MEN WITH INTELLECTUAL DISABILITIES AND SEXUAL OFFENDING HISTORIES: AN EXPLORATION OF THEIR EXPERIENCES OF LIVING WITHIN A SECURE HOSPITAL SETTING

by

Stacey Heppell

A THESIS SUBMITTED TO THE UNIVERSITY OF BIRMINGHAM FOR THE DEGREE OF DOCTOR OF FORENSIC CLINICAL PSYCHOLOGY

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School of Psychology

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Thesis Overview

This thesis contains two volumes and is submitted as partial fulfilment for the degree of Doctorate in Forensic Clinical Psychology at the University of Birmingham.

Volume I: Research Component

Volume I consists of a meta-analysis, empirical research paper and a public dissemination document. The meta-analysis considers the effectiveness of cognitive-behavioural group based psychological interventions for sexual offenders with intellectual disabilities. This focuses on their impact upon cognitive distortions, sexual knowledge and victim empathy as well as further sexually abusive behaviour. The empirical paper explores the experiences of men with intellectual disabilities and sexual offending histories, of living within a secure hospital setting. The public dissemination document provides an accessible summary of the meta-analysis and empirical research paper.

Volume II: Forensic Clinical Component

Volume II consists of five Forensic Clinical Practice Reports (FCPR's). FCPR I presents a cognitive behavioural and psychodynamic formulation for a 50-year-old male who's mental health relapsed when discharge from hospital was planned. FCPR II presents a service evaluation of the use of the Recovery Model within a male locked rehabilitation hospital. FCPR III presents a case study of a Dialectical Behaviour Therapy intervention used with a 16-year-old female presenting with self-harm and attachment difficulties. FCPR IV presents a single-case experimental design to assess the effects of a positive behaviour support intervention for a 53-year-old male with intellectual disabilities and behaviour which challenges. FCPR V

presents a presentation abstract of a case study involving a 64-year-old male convicted of sexual offending and the treatment effects of an intervention based upon the Sex Offender Treatment Programme.

Dedications

For my husband Anthony. Thank you for supporting me through the good, the bad and the ugly. Without your unconditional faith in me, endless love, support, patience and sacrifices made over the past eight years, none of this would have been possible. You are my rock and I am so grateful to have you as my partner in crime even if I don't always show it.

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VOLUME I: RESEARCH COMPONENT

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VOLUME I

CHAPTER I: META-ANALYSIS

THE EFFECTIVENESS OF COGNITIVE-BEHAVIOURAL THERAPY GROUP-BASED INTERVENTIONS FOR MALES WITH INTELLECTUAL DISABILITIES AND SEXUAL OFFENDING HISTORIES: A META-ANALYSIS

Abstract

Background

The impact of sex offender treatment programmes on the re-offending outcomes of convicted sex offenders in England and Wales was recently associated with little or no change in both sexual and non-sexual reoffending. Most programmes for individuals with intellectual disabilities adopt similar treatment methods and therefore it is important to consider the treatment outcomes of these programmes. Existing literature suggests this research is inconsistent. This study aimed to complete a meta-analysis to examine treatment effects for this client group further.

Method

A systematic search of PsychINFO, EMBASE, MEDLINE and CINAHL was conducted in February 2019 using specific inclusion and exclusion criteria. 18 papers were identified, and their quality was assessed using a risk of bias framework. Scores on cognitive distortions, sexual knowledge and victim empathy measures as well as reports of further sexually abusive behaviour were pooled together to run a meta-analysis which yielded effect sizes for each outcome.

Results

A large treatment effect was found for reducing cognitive distortions and increasing victim empathy, with a moderate effect found for improvements in sexual knowledge. This meta-analysis also demonstrated that 11.5 per cent of individuals with intellectual disabilities who have completed these programmes will go on to display further sexually abusive behaviours.

Conclusions

Identified studies had a number of methodological flaws. However, the findings suggest that cognitive distortions are significantly reduced following this type of treatment and there are significant improvements in sexual knowledge and victim empathy. A rate of 11.5% for further reported sexually abusive behaviour during follow up periods was found, which is higher than the rate found for mainstream SOTP completers. Problems regarding the recording of sexually abusive behaviour are considered.

