent	Small numbers, no control group.

	Ethnicity: Not described **Age:** Range from 13 to 17 years, mean age of molesters of boys: 15.75, and 15.87 for molesters of females. **History:** 12 adolescent male child molesters of prepubescent males 15 adolescent male child molesters of prepubescent females**.** Mean age of male victims was 6.73 years and the mean age of female victims was 5.89 years. The use of force or aggression was reported by 58.3% of the molesters of young males and 60% of the molesters of young females. Approximately 58% of the molesters of young females and 47% of the molesters of young females demonstrated a history of incestuous involvement with at least one of their victims. A history of significant drug or alcohol abuse was indicated in 58.3% of the perpetrators of males and 53.3% of the perpetrators of females. 83.3% of the molesters of males and 80% of the molesters of females had themselves been sexually molested as children.	conflicts that may have contributed to the problem (low self- esteem etc) Family sessions focused on educating the patients parents concerning the nature of his sexual problem, and exploring pertinent family system issues. Each patient participated in a therapeutic milieu which provided monitoring of compliance with the CBT protocols, peer and staff support for a commitment to desired therapeutic involvement and change, and increased status and privileges in the program for demonstration of positive peer and staff relations and attitude toward treatment. **Underlying theory:** The satiation procedure is based on an extinction model where in deviant fantasy is repeated until it becomes boring and devoid of its reinforcing properties. Covert sensitization successfully teaches the patient to pair fantasy of sexual perpetration with mentally aversive stimuli and increases the individual's ability to inhibit deviant sexual urges. Other areas of treatment focus include: social skills training; assertiveness training and anger control; correction of cognitive distortions pertaining to the meaning of the behaviour; empathy for victims and sex education **Setting:** Treatment was provided in an inpatient residential program for adolescent sexual offenders. **Therapist fidelity:**	offenders showed a greater positive differential between arousal to stimuli involving consensual sexual activity with the same age female and arousal to sexual activity with prepubescent children, following treatment. Non-aggressive sexual activity with a prepubescent female: -31.6% Aggressive sexual activity with a prepubescent female: -35.5% Consensual sexual activity with a same age female: +4.9% Analysis of variance (ANOVA) of the combined mean peak scores for aggressive and non-aggressive paedophilic cues produced a significant difference between scores across baseline and treatment conditions; $F(2, 28) = 3.66$, $p < 0.05$ Non aggressive sexual activity with a same age prepubescent male -36.8% Aggressive sexual activity with a prepubescent male -41.5% Consensual sexual activity	

			with a female + 6.9%	
Authors: Hunter and Goodwin '92 **Country:** USA **Aim of study:** To explore the efficacy of verbal satiation according to length of treatment; the characteristics of youth who appear to respond to this treatment; and the effectiveness of combining laboratory and verbal satiation with relatively treatment resistant youth. **Study design:** **Quality Score:** (-)	**Source population:** N=39 Juvenile sexual offenders in the Behavioural Studies Program of the Pines Treatment Center **Inclusion criteria:** Not described **Exclusion criteria:** Not described **Gender:** Male **Ethnicity:** 59% Caucasian 33.3% African-American 7.7% other minority youth. **Age:** Mean age 15.4 years at the time of admission **History:** All referred for treatment for reported "hands on" sexual offenses, averaging 2.7 victims	**Intervention/s description:** 6 months minimum of verbal satiation In addition: individual, group and family therapies or a non-behavioural, insight-oriented, and problem-solving nature. Approximately three months after the initiation of **verbal satiation** therapy, each participant was instructed in the making of ten, fifteen minute **covert sensitization** audiotapes. Verbal satiation consisted of 4, 60 minute satiation sessions per week. These sessions were divided into two parts: ten minutes of description of consensual sexual activity with same age peer, followed by 50 minutes of repetition of a deviant sexual phrase pertinent to their target deviant sexual arousal and behaviour . Compliance was checked by having each youth record the session on an audiotape which was then checked for accuracy by trained staff. **Underlying theory:**	**Psychophysiological assessment of changes in penile circumference** **N=39** a significant treatment effect was not found Deviant arousal scores: Baseline: 72% 6 months: 67% Consensual arousal scores: Baseline: 87% 6 months: 92% **n=27** remained in verbal satiation for 9 months did produce a significant repeated measures ANOVA $F(3,63) = 5.5$, $p < 0.01$ using the deviant score (peak % score for deviant target) as the dependent variable. A post-hoc Scheffe test revealed that the mean deviant score at baseline was significantly higher than the same at nine months.	No Control group Small numbers

	each. 59% had been sexually victimized as a child 51% having been physically abused by a caretaker. Majority had a secondary psychiatric diagnosis, including 59% with a diagnosis of a learning disability and/or ADHD. 18% had molested only males 38% had molested only females 44% had molested children of both sexes	**Therapist fidelity:** Not described	Deviant arousal scores: Baseline: 67% 9 months: 39% Consensual arousal scores: Baseline: 86% 9 months: 82% **Summary** Verbal satiation has potential clinical utility for lowering deviant sexual arousal in older juvenile sexual offenders. However, the length of time required to obtain a significant treatment effect may be six to nine months duration , or longer, for those youth who have been judged to be moderately to severely psychosexually and psychologically maladjusted. These data also point to the presence of a cohort of juvenile sexual offenders who may be relatively non-responsive over several months of treatment, regardless of variation of non-masturbatory satiation utilized. Such youth may require a different therapeutic approach, including consideration of other cognitive-behavioural and/or biologically based treatments in cases where stong deviant arousal and interests are evident.	

Authors: Kaplan, Morales and Becker '93 **Country:** USA **Aim of study:** The purpose of this exploratory study was to determine if such boredom therapy or verbal satiation is effective in reducing arousal to deviant sexual stimuli. **Study design:** Pre-post test design **Quality Score:** (-)	**Source population:** Participants were referred to the sexual behaviour clinic for evaluation and treatment from a number of different sources, including probation, juvenile courts, and social services. **Inclusion criteria:** Adolescents who had been accused of or charged with having committed a sexual crime against a child and who had completed eight (8) individual verbal satiation sessions within a time frame of now more than 13 weeks or 91 days. **Exclusion criteria:** Not described **Sample sizes:** N=15 **Gender:** male **Ethnicity:** 2/15 (13.3%) Caucasian 5/15 (33.3%) Black 2/15 (13.35) Hispanic/Black 6/15 (40%) Hispanic **Age:** 13-18 years (mean age 15.4) **Baseline comparisons:**	**Intervention/s description:** Cognitive behaviour treatment package, firstly to look at the impact of verbal satiation specifically before implementing the rest of the treatment. Verbal satiation: 8, 30 minute sessions. **Underlying theory:** Marshall (1979) observes that repeated exposure to deviant stimuli may result in the exhaustion of the subject's response and therefore may be the most important ingredient involved in satiation therapy. **Therapist fidelity:** Not described	**Forty adolescents had begun this treatment but only the above 15 were able to complete treatment within the 13 – week time frame due to non-compliance.** Overall decrease in participant's arousal to atypical stimuli in 14 out of 15 participants. However, only 5 out of 15 participant's responses established criteria of under 20% of an erection response upon completion of the initial 8 sessions. **Erection responses** Pretreament: range from 29% to 100% Post treatment: range 0% to 96% The mean arousal to the same stimuli declined to 34.5%. Two youngest subjects (at ages 13 years, 8 months and 13 years, 11 months, had 100% arousal in their pre-treatment assessment. These two subjects had a post treatment arousal of 78% and 69% respectively.	Small number No control group
Authors: Letourneau (2009) Henggeler (2009) Letouneau (2013) *	**Source population:** 127 youth referred by the county State's Attorney after having been charged with a	**Intervention/s description: MST** *used an existing private provider agency to deliver the community based MST services.	**Follow up duration: years (SD):** 6 months post recruitment* reported but not extracted.	**Limitations identified by author:** • Longer follow up is needed to determine