Introduction

Background

There is some evidence that rates of sexual offending by individuals with intellectual disabilities are higher compared to those without intellectual disabilities (Cortoni, Beech & Craig, 2017). One study found that around half of individuals with intellectual disabilities who had contact with the criminal justice system and were receiving services from a community team in one locality, were identified with the primary issue of sexual assault (Rose, Cutler, Tresize, Novak & Rose, 2008). However, it is evident that estimates of the prevalence of sexual offenders with an intellectual disability are difficult to establish as offences are often not reported, or when they are, the police are less likely to pursue a conviction (McCarthy & Thompson, 1997; Murphy, Powell, Guzman & Hays, 2007). For example, McBrien, Hodgetts and Gregory (2003) found that in one local authority in England, 41% of individuals involved with services for intellectual disabilities had a history of sexually related behaviours, however only 4% received a conviction. Furthermore, it is suggested that the available evidence varies across community, secure and prison settings, which produce different prevalence rates and several methodological issues, such as small sample sizes, mean that it is currently difficult to provide accurate figures (Lindsay, Hastings, Griffiths & Hayes, 2007). Nevertheless, a widely used prevalence rate of convicted sexual offenders with intellectual disabilities is 3.7% compared to 4% of sexual offenders convicted without an intellectual disability (Hayes, 1991; Patterson, 2018).

Key Terms

Intellectual Disability is characterised by significant limitations in intellectual functioning such as learning and problem solving, and adaptive behaviours affecting everyday

living, such as communication and independent living, (American Psychological Association [APA], 2013). It usually refers to individuals with an IQ quotient of below 70, and originates in childhood (APA, 2013). Within the research literature of individuals with intellectual disabilities, a common methodological flaw is that participants with an IQ score of between 70 – 80, indicating borderline intellectual disabilities, are recruited within the same sample (Cohen & Harvey, 2016). However, studies will be included in this meta-analysis if participants had an IQ of below 80 and they were accessing learning disability services, as this is consistent with the existing literature.

As discussed, individuals with intellectual disabilities who sexually offend, are often diverted away from the criminal justice system for hospital or community treatment, rather than receiving a conviction. Sexually abusive behaviour is a term which can describe any sexually related behaviour which would be considered illegal or sexually related behaviour where the other person did not consent or their ability to consent was compromised (Murphy et al., 2010; Thompson, 1997) and this term will be adopted by this study to ensure all relevant research is considered.

Treatment of Sexual Offenders

The Government have reviewed policy and strategy on sexual offending over the past decade, focusing on reducing sexual reoffending, including greater investment in treatment programmes for sexual offenders both with and without intellectual disabilities (Jones & Chaplin, 2017). Following the "what works," (McGuire, 1995) series of meta-analyses, examining effective offender treatment; programmes underpinned by cognitive-behaviour therapy (CBT) have become the predominant model used (Vanstone, 2000). The Core-Sex Offender Treatment Programme (SOTP), was the main treatment intervention utilised within

prisons in England and Wales for medium to high risk sexual offenders (Ho & Ross, 2012). It draws upon CBT approaches, targeting several criminogenic needs that are thought to be significant in the aetiology and maintenance of sexual offending and therefore reducing recidivism. These criminogenic needs include deviant arousal, distorted thinking patterns, lack of victim empathy, denial and minimisation and patterns of offending (Beech, Oliver, Fisher & Beckett, 2005; Mews, Di Bella, & Purver, 2017).

The Ministry of Justice evaluated the impact of Core SOTP on the re-offending outcomes of 2,562 convicted sex offenders in England and Wales who started the programme between 2000-2012. They matched treated sex offenders to 13,219 sex offenders in a comparison group, using 87 matching factors over a period of up to 13.9 years. The treatment and comparison groups were matched on an extensive range of proven reoffending outcomes. The key findings of this research suggest that completion of Core SOTP was associated with little or no change in both sexual and non-sexual reoffending. Indeed, they reported that 10 per cent of treatment completers committed a further sexual offence after eight years and 4.4 per cent committed a child image reoffence, which was higher than the matched control group where reoffence rates were 8 and 2.9 per cent respectively over the same follow-up period. Although small, this was statistically significant (Mews et al., 2017). However, some of the outcomes of this paper have been scrutinised (McCartan, Hoggett & Kemshall, 2018). There were failures in matching participants on sexual deviancy which is a known key variable in predicting recidivism and selection onto the programme, (Walton, 2018). Furthermore, they relied on file data being accurate to develop their matching model and included individuals in the comparison group without considering their willingness to engage in the programme, potentially impacting upon the findings, (Walton, 2018).

There has been some evidence of effectiveness of CBT based programmes, such as SOTP. Schmuker and Losel (2015), evaluated psychosocial treatment, predominately CBT. The mean effect size for sexual recidivism was smaller than in a previous analysis they completed, but still significant, (OR = 1.41, $p < 0.0001$). This equates to a difference of 3.6 percentage points, (10.1% in treated vs 13.7% recidivism in untreated offenders) and a relative reduction in recidivism of 26.3%. Gannon, Olver, Mallion and James (2019) conducted a meta-analysis examining specialised psychological treatments for offending and their association with reductions in recidivism, both offence specific and non-specific. In terms of sexual offending, they found a significant treatment effect, (OR = 0.64) and over an average follow-up of 76.2 months (SD = 34.2), sexual recidivism was 9.5% for treated and 14.1% for untreated individuals. This equates to a difference of 4.6% percentage points, and a relative decrease of 32.6% compared to controls. Gannon et al (2019) found that treatment was most effective in reducing recidivism, when a qualified psychologist was consistently present during treatment, and facilitating staff were provided with clinical supervision. Their study also suggests that group-based interventions were more effective rather than treatment combining group and individual sessions.

Adapted Sex Offender Treatment

Most adapted programmes adopt similar treatment modules and methods used within Core SOTP (Cohen & Harvey, 2016; Jones & Chaplin, 2017; Marotta, 2017; Lindsay, Michie, Steptoe, Moore & Haut, 2011) and therefore it is important to consider the treatment outcomes in relation to these programmes. Four main areas are addressed through all groups, mainstream and adapted. The first is focussing on the nature of the offence, considering details of the offence and victim, pathways taken for the individual to commit the offence and personal needs met through offending (such as a lack of intimacy). The second considers the individual's

emotional states, thoughts and feelings that are related to the offence, as well as their maladaptive attitudes and cognitive distortions regarding the victim and empathy for them. Courtney, Rose and Mason (2006) used grounded theory techniques with nine male sexual offenders with intellectual disabilities and found that all aspects of their offences were linked to their attitudes and beliefs, such as seeing themselves as the victim, denying the offence and blaming others for their offence. Therefore, a focus on cognitive distortions and victim empathy is thought to be vital in treatment for sex offenders with intellectual disabilities (Courtney et al, 2006; Lindsay & Taylor, 2008). A third area identifies how the individual's sexual fantasies and use of pornography are involved in the offending as well as elements of their personality such as feelings of entitlement. The fourth area involves making a plan for the future which considers the contributing risk factors identified in previous sessions and helps to develop a relapse prevention plan (Lindsay, Michie & Lambic, 2010). A group may adapt the following outline: introduction to the group; offence disclosure and personal accounts of offending; pathways and cycles of offending; dealing with cognitive distortions and attitudes towards victims; personal physical and sexual abuse; victim awareness and empathy; understanding the role of pornography and sexual fantasy in offending; promoting future appropriate relationships; developing a lifestyle change and relapse prevention plan (Lindsay et al, 2010).

Evidence Base for Psychological Treatment of Sexual Offenders with Intellectual Disabilities

There have been three recent systematic reviews examining the effectiveness of adapted SOTP for individuals with intellectual disabilities (Cohen & Harvey, 2016; Jones & Chaplin, 2017; Marotta, 2017). Across the three reviews, 21 studies were identified which mainly incorporated CBT interventions adapted from mainstream SOTP. One mindfulness-based intervention was included (Singh, Lancioni, Winton, Singh, Adkins & Singh, 2011). The

studies were based across a variety of settings including prisons, secure settings and the community. All participants were males with an IQ ranging from 55 to 80 and they were described as having borderline or mild intellectual disabilities. The programmes were all group-based, typically weekly 2 to 2.5-hour sessions, however some also provided individual sessions. The duration of treatment ranged from 4 months to 2 years and follow-up periods were varied, ranging from 6 months to 4 years. The general content of the interventions followed a similar framework as outlined above but they generally also targeted: sex education (including knowledge, the law and consent), cognitive distortions, victim empathy and awareness, relapse prevention, offence disclosures and cycles, issues of denial and minimisation and finding other appropriate sexual outlets.

The three reviews reported a number of positive treatment outcomes, mainly improvements in reducing cognitive distortions and increasing victim empathy and sexual knowledge. One study found similar outcomes to a mainstream sex offender programme (Keeling, Rose & Beech, 2007). However, reductions in sexual reoffending during follow-up periods were not consistent across the studies (Cohen & Harvey, 2016). There was also a lack of long-term follow up data provided. All reviews reported several methodological issues, which limited their evaluation of the treatment outcomes. Designs of the studies were mainly pre and post comparisons on particular measures of change, such as attitudinal changes, victim empathy and sexual knowledge with a follow-up period. None of the studies identified had an adequate control group. Most studies had small sample sizes and there was a wide variation in treatment length and follow-up time, causing complications in synthesising the study findings (Marotta, 2017). Identification and selection of participants was variable and as stated, interventions were delivered at various levels of security. From the data available, it was difficult to confidently assess effectiveness of interventions for this population.