Country: USA **Aim of study:** Effectiveness trial of MST with juvenile sexual offenders that included a comparison condition that is generally typical of the community based services provided to such offender's in the US. **Study design:** ***effectiveness trial.** Block randomisation was used based on index victim age. **Quality Score:** **Blinding:** Research assistants administered assessments – not blind to group allocation. **Caregivers were compensated for their time for each completed research assessment and monthly interview** **Allocation concealment** Sealed envelopes **Intention to treat analysis** yes	sexual offense. **Inclusion criteria:** • Judicial order for outpatient sexual offender treatment either as part of postadjdication probation or preadjudication diversion. • Presence of a local caregiver with whom the youth resided • Youth age between 11 and 17 years • Fluency in either English and Spanish • Absence of current psychotic symptoms or serious mental retardation • Youth with other co-morbid psychiatric disorders (eg. Depression) or co-occurring conduct problems (eg school truancy) were included in the study. **Exclusion criteria:** NR **Recruitment:** Families were recruited by a researcher who obtained informed consent and assent. 178 eligible youth were referred and consented. Two families withdrew when not in desired intervention and tow developed a degenerative brain disorder. Final sample of 127 participants	The MST therapists worked on a team with individual caseloads of four to six families per therapist. MST – home-based model of service delivery in which treatment is delivered in home and community settings at times convenient to families. Members of the team were available to respond to crises 24 hours per day. The overriding goals of MST are to empower parents with the skills and resources needed to independently address the inevitable difficulties that arise in raising adolescents and to empower adolescents to cope with familial and extrafamilial problems. **Therapist Characteristics:** MST was provided by one predoctoral, three masters-level and one bachelor-level clinician employed by a private community based provider agency. All MST clinicians complete a standard 5 day MST training curriculum **Underlying theory:** **Control/comparison/s description:** **TAU** **N=60** Treatment as usual for JSO, included interventions that have a cognitive behavioural orientation, focus on individual (youth-level) behavioural drivers and are delivered in weekly group treatment sessions for a year or longer. This contrasts with the family based and ecological emphases of MST	12 months post recruitment *2 year follow up published by Letrouneau (2013) **Problem sexual behaviour:** Adolescent Sexual Behaviour Inventory (ASBI) used to assess inappropriate adolescent sexual behaviours. Scores for dichotomous data (% responding positive) ASBI Deviant sexual interest youth report: I: 7/ 67 (10.9%) C: 9/60 (15.4%) ASBI Sexual Risk/Misuse youth-report: I: 20/67 (29.7%) C: 11/60 (48.1%) ASBI Deviant sexual interest caregiver-report I: 24/67 (36.5%) C: 32/60 (52.9%) ASBI Sexual Risk/Misuse caregiver I: 5 /67 (7.9%) C: 12 /60 (19.2%) The MST youth had significantly greater reduction in problem sexual behaviour over time, relative to the control group. **Antisocial behaviour:** Self report delinquency scale (SRD).	whether the observed 1 year outcomes translate to reduce sexual offending. • Self report measures of inappropriate criminal or sexual behaviours for adolescents have not yet been fully validated, particularly with respect to predictive validity. • Dichotomizing the score means. • External validity of the sample, a small portion of otherwise eligible youth was excluded because they were initially sent to restrictive placements • Research assistants were often not blind to the families treatment conditions. • External validity of the MST interventions and quality assurance protocol. Developers of the MST adaptations for juvenile sexual offenders provided clinical oversight and training in the role of expert consultants. Therefore the findings may not be replicable in another setting. **Limitations identified by review team:**

	Sample sizes: Randomised Total n= 131 I: 68 C: 63 Analysed Total n=127 I: 67/68 C: 60/63 **Gender:** Girls: 3/127 (2.4%) Boys: 124/127 (97.6%) **Ethnicity:** Black: 69/127 (54%) White: 56/127 (44%) Hispanic ethnicity: 40/127 (31%) **Age:** mean 14.6 years (SD 1.7), range 11-18 years) **Offense History** 35% had nonsexual offenses in addition to sexual offenses Index sexual offense charges included aggravated criminal sexual assault (31%) Criminal sexual assault (18%) Aggravated criminal sexual abuse (15%) Criminal sexual abuse (24%) Other sexual offenses (5%) Sexual offenses that were pled as nonsexual offenses (7%) **Family:** Youth's primary caregivers were mothers (64%), fathers	The youth on probation were directly under the supervision of probation officers and met for sexual offender treatment in groups of approximately 8 to 10 youth for weekly 6o minute sessions. The sexual offender treatment groups included components that addressed deviant arousal, victim empathy, cognitive distortions, relapse prevention and family counselling. Families had the option of paying for private treatment rather than participating in the juvenile sexual offender groups offered by probation and five families chose this. These youth were retained in the TAU group. **Therapist fidelity:**	I: /67 (29.7%) C: /60 (42.3% Substance abuse was measured using the Personal Experience Inventory (PEI) I: /67 (17.2%) C: /60 (38.5%) **Mental Health Symptoms** Assessed with the Externalizing and Internalizing scales of the parent reported Child Behaviour Checklist. Assess mental health functioning. Youth self report Externalizing T-score I: 40.3 (10.0) n=67 C: 44.9 (9.7) n=60 Internalizing T – score I: 40.3 (10.0) n=67 C: 44.9 (9.7) n=60 Child behaviour check list I: 40.3 (10.0) n=67 C: 44.9 (9.7) n=60 Moderator analysis conducted to determine whether treatment effects varied by perpetrator-victim age differential and level of aggression in that sexual offense. No significant interaction effect emerge. Indicating that treatment effects did not vary by the nature of the juveniles	**Source of funding:** **Conclusions:** MST was more effective than TAU-JSO in decreasing deviant sexual interest/risk behaviours, delinquent and substance use behaviours, externalizing problems and costly out of home placements.

	(15%), other female relatives (19%), foster parents (2%) and a male relative (1%) **Economic circumstances:** Less than $10,000/year – 33% $10,000 to $30,000/year – 38% $30,000 or more – 28.5% **Baseline comparisons:** No statistically significant difference between index offense, presence of prior nonsexual offenses and demographic variables.		offenses. *2 year follow up data: MST treatment effects were sustained f or3 of 4 measures of youth problem sexual behaviour, self-reported delinquency and out of home placements. The base rate for sexual offense rearrests was too low to conduct statistical analyses, and a between groups difference did not emerge for other criminal arrests.	
Authors: Lund (1992) **Country:** USA **Aim of study:** The study summarizes long-term behavioural treatment and outcome data from 16 individuals with histories of serious sexual behaviour problems. **Study design:** **Quality Score:**	**Source population:** All clients resided in an institutional setting serving persons with developmental disabilities. All had IQ scores between 70 and 75. **Inclusion criteria:** **Exclusion criteria:** **Sample sizes**: n=16 **Gender:** males **Ethnicity:** **Age:** mean age was 17.3 years. **Baseline comparisons:** **Offending history:** N=4 had outstanding criminal chares related to sexual offenses, with detailed	**Intervention/s description:** Individual counselling involved feedback, regarding progress in crucial areas of behavioural functioning, anger management, discussion of specific instances of sexual behaviour problems, confronting denial or other thinking styles related to sexual behaviour problems, discussion of clients' own abuse experiences when appropriate, victim empathy issues and assistance in problem solving about various living concerns. Social skills training focues on teaching rationales and simple skills related to interpersonal functioning using small group discussion, modelling, behavioural rehearsal, prompting, couching and feedback. Ten skills were identified and the treatment programmes were based on procedures developed for adolescents with significant	**Follow up duration: years (SD):** Services were provided or monitored by the author over a 52 month period with several clients receiving services over most or all of the period. The maximum period of service involvement and follow-up was 60 months. **Clients were divided into three groups:** 1) Improved discharged clients 2) not discharged but showed improvement in 4 of 5 outcome categories 3) clients not discharged and who showed improvement only in three or fewer outcome categories.	**Limitations identified by author:** **Limitations identified by review team:** No control group **Source of funding:** not reported.

	documentation abou tht nature of the charges. Two others had criminal charges for nonsexual offenses. Four others had records that referred to sexual issues and allegations of offenses and public behaviours.	behaviour problems and children with impulse control problems. Sex education addressed topics such as sexual anatomy, puberty, private body parts, social conventions about dating and touch, homosexuality and sex and the law. Personal living skills were taught and maladaptive behaviours targeted via token economy interventions. The treatment components for each client could vary depending on their needs. **Underlying theory:** Treatment programmes reflect the view that deviant sexual behaviour has multiple influences. Therefore programme interventions have addressed sexual behaviour in the context of social skills, intimate relationships, sexual knowledge and beliefs, sexual arousal and psychopathology affecting control over sexual impulses. Multicomponent assessment procedures and treatment approaches have been described in : Murphy et al 1983, Griffiths et al 1989) **Control/comparison/s description:** **Therapist fidelity:**	The data suggest that more favourable outcomes were obtained with those individuals who had fewer collateral behaviour problems, were older at admission, were exposed to services more rapidly and functioned at higher levels intellectually. The total number of treatment components or exposure to specific treatment components did not systematically affect outcome, with the exception that no person receiving treatment via sexual behaviour management programmes was discharged. However, this treatment component was utilized only for cases in which serious sexual behaviour problems persisted at the facility and were not impacted by other prior interventions. Thus this apparent effect would related more to the nature and intractability of the behaviour rather than reflecting an effect related to a treatment intervention itself.	
Authors: Rehfuss (2013)	**Source population:** A convenience sample of 309	**Intervention/s description:** ISOP – a structured individual and	**Follow up duration: years (SD):**	**Limitations identified by author:**

Country: USA **Aim of study:** To examine the effectiveness of an integrated sex offender program. **Study design:** Quasi-experimental design **Quality Score:**	adjudicated male adolescent sex offenders who had completed an inpatient program in a juevenile secure center facility. **Inclusion criteria:** • Legal documentation of having committed a sexual offense serious enough to result in adjudication to juvenile corrections. • Identified as having problems to the degree that required informed behavioural management to reduce the likelihood of sexually offending. • Had received specialized services in keeping with national standards and consistent with the observation that sex offenders who completed treatment programms tend to have lower rates of sexual recidivism than those who do not. **Exclusion criteria:** • If they did not have a follow-up J-SOAP-II assessment (n=19) or if they were female (n=5) **Sample sizes:** 309 male sex offenders in a juvenile correctional facility **Gender:** **Ethnicity:** White 145/309	group counselling intervention as opposed to a psychoeducational group. Participants received individual counselling, case management, family meetings and interventions and crisis intervention services and participated in sex offender specific groups. These groups focused on the importance of appropriate sexual boundaries, emotional regulation and self-control skills. The ISOP was divided into four phases, each lasting 3 months. For each phase of treatment, participants attended four groups per week for 10 weeks. Phase 1 – focused on developing readiness for change Phase 2 – was seeking to understand behavioural change. Phase 3 – sought to achieve behavioural change Phase 4 encompassed preventing relapse. Participants had to adequately complete one phase of treatment before they could begin the next. In addition the participants attended twice-weekly New Freedom Groups, a CBT group based on the stages of change. This group was largely psychoeducational. Each participant was placed into a treatment group based on severity of offense. Treatment groups were characterized by length of treatment and categorized as low risk of recidivism, moderate risk and high	**ANCOVA** Analysis was conducted by an independent group of statisticians. A factorial analysis of covariance (ANCOVA) was conducted to determine the effect of: Participant age Treatment group length. The covariate was the J-SOAP-II pretest dynamic score. Significant main effect for treatment group length, $F(2, 302)=5.44$, $p=0.005$, $n^2=0.035$ No significant main effect for age, nor a significant interaction for age and treatment group length. Treatment group 2 (9-23 months) had a lower adjusted mean (0.43) that the other two group (group 1, mean 0.57 and group 3 mean=0.53. This indicates that the Group 2 members showed a significantly greater decrease in dynamic J-SOAP-II scores than the other two groups.	J-SOAP-II useful but clinical interviews could provide useful information. Used archival data. Sample size not large enough to create actuarial limits. Limited to male participants. **Limitations identified by review team:** **Source of funding:** **Conclusions** This decrease in J-SOAP-II scores in the moderate risk treatment groups, reflects an increase in a healthy attitude and perspective towards sexual behaviour. They demonstrate remorse for their action and empathy toward the victim. They show that participants in the moderate group significantly increased their ability to accept responsibility for offenses, develop internal motivation for change, understand risk factors and apply rik management strategies, empathize, show remorse and guilt, analyse cognitive distortions and maintain quality of peer relationships. Why? May be a more effective length of treatment that either the short or long

	Hispanic 111/309 African American 31/309 Native American 11/309 Mexican national 9/309 Other 1/309 **Age:** Age ranged from 12 to < 18 (mean = 15.8 years)	risk of recidivism. Low risk = n=66 (0-9 months of treatment) Moderate risk n=149 (9-23 months of treatment) High risk n=94 (23-52 months of treatment) Each participant was evaluated on admission and during treatment to mark progress, culminating in a final assessment upon programme completion. The data collected were from a 5 year period, 2005-2010. **Underlying theory:** **Control/comparison/s description:** **Therapist fidelity:**		treatment groups. The participants in the moderate treatment group may be the segment of the population who can be helped. Further research is needed to determine why these differences exist.
Authors: Weinrott (1997) **Country:**	**Source population:** Subjects were recruited from outpatient Juvenile Sexual Offender treatment	**Intervention/s description :** N=35 25 sessions of VS twice per week after which they were revaluated	**Follow up duration:** 3 months **Phallometric Measures**	**Limitations identified by author:** Analysis of ASYM ratings was hampered by low power due

USA **Aim of study:** To test the effectiveness of vicarious sensitization (VS) – a form of conditioning the aim of which is to decrease sexual arousal to prepubescent children. **Study design:** RCT **Quality Score:**	programmes, private practitioners and probation officers. **Inclusion criteria:** • Male • Aged 13-18 years at the time of referral • Committed a hands-on sex offense against a child at least 4 years younger • Admit having done so • Volunteer for VS to reduce arousal to children • Have at least 6 months remaining in his core treatment. **Exclusion criteria:** Low overall or deviant arousal (when measured phallometrically **Sample sizes:** 118 assessed phallometrically, 15 excluded due to low overall or deviant arousal, 24 youths withdrew from the study prior to completion. N=69 **Gender:** 100% male **Ethnicity:** 94% caucasian **Age:** mean 14.7 (range 13-18) **Sexual offending history:** All youths were participating in	VS is a form of aversive conditioning the aim of which is to decrease sexual arousal to prepubescent children. Perpetrators were alternately exposed to an audiotaped crime scenario designed to evoke deviant arousal followed immediately by an aversive video vignette. The aversive stimuli portray adolescent sex offenders contending with negative social, emotional, physical and legal consequences of their sex crimes. Subjects received approximately 300 VS trails over 25 sessions. **Underlying theory:** **Control/comparison/s description:** N=34 3 month wait-list (WL) Reassessed prior to receiving the identical 3 month regimen of VS. Three months after the second assessment, subjects in both conditions were again reassessed. All assessment and treatment sessions were individual and took place in a mobile laboratory (for outpatients) or in the sexual laboratory. Both labs were identical. Erectile responses were transmitted by means of D.M. Davis mercury strain gauges. **Therapist fidelity:** Not described	*paper reports both change scores and comparisons between IT and WL at Assessment 2. Reporting the comparison between groups at assessment 2 here. **Video Phollometric Measures** % of full erection to female child composite stimuli 3 months VS: 20.2% (SD 22.1%) WL: 31.2% (SD 29.2%) **Audio Phollometric Measures** % of full erection to female child composite stimuli 3 months VS: 55.5 (SD 35.9%) WL: 63.7% (SD 33.8%) **Slide Phollometric Measures** % of full erection to female child composite stimuli 3 months VS: 17.7 (SD 14.8%) WL: 28.1% (SD 21.6%) **Adolescent Sexual Interest Cardsort (ASYM)** **Self-Perception Profile** No data given. But reports that there was a significant increase in self-esteem over time across groups. Post hoc tests revealed no differences	to subject loss. **Limitations identified by review team:** No ITT **Source of funding:**

	specialized sex offender treatment at the time of referral. All continued in their core treatment while participating in the present study. 70% were receiving outpatient treatment and 30% institutional **Baseline comparability:** yes		between the two groups at any point. **Social Validation and Clinical Significance.**	
Authors: Worling and Curwen 2000 **Country:** Canada **Aim of study:** To examine the success of specialized adolescent sexual offender treatment by comparing subsequent recidivism rates between treated offenders and a comparison group. Alsop to examine the predictive utility of the variables assessed with respect to both sexual and nonsexual recidivism. **Study design:** Did not use random assignment at the inception of the study. **Quality Score:**	**Source population:** **N= 148** **Intervention group** N= 58 (53 males and 5 females) offenders participating in at least 12 months of specialized treatment at the SAFE-T program. **Control group** N=90 (86 males and 4 females) **Inclusion criteria:** Not described **Exclusion criteria:** Not described **Gender:** male 139/148 (94%) female 9/148 (6%) **Ethnicity:** **Age:** Aged between 12-19 years (mean 15.5 years, SD 1.5) **Sexual offending history:** Victims: 28% intrafamilial	**Intervention/s description :** The Sexual Abuse, Family Education and Treatment (SAFE-T) Program is a specialized community based program that provides sexual abuse specific assessment, treatment, consultation and long term support. Treatment plans are individually tailored for each offender and family and treatment goals are reviewed every 4-6 months. Offenders are typically involved in concurrent groups, individual and family therapy. Use CBT and relapse prevention strategies and address issues related to denial and accountability, deviant sexual arousal, sexual attitudes and victim empathy. Given that sexual deviance is only one aspect of the adolescent's life, however, related treatment goals include the enhancement o f social skills, self-esteem, body image, appropriate anger expression, trust intimacy. Family is viewed as an important system in the adolescent's life and that the most significant change will	**Recidivism** Data gathered through an order from a Youth Court Judge – accessed both youth and adult records held by the Canadian Police Information Centre (CPIC) database is a national registry of criminal arrests and convictions maintained by the Royal Canadian Mounted Police. The follow-up period ranged from a minimum of 2 years post initial contact to a maximum of 10 years (mean 6.23, SD 2.02). Given that SAFE-T is a community based treatment program, a post initial contact follow-up period was used rather than post treatment as offenders are 'at risk' both during and after treatment. **Number (and percent) of offenders with subsequent criminal charges.** **Sexual offenses**	18/58 (31%) of the offenders in the treatment group dropped out before completing treatment.