A meta-analysis has examined whether adapted SOTP reduces cognitive distortions (Patterson, 2018). Six studies were included in the meta-analysis which indicated that adapted SOTP can significantly reduce cognitive distortions in this population, regardless of treatment length, IQ, language abilities or offence type. Patterson (2018) also highlighted the need for further research into this area using randomised controlled trials due to methodological difficulties. However, this meta-analysis had a limited scope and there was no analysis of whether such belief change affects victim empathy, sexual knowledge, and more importantly, whether a reduction in cognitive distortions was associated with a reduction in sexual offending behaviour. The current meta-analysis differs from Patterson (2018) in a greater number of studies being included in the synthesis, as well as examining a wider range of treatment outcomes.

Aims of the Meta-Analysis

This meta-analysis aims to evaluate the effectiveness of CBT group-based programmes for sexual offenders with intellectual disabilities. To do this, it will focus on studies which have examined the effects of the programmes on changes in cognitive distortions, victim empathy and sexual knowledge. It will also look for papers focusing on whether these changes have impacted upon further sexually abusive behaviours committed by individuals with intellectual disabilities following treatment. It should be remembered when reading this paper, that due to the literature available, this meta-analysis is based upon within-group studies only.

Method

Identifying Primary Studies

Search of electronic databases. A systematic search of the literature was carried out in February 2019, using PsychINFO, EMBASE, MEDLINE and CINAHL databases. These electronic databases were chosen due to their coverage of psychological research and intervention. The aim of this search was to obtain a comprehensive overview into the efficacy of cognitive-behavioural therapy (CBT) group-based treatment interventions, for sex offenders with intellectual disabilities. This search also aimed to build upon and add to a quantitative synthesis of three existing literature reviews which investigated the effectiveness of psychological interventions for sex offenders with intellectual disabilities (Cohen & Harvey, 2016; Jones & Chaplin, 2017; Marotta, 2017). The search terms of sex offending, intellectual disability and treatment, were used to identify the three construct areas. Truncation and wildcards were used to consider variations in spelling. Alternative terms for each construct area were also considered, for example, "learning disability" as an alternative to "intellectual disability". This maximised the opportunity to obtain relevant papers. The Boolean operator "AND" was used to combine the three concepts of sex offending, intellectual disability and treatment, (see Table 1).

Table 1: Search terms utilised in systematic search of electronic databases

Key Constructs					Limits
Sex Offending		Intellectual Disability		Treatment	
Sex* offen* OR Sex* assault OR Sex* abus* OR Rap* OR Sex* Inappropriate Behav* OR Paraphil* OR P?edophil* OR Child abus*	"AND"	Intellectual disab* OR Learning disab* OR Developmental disab* OR Mental retard* OR Mental impairment OR Mental* handicap*	"AND"	Treatment OR Therap* OR Intervention OR Reoff* OR Recidiv*	Peer Reviewed Journals

Abbreviations: *=Boolean search modifier allowing search for truncated terms, ? = Boolean search modifier allowing search for wildcard terms, OR = Boolean search operator allowing search for multiple terms relating to a single cluster, "AND" = Boolean operator used to combine the three search constructs.

Inclusion criteria. Full inclusion/exclusion criteria are described in Table 2. The criteria were kept relatively broad in order to obtain a full overview of the current literature focusing on CBT group-based treatment for sex offenders with intellectual disabilities. This is largely due to previous systematic reviews highlighting that there are a lack of studies researching this area, particularly controlled studies (Cohen & Harvey, 2016; Jones & Chaplin, 2017; Marotta, 2017) The main criteria included any study focusing on a CBT group intervention programme for sexual offenders with intellectual disabilities. The only restrictions placed on study design were to ensure that there were sufficient data within the study to calculate an effect size. Studies focusing on male participants only were considered to ensure a homogenous sample. No restrictions were placed upon setting, timeframe or follow up.

Table 2: Inclusion criteria for studies included in meta-analysis

Inclusion criteria	Justification
Participant focus: Studies that target interventions aimed at sexual offenders with intellectual disabilities. This is to include: Participants with an IQ of <80 and accessing intellectual disability services Participant's with convictions for sexual offending or a history of sexually inappropriate behaviour	This is to ensure that the intervention studies do not include individuals who are not diagnosed as having an intellectual disability, as this is the sample concerned in the meta-analysis theme. This is also to ensure participants with intellectual disabilities who do not have a history of sexual offending are not included in this meta-analysis.
Study focus: Studies that involve CBT group-based programmes for sexual offenders with intellectual disabilities. Single case studies will not be included.	This is to address a gap in the literature of assessing the effectiveness of group CBT treatment for sex offenders with intellectual disabilities. Single case studies would not provide enough data to run the meta-analysis.
Outcome data: The studies are required to report either Means and Standard Deviations, or F- Test statistics, Cohen's d effect size or an r effect size. The number of participants who did and did not demonstrate a recurrence of sexually harmful behaviour or who were known to reoffend following intervention is required to analyse this outcome.	To ensure that outcomes can be calculated into an effect size.
Type of article: The following article types were excluded: meta-analysis/theoretical papers/ reviews/commentaries/ clinical guidance/non-outcome focused studies i.e. longitudinal/association studies/case studies/validation of psychometric scales/qualitative papers	These articles do not provide the outcome data required for this meta-analysis.