	55% extrafamilial 17% both 98% were referred for 'hands on' offenses involving direct physical contact with their victims **History:** 47% living at home 25% living in secure facilities 19% group homes 6% foster homes 3% friends or extended family **Baseline Similarity** No significant group differences on any of the factors that have been linked to the risk of sexual or nonsexual recidivism, therefore, it was not necessary to control for any pre-treatment group differences in subsequent analyses.	result from family participation, wherever possible. Average length of treatment was 24.43 months (SD 5.43) and the mean length of concurrent family treatment was 16.02 months (SD 9.28). **Underlying theory:** **Control/comparison/s description:** N=46 * received only an assessment by staff from the SAFE-T programme. Of these 30 were receiving treatment elsewhere (17 received specialized group therapy in the community, 13 participated in milieu treatment in a custody setting) and 16 were only referred for assessment. N=17 refused treatment and N= 27 dropped out of treatment before a 12 month period. Overall 67% of the adolescents in the comparison group received some form of treatment outside of the SAFE-T Program **Therapist fidelity:** Not described ***only used data from 'assessment only' group for control**	Treatment: 3/58 (5%) Assessment only: 6/46 (13%) **Violent nonsexual offenses** Treatment: 11/58 (19%) Assessment only: 13/46 (28%) **Nonviolent** Treatment: 12/58 (21%) Assessment only: 26/46 (59%) **Any offenses** Treatment: 20/58 (35%) Assessment only: 27/46 (59%)	

Qualitative studies: Data Collection, Analysis and Main Themes from Included Studies

Allan (2004)	Australia	Conducted semi-structured in-depth interviews (Jan 1999 - Nov 2000). As interviews progressed and were transcribed, particular areas of interest emerged - followed up using purposive sampling technique. Participants asked to name and define their job and the agency or practice where they worked. They were asked to identify and describe the theoretical or therapeutic approaches that informed their practice and the way these had developed. Participants were asked to define the term 'sexually violent child ' and describe the way they came into contact with this client group. Participants were then invited to describe and discuss one or two case examples including the following: the characteristics of the child and their family, the issues and difficulties that arose from these cases and the participants' understanding of how the sexually violent behaviour developed and what factors influenced its maintenance or change.	36 women and men who identified they provided therapeutic intervention to children who had sexually assaulted another child.	Interviews conducted, transcribed and coded in a cyclical manner that involved the development of broad themes in an inductive analysis. Subsequent data reduction identified patterns and exceptions in the narratives that linked to existing theory and discourse in a deductive analysis.	Causes of children's sexual violence Responsibility for the outcome of intervention Fathers
Allan (2006)	Australia	Semi-structured in-depth interviews	36 women and men	Interviews conducted, transcribed and coded in a cyclical manner that involved the development of broad themes in an inductive analysis. Data reduction identified patterns and exceptions in the narratives that linked to existing theory and discourse in a deductive analysis	Impoverished violent environments, parental neglect, lack of choices and opportunities for education and housing. Classlessness (abuse occurs at all levels of society); the powerlessness of the counsellor to intervene in the inter-generational cycles
Belton et al (2014)	UK	Interviews normally took place within two months of programme ending. Interviews with referrers and NSPCC practitioners took place by telephone.	40 Interviewees - young people, parent/carers, referrers and	Interview transcripts analysed in Nvivo using the framework approach. Taking a case study with interviews approach allowed both a thematic analysis of issues emerging from the interviews as	Motivation; Ongoing Commitment; Role of parents and carers; Programme Outcomes; Quality of Delivery; Follow up

		Interviews with service users usually conducted face to face at the NSPCC service centre or the service user's home. Some service users chose to conduct the interview by telephone. Topic guides developed for each of four types of interview conducted to ensure the aims of the research were covered. Interviewees asked for permission to record interview. Where consent not given, notes taken instead. Interviews lasted for average of 40 minutes.	practitioners	well as in-depth analysis of the issues specific to a particular case and differences in perspectives on a case.	

Brogi & Bagley (1998)	U.K.	Only general statistical information requested, as well as `statement of function and purpose', since centres have a say in what type of adolescent is admitted. Managers were asked their views on policy and programming aspects of mix of child and adolescents in secure centres. All managers who replied to questionnaire were aware of the fact that secure centres contained mix of young people which included those who were physically and sexually aggressive, those who were suicidal and victims of sexual abuse. In questionnaire, managers asked to comment on suitability or otherwise of the mixed backgrounds of their charges, in terms of prior victimization and prior offending.	15/27 (55%) completed questionnaire	No details given	Statements of Purpose Alternatives Population mix
Cheung & Brandes (2011)	U.S.	The " Provider Opinions of Treatment and Supervision of Juveniles with Sexual Behavior Problems" survey used as instrument to identify providers ' viewpoints. Survey developed from current literature on JSBP (31 items – 5 demographic items, 17 intervention items, and 9 interaction items). Within intervention items, 3 items designed to identify views on emerging issues including timing for sexual addiction treatment, use of polygraphs, and victim-offender reunification; 7 items measured utilization of treatment approaches to achieve positive outcomes; 7 items measured treatment goals. Each item designed to obtain data about respondents' experiences that have led to positive outcomes for young male sex offenders. A 4-point Likert-type scale was used in questions regarding outcome-based experience (one = most favorable	342 survey respondents, 161 from June (60% response) and 181 from July (66.5% response), with overall response rate of 63.45%.	First test: exploratory factor analysis to identify the dimensionality of the " Interaction " and " Intervention " constructs and subconstructs in relation to successful treatment outcomes. Nine variables within "Interaction" construct analyzed to determine whether the factors that emerged represented the three subconstructs based on the literature: Communication, Coordination, and Collaboration. Second factor analysis examined 17 variables within Intervention construct to determine whether factors emerged that represented the three subconstructs: traditional Approaches, Goals, and Controversial approaches. Third factor analysis examined seven variables for subconstruct of Approach within the Intervention construct. Fourth factor analysis examined the seven variables	Protocol accounted for 26% of variance, Collaboration accounted for 17% of variance, and Roles accounted for 15% of variance. Counseling, accounted for 13% of variance, Placement, accounted for 11% of the variance, and Self-Discipline, accounted for 10% of variance. Integrative, accounted for 23% of variance and Cognitive, accounted for 17% of variance. Social Functioning, accounted for 25% of the variance, and Support, accounted for 20% of the variance.

		answer and four = least favourable answer). Emerging issues measured on a 3-point scale (1 = never and 3 = always).		for the subconstruct of Goals within the Intervention construct.	

Deacon (2015)	U.K.	LA Case Files and Interviews	30	Ethnographic Content Analysis (ECA) was used to analyse the data collected and to assess the use of the DCT. ECA requires the researcher to remain reflexive with their approach to data collection in this area, and to continually revise the DCT to reflect the findings.	Parents/carers problems in understanding what children who display sexually harmful behaviour means. Parents struggled to talk explicitly about what their child had done. Social work practitioners talk of sexual abuse rather than SHB. Case reflections of social work practitioners. Social work practitioners' use of non-specific language to describe SHB. Became: What does 'children with SHB' mean? The realities of case management Issues of stigma Views of the alleged perpetrator Training, support and practitioner reflections
Draper et al (2013)	South Africa	Guide questions used for interviews and focus groups developed in consultation with FWI programme staff. Evaluation outcomes provided a starting point for guide questions. For the FWI and comparison group participants, the guide questions aimed to elicit participants' perceptions of the extent to which the programme in which they have participated had been effective (i.e. what they have learnt, and how they have changed), and the factors they felt had influenced this change or learning. Focus groups with parents of FWI participants focused on extent to which parents believed that FWI had been effective in bringing about positive changes in their child. Due to the sensitive nature of the topic, space was given for participants to explore issues not directly addressed by the guide questions, but were applicable to the research. Guide questions for the key informant interviews focused on the	Focus groups with 17 FWI participants, 17 parents of FWI participants and a comparison group of 10 youth offenders who had only participated in CBT sessions. Key informants interviews conducted with 6 programme staff.	Based on the evaluation outcomes and the guide questions associated with these outcomes, an initial coding framework for the thematic analysis of the data was developed, with the three evaluation outcomes constituting the three main themes. All transcripts read to obtain general sense of the issues raised in the focus groups and interviews, and the coding framework was further refined in light of the subthemes identified within the three main themes. Using this revised coding framework, transcripts coded with assistance of Atlas.ti Qualitative Data Analysis Software to identify "repeated patterns of meaning" (Braun & Clarke, 2006, p. 86). The approach used in this thematic analysis could be defined as semantic and also characterised as predominantly deductive (or theoretical), since coding process was largely guided by the three evaluation outcomes and the case-study approach of this evaluation. However, identification of the subthemes was more inductive and less determined by analytic preconceptions, allowing	FWI's outcomes and mechanisms, factors influencing its effectiveness, and the kind of change that it helps to bring about in its participants.

		extent to which key informants believe that FWI has been effective in bringing about positive changes in programme participants, and their views on the factors influencing the effectiveness of the programme. Where languages other than English were spoken during focus group discussions (such as Zulu and Sotho), these portions of discussion translated (verbally) into English by an individual from TTBC fluent in English and the other languages. English translations were recorded via audio, and were provided, along with full audio recordings of the focus group discussions, to an external third party, who transcribed focus group discussions verbatim (in English).		these subthemes to be more strongly linked to the data, although they were not entirely data-driven. Once the transcripts had been coded using the framework, quotes for each code were grouped together and summarised, and specific quotes were chosen that best represented the sub-themes and themes outlined in the coding framework. Results of the thematic analysis are presented according to the three evaluation outcomes, with participants, key informants and parents' perceptions presented separately for outcome two (perceptions of FWI's effectiveness).	

Duane et al (2002)	Ireland	To explore the psychological processes that underpin changes which occur during the programme individual semistructured interviews were conducted with participants at the beginning, middle and end of the programme. 16 item interview (SSI) included questions focused on parents attitudes to the programme; their experience of participating in the programme; their observations of their son's behaviour over the course of his involvement in the programme; their understanding of their sons' sexual offending behaviour; and their understanding of their role in preventing re-offending.		Interviews audiotaped, transcribed and subjected to thematic content analysis. All participants gave written informed consent before entering the study. Thematic content analysis of transcripts of the semistructured interview was conducted. First transcripts were segmented into meaningful chunks of text so that each chunk contained one main idea. Second, administrative codes assigned to chunks such as participant number; father or mother; intra-familial or extra-familial offence; pre-programme, midprogramme or postprogramme. Third, chunks classified into meaningful categories at each of the three different time points when interviews were conducted and assigned thematic category codes. Both categories defined by the explicit content of participants' statements (e.g., Easier to talk when there are only parents present) and inferred by the analyst (e.g., Support) were used. Fourth, to establish inter-rater reliability an independent person read a random selection of the transcripts and assigned chunks of text to categories identified by the analyst in the initial content analysis. There was good agreement on the assignment of text chunks to thematic categories. Where disagreement occurred, there was discussion until a consensus was reached. Fifth, categories were grouped into meaningful superordinate domains. Sixth, a conceptual model was developed to explain the categories and domains which emerged from the thematic content analysis. Finally, this model was presented to the clinicians that run the programme and they were asked whether it fitted with their experience of working with parents of adolescent CSA perpetrators. The clinicians agreed with the model and made a number of suggestions, as to how it could be refined which were then integrated into the final version of the model.	The five superordinate domains identified were (1) experiences relating to the impact of disclosure of sons' sexual offence; (2) experiences in the parents' group; (3) positive experiences of parents themselves; (4) their observations of their son ; and (5) their comments on the programme.

Farmer & Pollock (2003)	U.K.	Fieldwork conducted (1994-1995) in one local authority in England and one in Wales. Both local authorities had large multiracial urban populations as well as suburban and rural areas. First phase of study was involved review of the case files of all 250 children in the two authorities who had been newly looked after in a set time period (6 months in the smaller and 4 months in two social services areas in the larger authority). Parental permission was obtained to review the case files. Data on the children were collected so that the backgrounds of the sexually abused and/or abusing children could be compared with those of the non-victimized children.	22 girls and 18 boys. 9 of the sample aged 10–12, 27 were 13–15 and 1 in 10 aged 16 or over at time of interview. One in six was African–Caribbean or of mixed parentage and over a quarter (28%) had a mild to moderate learning difficulty, whilst one child had a physical disability.	Identified specific dimensions of management and of child outcome and looked to see how these were connected with each other. In the second, we sifted the information from all the inter- views with young people, residential workers, foster carers and social workers in order to identify rather more subtle areas of practice that appeared to be either harmful or helpful. In this article, we report on the findings from this second, more qualitative, approach.	When all information about the management of the sexually abused and/or abusing children in substitute care in interview sample had been analysed it appeared that four areas of activity were particularly important to effective management, that is, to situations where general and sexual behaviour improved or was at least contained, risks reduced and the child's essential needs were met. Four areas are (i) supervision, (ii) effective sex education, (iii) modification of behaviours, and (iv) therapeutic attention to the needs that underlay the behaviours.

Geary et al (2011)	New Zealand	Qualitative data from structured, open-ended interviews with 47 consumers. Study approved by CYF Research Access Committee and ethical approval granted by the University of Auckland Human Participants Ethics Committee. Interviews with key stakeholders Relatively small samples purposefully selected for in-depth study and to ensure maximum variation on dimensions of interest. Interviews were conducted with adolescents, family members and caregivers at three geographical sites. For inclusion in the study, all participants had been involved with the programme for at least six months. Interview schedules developed in consultation with programme staff, CYF personnel and Ma¯ori consultants. Overall focus of enquiry for each interview centred on strengths, weaknesses and suggestions for improvement. Consumers asked about referral and assessment process, their experiences of treatment (including their opinions of staff), programme effectiveness and outcomes. Ma¯ori participants asked same questions as non-Ma¯ori and additional questions about ways in which programme did/did not meet their cultural needs. Handwritten notes taken during each interview. All sessions tape-recorded.	24 adolescents and 23 caregivers	Interview data analysed by flexibly applying method of thematic analysis. Taped interviews were listened to in their entirety. At the same time, handwritten notes (recorded on each interview schedule) were corrected and extended where necessary, and potentially useable quotes transcribed in full. An initial coding system was developed that reflected the focus of enquiry and issues of interest in the data. Coded data were sorted into themes and subthemes which were then reviewed and refined. Coding consistency checks carried out during process. Independent personnel were employed to code data, review findings and take part in discussions about the meaning of outliers and atypical cases. Following consensus, the scope and content of each theme was clearly identified, defined and named. Final analysis was carried out during the writing of the CYF report.	Participants' responses organized into six main categories, and these form the basis for discussion. Order of categories mirrors the process that an adolescent would follow in the programme: (a) the process of initial engagement; (b) engaging in treatment; (c) perspectives on therapeutic approaches; (d) perspectives on treatment modalities; (e) treatment components that facilitated change; and (f) treatment outcomes. Themes have been identified within each category.
Green & Masson (2002)	U.K.	Ethnographic fieldwork in two local authority children's homes undertaken, comprising semi-structured interviews with children, residential workers, managers and social workers, participant observation and documentary analysis. Researcher devoted significant amount of time to ethnographic research, spending a number of days each week at each home	110 respondents. Data accessed from over 100 settings and 15 local authorities.	Not stated	The nature of sexual activity in the children's homes Normalized/ritualized peer abuse Issues of power, gender and homophobia Staff attitudes and responses and potential consequences

		to ensure continuity and to build up trusting relationships with both staff and children. Homes also studied at varying times of day and week, including weekends, evenings and night-times. Interviews conducted not only with those living or working within the settings but with those who had regular contact with the settings, such as social workers. Confidentiality and anonymity guaranteed for both staff and children, except where previously unknown or current abuse was uncovered or where researcher became aware that a child or staff member was at significant risk of harm. Using different methods within the ethnographic fieldwork allowed continual triangulation and cross-triangulation of data.			

Griffin et al (1997)	U.K.	Literature review. Data from shared observations from a team meeting.	Not stated	Themes identified from meetings - no formal thematic analysis	Cognitive processing of common emotional reactions Phases in emotional processing: Initial phase of dependency and hope for a "magic cure" Realization: situation may get worse before it gets better Rationalization and flight from reality Depression and "working through" areas of difficulty Ending and loss of the group Managing therapeutic boundaries/Sharing relevant information: a reciprocal process Mutual support
Hall (2006)	UK	Data was collected in two stages. In the first stage, qualitative research methods were used to gather information in the agency about how referrals were responded to and whether a case conference had been held. A 12-month period was randomly selected and all 14 referrals where issues of children's or young people's sexually harmful behaviour were recorded by the agency were examined. Case files provided information about whether a case conference had been held. Data was cross-referenced with data held by the social services child protection unit. Case files were used to determine whether information had been gathered in those areas specified in the child protection procedures. In the second part, qualitative methods were used to interview all 14 social workers who had undertaken the assessments. Semi-structured interviews tape-recorded. Agreement for a small research study was given by senior management in the agency and this	14 social workers	Those interviewed were all asked a set number of questions and the data analysed for themes and trends. Information drawn from this source aimed to move away from the collection of facts and examine how social workers defined what they did and how they did it. In addition, such methods attempt to pick up and convey the way participants in the events make sense of them. As the research process unfolded, the researcher was able to draw on unique knowledge and experience of the organization, having worked in the agency for several years. Schon's (1983) work makes a useful distinction between experienced practitioners who 'think in action' and the academic researcher who starts with theoretical concepts and then attempts to apply them to real situations. The action researcher has a potential closeness to the data and this research was undertaken while working as a	Role of guidelines Role of Supervision Assessment Process Support needed

		agreement was shared with participants. Participants were advised of the purpose of the study and its objectives, which were to provide managers with information about social services activities and to contribute to work for an academic degree. Participants received a summary of conclusions. Confidentiality was preserved by anonymizing the data. Dissemination of findings was addressed by providing a written summary of the main conclusions for participants and supplying feedback at a divisional managers' meeting within the agency		social worker in the organization. However, care needs to be taken to maintain objectivity.	