The results of the systematic search are presented in Figure 1. The search yielded 903 articles; 650 once duplicates were removed. The titles and abstracts of those studies were then screened using the exclusion criteria. The three most common reasons for exclusion at this stage were the papers not presenting a treatment outcome study, (n = 214, i.e. assessing the validation of a psychometric tool or focused on theories of sexual offending and processes), having a focus on prevention of sexual abuse/victim outcomes, (n = 68) and not being related to or specific to sexual offending, (n = 61). The remaining 51 articles were then reviewed in more detail against the exclusion criteria. There were 17 articles which met the full inclusion/exclusion criteria. One additional article was sourced from reviewing reference lists; therefore 18 articles were considered for the purpose of the meta-analysis. Two articles each reported outcomes from two separate samples (Lindsay & Smith, 1998: Lindsay et al., 2011), thus, 20 sets of data from 18 articles are included in this analysis.

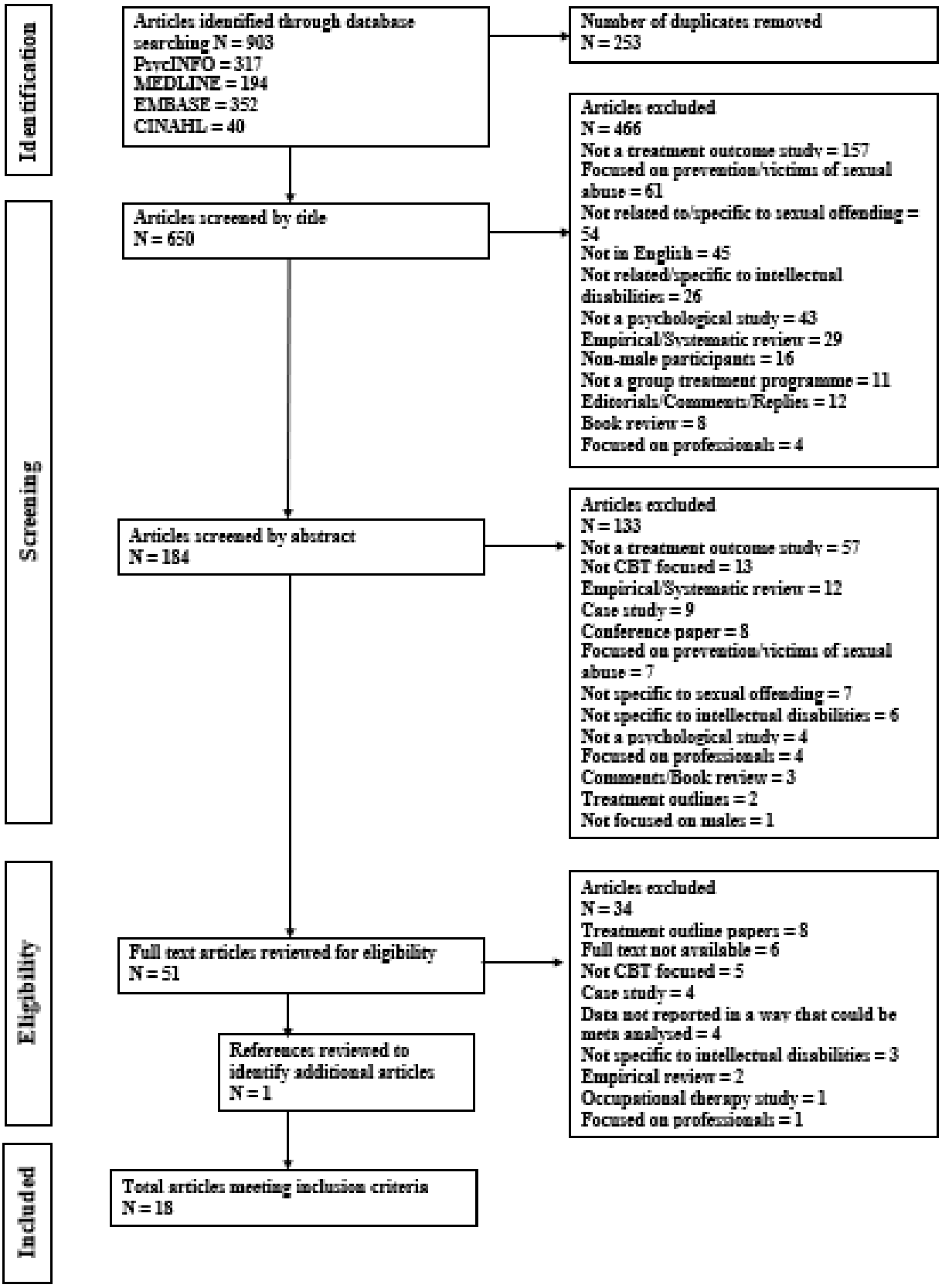

Figure 1: PRISMA flow chart summarising the systematic process of identifying articles eligible for the current meta-analysis