Halse et al (2012)	Australia	An adapted version of the closing clinical interview developed by Byers (1994) was used. The 24-item interview focused on the client's perceptions of the research team, tape-recorded, and transcribed verbatim. No members of the research team were involved in providing therapy to the participants in the study.	12	Interpretive Phenomenological Analysis was used to analyse the data in order to gain an understanding of the participants' experience of therapy. Because this method is data-driven, it enables exploration of particular experiences, while allowing for the emergence of unanticipated thematic material. An initial map of overarching domains was constructed by the research team, based on multiple readings of the interview material. The research team then reviewed these domains for analysis of the themes explored in the interviews. The QSR N-Vivo program for qualitative analysis was used to refine the process. Domains and themes were modified as coding continued.	Perceived Impact of Treatment Program Perceived Changes to Individual Functioning Self Esteem Affect Regulation Responsibility Program Impact on Family Functioning Program Impact on Understanding and Managing Sexually Inappropriate Behaviour Insight Into Offending Behaviours Relapse Prevention Victim Empathy Influence of Therapist Group Therapy Programme Evaluation
Jones (2014)		Interviews and focus groups used to collect data in the studies:. Interviews are used to understand the living world from the perspective of individuals and to discover the meaning of their experiences according to them. Semi-structured interviews conducted one on one with the participants, facilitated with an interview guide. They took place in private rooms at FTP, were tape-recorded, and last from 30 to 90 min. Focus groups are semi-structured group discussions in which the participants are considered the informants and are encouraged to guide the conversation. Study 1: Family support of the ASO. Interviews were the sole method used in this study. Based on an extensive literature review, an interview guide was developed and was reviewed by two experts in the field treatment of ASOs for content, appropriateness, and wording. Interview began with a grand tour question, used to present the general purpose of the interview, and continued	Study One: four parents and parental figures of four separate adolescents Study Two: four parents and parental figures of three separate adolescents,	Content analysis and constant comparison were used to analyze the data from each of the studies. This process constantly compares each datum with all collected data with the purpose of yielding a conceptual understanding of the data (Robinson-Wolf, 2012). Data consisted of words, phrases, and dialogues from the focus group and interviews, which were recorded and transcribed verbatim. The researcher and an expert consultant conducted the analysis independently and then simultaneously reviewed results and confirmed interrater reliability. They committed to a complete data set and then similar data were sought out and grouped together as codes. Each code was separated into different data topics and the data from each topic were compared with one another to find similarities, differences, associations, and relationships. The data were then sorted for patterns and clustered into conceptual themes. Using this method, data saturation is reached when no new concepts or properties emerge from the data. All themes were confirmed with all collected data and there was no outlying information.	Four core categories identified included: feelings, behaviors, changes to be made, and treatment needs. Prominent answers within each category identified and considered major themes within that category. Themes used to develop an interview guide. Follow-up interviews were conducted with each parent to clarify, expand on, and add information to the data from the focus group, with purpose of collecting more thorough descriptions of their experiences Three main themes emerged from Study One: an interactive relationship between the parent and the child, identified as being there; the parental toll; and aspirations for the child's future. Four main themes emerged from Study Two: Coping with the initial response, coping with feeling responsible,

		with probe questions to elicit more specific information and keep individuals focused on providing support to the adolescent. Study 2: Coping experiences of parents of ASOs. A focus group and interviews were both used. The focus group was conducted to collect preliminary data. A set of questions were developed by the researcher to facilitate the discussion about their behavioral and emotional responses related to the experience. To start the group, different colored papers were distributed to each participant and they were told that each color corresponded to specific question. Participants answered each question on corresponding colored paper; encouraged to write more than one answer for each question, using separate sheets of paper. They selected 5 to 10 answers that were most relevant to their experiences as a parent of an ASO. They shared their responses with the groups and discussed the relationships between their answers. Related answers were clustered into core categories and named by the group. Answers shared until they agreed that the core categories they jointly identified adequately summarized their experience. This allowed preliminary analysis to be conducted by participants during the group..			coping with feeling alone and overwhelmed, and benefits from participating in a family support group.
Ladwa-Thomas & Sanders (1999)	United Kingdom	No details given	Seven child protection social workers	No details given	Getting through the denial of both parents and perpetrators was described as a major obstacle. Parents of perpetrators, especially very young ones, were described as frequently work intervention. Not allowing the child to be interviewed was one response. Another was to claim that they, the parents, could supervise the

					child and so prevent further incidents. When parents allowed the child to be seen, the first interview was occasionally very di• cult as parents were able to 'coach' the young person. By the time of the interview, s/he already knew the wrongness of the acts committed. Some of the children or young people had already been 'in the system' before coming to the notice of practitioners for sexually abusing other children. One worker noted that one 14-year-old perpetrator had been displaying traumatized behaviour since the age of 2, suggesting the need for an earlier and more thorough assessment. Lack of skills in challenging the denial of abusers and carers was a major concern for practitioners. Other perceived gaps in skills were how to assess risk of reoffending and, more generally, what pertinent questions to ask when undertaking a comprehensive assessment. Practitioners felt an urgent need to be updated generally on the knowledge currently available from research and practice experience. All workers believed that a multidisciplinary team, drawn from statutory and voluntary agencies, incorporating the different strengths of each, would be the ideal solution in meeting the 'focused needs' of young abusers.

Lambie et al (2000)	New Zealand	Intensive structured interviews to gather detailed information about clients' experiences of the programme. Data gathered from these interviews later aided the development of recommendations for programme changes. Purpose of structured interviews was to gather information as to whether the programme was consistent with the original aims of stopping the adolescents re-offending and to assess whether participants thought it had helped them. For this evaluation, adolescent self-reports considered acceptable source of information. Family members also included as part of the evaluation as they were most likely to be aware of personal or behavioural changes in the adolescent. Parents provided validation of adolescent's self-reported changes and also provided a medium through which they could express their experience of programme. It was acknowledged that both adolescents and their parents could be biased in their responses. Thus, recidivism reports were obtained from child protection services. Evaluation aimed to provide information for programme development and initial validation of wilderness programme to treat this client group. Evaluation primarily focused on the adolescents' views of wilderness programme. No pre and post measurements were undertaken, nor any control group used. Questionnaire for adolescent interview was developed to assess whether or not the objectives had been achieved. Questionnaire covered a range of topics including: social relationships with peers within and outside the treatment	14 adolescent sexual offenders who had attended community treatment programme and 12 parents	The interviews were analysed by the use of absolute frequencies of the content data with responses being combined into categories relevant to their particular subject area (Marshall Q Rossman, 1989). Equivalent questions in the adolescent and parent questionnaires were compared. Scoring for the RSE was conducted according to instructions for this measure. Scores were assigned for each correct response on the SRQ and totalled.	All the adolescents interviewed had taken responsibility for their offending and none minimised their level of responsibility. At the time of the interview, some disclosed having minimised their level of responsibility prior to engagement in the therapy programme, and were able to recount the positive changes they had made. All the adolescents were able to describe how the victim may have felt at the time of the offence and the possible subsequent effects on their victims. All but one reported that doing the empathy psychodrama helped their understanding of the effects of sexual abuse on their victims. The empathy psychodrama was the aspect of treatment which was remembered most often by adolescents and which had the greatest impact on them. The impact of the victim empathy component in the programme appears to be relatively long lasting. All the adolescents indicated that they had close social relationships both before and after the programme. The interviews with the parents revealed that none of the adolescents had friendships with younger children and nine of the parents interviewed reported that their relationship with their son had improved since completing the programme. Responses to the sexual response questionnaire (SRQ) revealed that all 14 adolescents had a good understanding of sexuality issues upon completion of programme. With regard to the adolescents' self-esteem, 13 of the adolescents interviewed expressed

		programme; victim empathy; cognitive distortions (particularly minimisation and responsibility); safety plans and coping with high-risk situations; offending cycle behaviour; perceived level of risk; intimacy; and sexual relationships, Parent questionnaire was derived from adolescent interview schedule enabling direct comparison between adolescent and parent responses. Following each interview adolescent was given a Sexual Response Questionnaire (SRQ), and the Rosenberg Self-Esteem Scale. A small number of questions were modified to make the questionnaire more relevant. It included questions on topics such as homosexuality, women's sexuality, masturbation, and intimacy.			satisfaction with themselves as people. Twelve of the adolescents reported increased levels of self-esteem since completing the programme. Primary aim of the parents' questionnaire was to corroborate information obtained from the adolescents' questionnaire response. Information was also obtained regarding the adolescent-parent relationship. Eight parents stated that their relationship with their son had improved since he had attended the programme. Nine parents believed that if their son had not attended the programme, he would have reoffended.

Lawson (2003)	United States	Demographic and interview data were collected. Investigator explained study to each youth and his parent or guardian and asked for assent/consent. Demographic data, including information about the boys' family relationships, characteristics, adjustment factors and offence characteristics, were gathered by chart review after consent was given. The investigator gave each youth 10 questions to answer in writing as a homework assignment and scheduled an appointment for a face-to-face interview to discuss the responses. Two-stage questionnaire and interview process served two purposes. Boys' families, therapists and IRB reviewers were sensitive to the boys' vulnerabilities and wanted to know the issues that would be discussed. Questionnaire provided that information. Adolescents more likely to speak freely if they knew in advance what they would be expected to discuss and had something to refer to if they got stuck for an answer. Investigator conducted all seven interviews. Symbolic interactionism and Elkind's (1967) theory of developmental egocentrism formed the sensitizing framework that guided development of the questions asked. When the boys came for their interviews, they read their written responses aloud and responded to questions about clarity, accuracy, precision, relevance, depth, breadth and logic of their answers. Specific probes related to youths' responses. Interviews lasted average of 50 minutes (range 45–60 minutes), recorded by audio-tape and transcribed by a professional transcriptionist, who agreed keep	7 adolescent offenders (14-18 years old at time of the interview (average age 16, SD 1.46).	Using HyperRESEARCH (Hesse-Biber 1991–94) as text management and retrieval system, the investigator coded and analysed each interview. Memos were written to illustrate ideas, to compare incidents with incidents, and to describe properties of categories. Memos were used to document insights and to indicate how significant incidents, properties and categories shaped the developing theory. Interviewing, coding and memo writing continued until categories were saturated, indicating that no new information was being obtained. Demographic data summarized by reporting ranges, averages and standard deviations. The unit of analysis of interview data was the joint action, as reflected in the interchange between the investigator and participant. Each unit of data consisted of an interview question (I:) and a participant answer (P:). The interviewer probed for clarity, accuracy, precision, relevance, depth, breadth and logic and the participants responded by describing thoughts and events from their personal perspectives. Interview data were analysed in two phases. First, units of data were examined for words and phrases that illustrated the behaviours of participants indicating progress in treatment. These terms, or emic codes, were then organized according to the sensitizing framework. In the process, the participants' 'internal perspective' was made evident. During second phase of analysis, data examined from the perspective of an outside observer. Data were assigned etic codes using two-step approach. Fiirst, categories within the written responses were identified. Then boys' verbal responses to interview questions examined to identify properties of each of the categories. This process of identifying categories and their properties continued until the conceptual elements of the process of	Basic social process of treatment was 'becoming a success story'. The structural elements of becoming a success story included relapse prevention, compliance and decision-making. The boys integrated these structural elements by talking to people they trusted, listening to what people said, and using what people said to help them do what was right. Becoming a success story took place in a context of family and community support.

		material confidential. Investigator did a final check on accuracy by reading the transcripts and listening to the audio-tapes simultaneously. The transcriptionist was offered critical incident stress management should she experience secondary trauma. After transcribing the third interview, she revealed that she had been molested by an adolescent when she was a child. However, she said that listening to boys describe their experiences in treatment was useful to her recovery and insisted on continuing with the study. She declined the opportunity for debriefing by third party.		treatment from the perspective of boys who have molested children emerged. The result is a theory that is 'integrated, consistent, plausible, close to the data, and in a form which is clear enough to be readily, if only partially operationalized for testing in quantitative research'. Miles & Huberman's (1994) standards for determining whether conclusions are warranted were used to evaluate the theory's quality. Rival conclusions were carefully considered. The quality of transcriptions, coding schemes and memos was maintained. A content expert and several participants evaluated emerging theory for fit with structure of the treatment programme and for authentic portrayal of the youths' experiences in treatment. Clinicians who reviewed the theory indicated that the model helped them find ways to monitor progress through treatment by identifying behaviours that were associated with satisfactory completion of treatment. Theory is preliminary; subject to further testing before its findings are generalized.	

Martin (2004)	U.S.	Qualitative data derived from three unstructured interviews with each participant. Interviews intended to give participants an opportunity to reflect upon their own experience of participating in a treatment program and the meaning they gave this experience. Entire interview process focused on eliciting a response to the central question: "What is it like for you to have participated in the treatment program?" Each interview focused on clarifying meaning and exploring experiences in more depth.	7 male adolescents (15-18), having completed treatment in program for adolescent sexual offenders.	No details given	Five themes: (1) contending with the rough spots, (2) feeling supported by others, (3) working hard to stay on track, (4) being transformed by the journey, and (5) the aftermath — a continuing challenge.
Miller (2011)	U.S.	Data collection took place over 8.5 months. Of the seven young women interviewed, three were still in residence at correctional facility during time of interviewing. In total, 18 interview sessions held with just over 28 hours of total interview time. Average interview time per participant was four hours. The author conducted all interviews, which were audio-recorded and transcribed. Human subjects approval granted by the sponsoring University's Institutional Review Board.	7 young women who had participated in a specialized treatment program during residence at correctional training school	Data analysis was iterative, multi-step process that involved fieldnotes, in-text notes, and coding and compilation of interview data by thematic categories. Fieldnotes were taken immediately following interviews, being spoken into an audio recorder and later transcribed and integrated into interview transcripts. Fieldnotes provided a description of the interview locale (e.g. a room in the correctional facility, the participant's apartment), a description of the interviewee (e.g. her physical appearance, comportment, and affect), and recounting of any conversations that took place prior to or following interview (e.g. with the respondent or with correctional facility staff). Fieldnotes also served as a means for preliminary observations and analysis based on what 'snagged' in the researcher's mind from interviews. To set them aside from descriptive data, analytic observations from fieldnotes were integrated into transcripts via the use of bracketed in-text notes. In-text notes also incorporated in-the-moment analysis during transcription and were used as a means of memoing. Ideas of categories for thematic coding were generated from within case analysis and across-case comparisons. Coding for discursive processes generated two broad categories of 'telling' and 'relating to the label', each of which	Data concern broad thematic category of 'telling'. This concerned the way young women recounted being compelled to talk about their sexual offenses and what sorts of narratives were offered to them for doing so. Reported experiences generated three subcategories: 'the imperative to create a cohesive narrative account', 'learning a talking orientation and a language around offending' and 'appropriate tellings/what is a workable narrative'.

				had subcategories.	
Muster (1992)	U.S.	Questionnaire mailed to 50 counselors and psychologists. The instrument was meant to assess preferences for confrontational or sympathetric treatment in three different age groups.	18 counselors and psychologists who work in field of sexual abuse and sex offender treatment.	Percentages of responses to each question analysed.	Therapy should be flexible Sympathetic therapy does not reinforce minimisation and denial

Pierce (2011)	U.S.	Preliminary data gathered using a focus group. Focus group designed to ensure participants not only generated data but also conducted preliminary analysis. Set of questions based on premises of TOP model used to facilitate focus group. Different colored papers and pens distributed to each participant at start of focus group and they were told that each color of paper corresponded to a specific question. Using as many pieces of paper needed, the participants wrote single short answers on the corresponding colored paper for each question. They shared their answers and discussed the relationships between their answers. Similar answers were clustered into core categories and the categories were named by the group. Answers were shared until they agreed that the core categories adequately summarized their experience. Purpose of interviews was to ask parents of ASOs to clarify, expand on, and add to information from the focus group to provide a more thorough description about the experience. Three interviews were conducted. Interviews were audio-recorded and later transcribed verbatim. They lasted 30–50 minutes.	4 parents of ASOs	Data consisted of words, phrases, and dialogue among the participants and the researcher from the focus group and the interview discussions. Content analysis and constant comparison were used to analyze the data with the purpose of yielding a conceptual understanding of the data. Content analysis was used to identify the major ideas within the data. Constant comparison was used to seek out similar data and group them together as codes. Codes were compared to one another to find similarities, differences, associations, and relationships. Codes were then sorted for patterns and clustered into core categories. These core categories were then grouped together, forming the conceptual themes. There was repetition of information and confirmation of previously collected data within the complete data set, and saturation was reached.	During the focus group, the participants agreed upon and named four core categories: feelings, behaviors, changes to be made, and treatment needs. The reoccurring answers within each category were considered major themes within that category. These themes were then used to develop an interview guide. Parents of ASOs identified four conceptual themes: the initial reaction, the relationship with their child, "dealing with it," and being a survivor. Each theme consisted of various core categories; these categories were consistent among the participants, but were experienced differently by each individual.
Slattery et al (2012)	Ireland	At the end of each module, short, semistructured, qualitative interviews were conducted in order to gain feedback on the material and the young people's levels of understanding on the module topic covered. On occasion, it was not possible to interview all those who attended.	66 participants took part in the group programme.	To allow Project staff to assess the comprehension levels of both the generic and the sexual offending group participants, on all the topics covered, interviews were analysed subsequently using a thematic analysis approach. Initial themes were formed by the key question areas of the semistructured interviews, and from these other emerging themes were then identified. The transcripts were read and sets of similar responses were grouped into themes. This was conducted independently by two assistant psychologists, who then developed a mutually	Anger management Sex and sexuality Relationships Drugs and alcohol (D&A) Offence-specific Empathy Emotions and coping

				agreed set of themes. A coding frame was derived from these themes, which reflected each meaningful unit of responding which was relevant to the research. Coding frame applied to each transcript and the number of times each theme appeared was recorded. Subsequently, using inter-rater reliability checks, the reliability of the application of the coding frame was analysed. A random selection of transcripts (approximately 30% of the interviews on each module topic) were coded by psychologist not attached to Project. Independent rater's application of coding frame then compared to that of Project's assistant psychologist and acceptable reliability scores yielded across all module topics, with an average inter-rater reliability score of 86%.	