Study Characteristics

Eighteen articles were included in this meta-analysis, providing twenty sets of data (Lindsay and Smith, 1998, Lindsay et al. 2011 split into two separate interventions). Studies reported on different outcomes for 443 participants. Table 3 provides a summary of the main study characteristics and outcomes. Participants were selected from a variety of settings including prison, probation services, secure hospitals and forensic community services. Participants' level of intellectual functioning was usually assessed using a version of the Wechsler Adult Intelligence Scale (WAIS), with the majority using WAIS-III. All participants were considered to have moderate to borderline intellectual functioning. Participants had sexually offended against women, children and males, through a variety of offences.

Changes in cognitive distortions were measured by the Questionnaire on Attitudes Consistent Sexual Offenders (QACSO, Lindsay et al. 1998a & b) in the majority of studies investigating this outcome (n = 10). Craig et al. (2006) used the Multiphasic Sex Interview (Nichols & Molinder, 1984)). From this assessment the Justifications scale appeared to fit best with items on the QACSO and scores from this scale were extracted to measure cognitive distortions. Williams et al. (2007) utilised the The Sex Offender Opinions Test (SOOT, Bray, 1997) to measure changes in cognitive distortions. Five studies measuring victim empathy used the Victim Empathy Scale – Adapted (VES-A, Beckett & Fisher, 1994). Keeling et al. (2006) utilised the Victim Empathy Distortion Scale (QVES: Beckett & Fisher, 1994) and Williams et al. (2007) used The Adapted Victim Empathy Consequence Task (Offending Behaviour Programmes Unit, HM Prison Service, 1996). Three studies (Craig et al., 2012; Murphy et al., 2007; Murphy et al., 2010) using sexual knowledge as an outcome utilised the Sexual Attitudes and Knowledge Assessment (SAK, Heighway & Webster, 2007). Rose et al. (2006) designed their own scale to measure sexual knowledge called Sexual Behaviour and the Law scale (SBL)

and Rose et al. (2012) utilised the Socio-Sexual Knowledge and Attitudes Assessment-Revised (SSKAT-R, Griffiths & Lunksy, 2003). Sakdalan and Collier (2012) used the Assessment of Sexual Knowledge (ASK, Butler, Leighton & Galea, 2003) as their measure.

Two papers appeared to use samples already used in other studies. Keeling et al. (2007) appeared to use some of the same participants from Keeling et al. (2006) and Heaton and Murphy (2013) was a follow-up study to Murphy et al. (2010). To avoid double counting, both papers were only used for their data on further sexually abusive behaviours following treatment and outcome measures on cognitive distortions, victim empathy and sexual knowledge were not counted. As such, Murphy et al. (2010) was not included in the meta-analysis of further sexually abusive behaviours.

Pre and post outcomes on cognitive distortions, victim empathy and sexual knowledge were used in the meta-analysis only as follow-up periods for these measures were inconsistent, ranging from 6 to 48 months. Follow-up data was used in the meta-analysis for further sexually abusive behaviours, with participants being reviewed between end of intervention to 6 years following offence. Inconsistent follow up data and short follow-up periods make it difficult to draw accurate conclusions regarding group-based CBT interventions reducing risk of further sexually abusive behaviour.