Somervell & Lambie (2009)	New Zealand	Ethics approval for this project was gained from the University of Auckland Human Participants Ethics Committee. Three sources of data. First, researcher attended four-day WT camp as participant observer. During this time notes were kept which were included in the analysis. Dual function of observation: allowed researcher to rapidly gain understanding of specific context and workings of programme and provided opportunity for researcher to form a relationship with participants to facilitate interview process. Second source of data: semi-structured interviews with adolescent participants who were asked about their experience at camp and whether they had learnt anything from the experience; if they felt experience had been helpful they were asked more specifically about process of their learning. Photographs taken by researcher during the wilderness experience used as a visual prompt. In some instances, for example where participants were having difficulty ''finding their words'', questions relating directly to photograph asked. Third source of data: semi-structured interviews with the therapists. Therapists asked about what the wilderness experience contributed to therapy conducted at SAFE and how it was able to do this. Interview schedules were flexible and open, allowing for exploration of avenues of interest. Development of the schedules involved a review of the literature and discussion with and feedback from relevant individuals, including staff at SAFE (both participants	Seven adolescent offenders and four therapists.	Analysis involved thematic analysis. NVivo7 was used to manage and analyse data within this framework. Initial codes were labelled as free nodes in NVivo7 that were then built into tree nodes which corresponded to themes. Forty-two initial codes were created during the initial phase of the analysis. Following this, four themes were created to summarize the conceptual patterns in the initial codes.	Themes created were enhanced relationships, view of self, intensity of the experience and aiding disclosure.

		and non-participants), supervisor for project, experts in outdoor education and an adolescent unrelated to programme. All interviews conducted in two weeks following WT camp			

Yoder (2013)		Sample. With the University of Denver IRB approval, qualitative data obtained by conducting individual interviews with approved treatment providers who have serviced youth sex offenders throughout the state of Colorado. The qualitative data were collected using a semi-structured interview guide. Researcher intended to study concepts that were not presented in the quantitative data, and this necessitated the use of qualitative methods. Interview guide formulated from emergent themes from focus group data. The CSOMB and the researcher conducted focus groups with a variety of multi-disciplinary team members including polygraph examiners, treatment providers, and probation officers. Four focus groups were conducted in three jurisdictions around the state. Emerging findings centered around concepts like families and treatment and included: Family dynamics, a lack of family involvement, challenges in getting families involved, difficulty understanding the system, and ways to improve service delivery for families. The researcher developed the individual interview guide in collaboration with the CSOMB and her dissertation committee. The guide was composed of questions that focused on treatment provider perspectives and experiences in working with families of youth who have sexually offended. Seven overarching questions asked of treatment providers. Location of data collection contingent upon treatment provider location and availability. The researcher traveled to the location of the treatment provider and often conducted the interviews at their place of	19 approved Colorado treatment providers	Data analyses took place between August 2012 and November 2012 and strands were analyzed during the same phase in the study. Qualitative methods were predominate strand to answer all four research questions. Analyses occurred such that any research questions warranting a mixed methods approach used available quantitative data and the analyses were enhanced with qualitative methods. Two-research assistants were hired to help transcribe the interviews, and data were judiciously transcribed with oversight of researcher. Data were then entered in the qualitative data analysis software, ATLAS.Ti 7. A research assistant was hired for the purpose of aiding in the coding process alongside the researcher. Having an additional onlooker observe the data helped establish observer triangulation and inter-subjective agreement among emerging themes. A coding template, or codebook was developed in conjunction with the research assistant. In establishing this template, the two researchers coded the first five transcripts simultaneously to ensure inter-rater agreement, and approximately 80% of codes agreed upon. Coders reconvened and discussed ways to improve their consistency and were able to agree on approximately 95% of the codes. Coding template used to guide remainder of analyses. Prior to developing the coding template, a coding schema, or an analytical approach to coding was developed to assign meaning to the data and to accurately capture the discourse in the interviews. This coding schema included open cycle coding, first cycle coding (structural and values coding), and second cycle coding (focused coding). Open cycle coding (the process of initially labeling the data) was used as a preliminary coding scheme in which the data were approached with a blank	Qualitative results revealed the high level of stress among families and underscored therapeutic relationship and treatment components as reciprocal provisions of treatment, whereby one is contingent upon the other for ethical service delivery. A conceptual model emerged that revealed strategies to move families through the treatment process. Inherent implications suggest that: crisis prevention initiatives are important to avert high levels of family stress; current treatment frameworks should be revised to include family protective factors; critical mechanisms of change should be tested quantitatively; and family services should occur uniformly. Overall, future research steps should detail a manual for how to pragmatically move families through the treatment process, test the effectiveness of that manual, and then disseminate effective methods to the provider community.

		employment. When travel was not possible, interviews were conducted and audio- recorded over the phone.		slate. The first cycle of coding and the second cycle of coding have addressed the research questions by applying different techniques to extract information from the data, but the two coding cycles ultimately lead to consensus among the findings. First and second cycle coding structures were formed based on nature of the qualitative interview questions within the semi-structured interview guide. To focus on families and families in treatment, only questions pertaining to family were analyzed. Structural coding was used as a first cycle coding mechanism to analyze responses as the interview guide was framed so that the researcher could easily index and access the relevant data. In analyzing responses to the interview question, "What are the costs and benefits of incorporating families into services?" values coding was used as a first cycle coding technique. Focused coding used to analyze all semi-structured interview questions to draw out themes from the Grounded Theory approach. It was in the second cycle of coding that patterns began to emerge and categories and themes were eventually developed. Using a grounded theory approach through inductive coding and memo writing, data were analyzed through constant comparison technique. This technique was used to compare the data of one treatment provider throughout duration of an interview, compare the data of one treatment provider throughout interviews and member checks, and compare different providers in different interviews. Using multiple observers further supported the findings that emerged To ensure qualitative rigor, this study incorporated multiple coders, triangulation of data (focus groups, interviews, and written memos), member checks, peer debriefing, and a well-organized audit trail. After coding was completed, a member of the CSOMB reviewed the transcripts and the	

				themes and categories were agreed upon.	

Yoder & Ruch (2014)	U.S.	To preliminarily understand issues related to family engagement and to frame questions for the individual interviews, four focus groups conducted with multidisciplinary team members (April 2012- June 2012) in three state jurisdictions as part of a broader investigation with the Sex Offender Management Board to capture perspectives on treatment approaches throughout the state. Saturation, or the phenomenon of concepts becoming repetitive across participants (Padgett 2008), was reached upon interviewing 14 participants. Recognizing repetition across initial participants, the semi-structured interview guide (used to organize interview questions) was restructured to obtain complementary and more detailed information.	19 (14+5) participants	Data transcribed by two research assistants and entered into ATLAS.Ti7. To better understand the data, coding schema established that included open cycle coding, first cycle coding, and second cycle coding. Open cycle coding is used to gather initial information related to the data. First and second cycle coding used discrepant coding processes (structural and values coding and focused coding, respectively) to interpret the data, but both coding schemas supported the overall findings. First and second cycle coding processes intentionally selected to correspond with content areas within semi-structured interview guide. Structural coding, or ‘‘content based coding’’, used as a first cycle coding process to investigate responses to questions within the content area, Overcoming barriers and challenges to engagement Structural coding was appropriate for questions within this content area because the relatable data could be indexed with ease. Values coding was used to analyse responses to the questions within the content area, Costs and benefits of incorporating families into service. Second cycle coding schema used focused coding to create ‘‘salient categories’’. Focused coding used to answer questions within both content areas to inductively identify themes. To establish observer triangulation (using different sources to review data) and inter-subjective agreement (corroboration among sources) across themes, research assistant assisted with coding. A coding template (a list of codes, definitions, and rules for use) was used to ensure consistency across multiple coders. During the first round	Building Rapport Feeling Safe Trust and Connection Empathy Strengths Based Approach Valuing Families Families as Change Agents

				of inter-subjective agreement checking, five transcripts were coded, and approximately 80 % of the codes were agreed upon. Following a second round of inter-subjective agreement checking, the next five transcripts were coded, and the coders agreed upon approximately 95 % of the codes. The final coding template was used throughout the analyses. Data analyzed using constant comparison technique. Study integrated multiple coders with various perspectives, member checks with willing participants, peer debriefing, triangulation of data (focus groups, interviews, and written memos), and an organized audit trail. A research assistant affiliated with the Sex Offender Management Board further corroborated the codes, themes, and overall findings.	