Table 3: Characteristics of Studies Included in Meta-Analysis

Author	Participant and Study Characteristics	Intervention	Outcome Measures	Quality Rating
Craig, Stringer & Moss (2006)	Quasi-experimental: Within group study from a single treatment group; Pre and post intervention study 6 participants recruited from NHS learning disability services Mean age = 24.8 years (SD = 7.46 years; range 18 – 39 years).	Group-based CBT following Craig and Hutchinson (2005). Weekly 2-hour sessions running for 7 months	**Multiphasic Sex Interview Justification Scale**: Pre-treatment: n = 6; M = 3.8; SD = 3.89 Post-treatment: n = 6; M = 7.8; SD = 6.22 **Multiphasic Sex Interview Sexual Knowledge and Beliefs Scale**: Pre-treatment: n = 6; M = 8.0; SD = 5.56 Post-treatment: n = 6; M = 13.4; SD = 1.51 **No reconvictions or charges of sexual offences during 12-month follow up**	57%
Craig Stringer & Sanders (2012)	Quasi-experimental: Within group design for a single treatment group; Pre and post intervention study; Follow up at 3- and 6-months post-treatment 14 participants recruited from UK community and probation services: 12 completed treatment. Mean age = 35 years (range 19-61). Mean Full Scale IQ = 73 (range 67-79)	Group-based CBT using Sinclair et al.'s. treatment approach for sex offenders with intellectual disabilities. Weekly 2-hour sessions running for 14 months	**QACSO** Pre-Treatment: n = 12; M = 45.21; SD = 21.21 Post-Treatment: n = 12; M = 19.25; SD = 11.56 **VES-A** Pre-group: n = 12; M = 32.21; SD = 21.49 Post-group: n = 12; M = 21.83; SD = 17.08 **SAK** Pre-group: n = 12; M = 46.25; SD = 1.74 Post-group: n = 12; M = 45.45; SD = 2.63	50%

	38 per cent of the sample met the diagnostic criteria for ASD		**No reconvictions of sexual offences during 12-month follow-up**	
Heaton & Murphy (2013)	Follow-up study 34 participants were followed up from sex offender treatment groups they had previously completed. Mean age = 44 years (SD = 12, range 22-68 years). Mean IQ = 65 (SD = 7, range 52-83) 21% ASD	Follow-up of a treatment outcome study (SOTSEC-ID, 2010) in which participants completed group-based CBT, developed from the group CBT approach for the treatment of mainstream sexual offending, (Marshall et al. 1999).	This meta-analysis did not look at the follow-up results on psychometric measures described in this study as the meta-analysis is based upon pre and post intervention measures. This study was used for follow-up rates of sexually abusive behaviours. **Follow up**: n = 34; M = 44 months; SD = 28.7 (range 15 – 106 months) 11 of 34 men (32%) showed further sexually abusive behaviours. 2 received convictions.	64%
Keeling, Rose & Beech (2006)	Quasi-experimental: Within group study from a single treatment group; Pre and post intervention study 18 participants recruited from Australian prison services. 11 completed treatment. Mean age = 35.2 years (range 25-46) Mean IQ = 71.8 (SD 6.8)	Group-based CBT adapted from Feelgood and Cortoni (2001) and Kow and Mamoni (2002). Four times per week for 12 months.	**QACSO:** Pre-treatment: n = 11; M = 26.64; SD = 15.09 Post-treatment: n = 11; M = 8.27; SD = 11.7 **QVES:** Pre-treatment: n = 11; M = 129.73; SD = 9.48 Post-treatment: n = 11; M = 138; SD = 6.91	50%
Keeling, Rose &	Two treatment groups recruited from Australian correctional services.	Group based CBT. Mainstream offenders	Paper used for further sexually abusive incidents data only to avoid double counting as	64%

Beech (2007)	Group 1 special needs sexual offenders: n = 11; Mean age = 37.82 years (SD = 6.85 years, range 25-46 years) Mean IQ = 71.0 (SD = 6.0, range 63-83) Group 2 mainstream sexual offenders: group not used for meta-analysis	completed the mainstream group. Programme for special needs offenders adapted from original mainstream programme, described by Keeling and Rose (2006).	some of the participants were also included in the Kelling and Rose (2006) study. **No reconvictions following release from prison at 16-month average follow up**	
Lindsay, Marshall, Neilson, Quinn & Smith (1998)	Quasi-experimental: Within-group study from a single treatment group; Pre and post intervention design 4 participants recruited Mean age = 31.25 years (SD = 6.24 years, range 25-40 years). Mean IQ = 67 (SD = 3.16, range 64-71)	Group-based CBT devised by authors Weekly 2.5-hour sessions for duration of probation period (range 12-24 months)	**Early version of QACSO:** Pre-treatment: n = 4; 25.5; SD = 0.58 Post-treatment: n = 4; M = 4.5; SD = 4.39 **No recorded incidents of reoffending over 5-year follow-up**	50%
Lindsay, Michie, Steptoe, Moore & Haut (2011)	Quasi-experimental: Pre and post intervention study Recruited from the community Two treatment groups: Group 1 offenders against women: n = 15; Mean age = 32.7 years; Mean IQ = 65.4	Group-based CBT, using Lindsay's (2009) sex offender treatment manual. Weekly 2-hour sessions for 36 months.	**QACSO:** Group 1 Pre-treatment: n = 15; M = 33.3; SD = 6.3 Post-treatment: n = 15; M = 12.5; SD = 4.2 Group 2 Pre-treatment: n = 15; M = 34.8; SD = 8.2 Post-treatment: n = 15; M = 14.1; SD = 6.3 **Reoffending 6 years from referral follow up:**	64%

	Group 2 offenders against children = 15; Mean age = 36.4 years; Mean IQ = 63.2 Treated as two separate studies for meta-analysis		Group 1 = 3 participants Group 2 = 4 participants	
Lindsay, Neilson, Morrison & Smith (1998)	Quasi-experimental: Within-group study from single treatment group: Pre and post intervention design 6 participants recruited from probation services Mean age = 31.83 years; (SD = 10.07 years; range 24-52 years) Mean IQ = 66.5 (SD = 3.02; range 62-71)	Group-based CBT designed by authors Participants seen in two groups (one for offences against boys and one for offences against girls). Weekly 2.5-hour sessions for duration of probation period (12-36 months)	**Early version of QACSO:** Pre-treatment: n = 6; M = 31.67; SD = 3.39 Post-treatment: n = 6; M = 4.67; SD = 5.09 **None reported to have reoffended four years after first offence.**	43%
Lindsay, Olley, Baillie & Smith (1999)	Quasi-experimental: Within group study from single treatment group: Pre and post intervention design 4 participants recruited from probation and community services Mean age = 16.25 (SD = 1.5, range 15-18) Mean IQ = 70.5 (SD = 4.20, range 66-75).	Group-based CBT devised by the authors. Weekly 2.5-hour sessions for one year Some individual sessions conducted to deal with specific issues	Unable to use psychometric data as no statistical data reported. Used for reported incidents of further sexually abusive behaviour. **No reported reoffending at follow-up: M = 3.5 years**	57%

Lindsay & Smith (1998)	Quasi-experimental Two groups. Pre and post intervention design. Group 1 sexual offenders given a 1-year probationary sentence: n = 7; Mean age = 35.7 years, Mean IQ = 67.7 Group 2 sexual offenders given a 2-year probationary sentence: n = 7; Mean age = 32.8 years, Mean IQ = 69.2 Treated as two separate studies for meta-analysis	Group based CBT as described by Lindsay et al. 1997a, 1997b Weekly 2.5-hour sessions for either one year or two years, depending on probation period.	Paper used only for data on further sexually abusive behaviour due to being unable to extract all data required. **Follow up: 2 years after probation had finished** Group 1: 2 participants had sexually reoffended Group 2: None were reported to have sexually reoffended	57%
Murphy, Powell, Guzman & Hays (2007)	Quasi-experimental: Within-group study from a single treatment group: Pre and post intervention design Results for 8 participants described recruited from community learning disability services in two South London boroughs. Mean age = 38.8 years (SD = 14.6) Mean IQ = 67 (SD = 9, range 52-83) Mean VBAS = 93 months (SD = 47).	Pilot study for group-based CBT for men with intellectual disabilities and sexually abusive behaviour. Treatment designed by authors Weekly 2-hour sessions running for 1 year.	**QACSO:** Pre-treatment: n = 8; M = 48.2 Post-treatment: n = 8; M = 27.6 **VES-A:** Pre-treatment: n = 8; M = 33.2 Post-treatment: n = 8; M = 24.0 **SAK:** Pre-treatment: n = 8; M = 37.8 Post-treatment: n = 8; M = 44.0	36%

			3 participants had engaged in further sexually abusive behaviour at 6-month follow up.	
Murphy, Sinclair, Hays, Heaton, Powell, et al. (2010)	Quasi-experimental: Within-group study; Data provided from 13 groups running the programme; Pre and post intervention design. 46 mean completed treatment, recruited from NHS community learning disability teams, secure services and one probation service Mean age = 35.3 years (SD = 12.0) Mean IQ = 68 (SD = 7.6, range 52-83) 9 participants had a diagnosis of ASD	Group-based CBT, following Sinclair et al.'s (2002) manual. Data from 13 groups provided Weekly 2-hour sessions running for one year	**QACSO:** Pre-treatment: n = 40; M = 51.4; SD = 20.7 Post-treatment: n = 38; M = 28.0; SD = 20.6 **VES- A:** Pre-treatment: n = 38; M = 34.5; SD = 18.4 Post-treatment: n = 35; M = 27.1; SD = 17.9 **SAK:** Pre-treatment: n = 45; M = 42.0; SD = 6.8 Post-treatment: n = 42; M = 45.1; SD = 7.1 **Not included in further sexually abusive behaviour data to avoid double counting with Heaton and Murphy (2013).**	71%
Newton, Bishop, Ettey & McBrien (2011)	Quasi-experimental: Within group study from two treatment groups; Pre and post intervention design. 13 participants recruited from the community: 7 completed treatment. Mean age for 13 men = 33.05 (range 19-47)	Group-based CBT using the Sexual Harm Exhibited by Adults with a Learning Disability (SHEALD) programme Group 1: weekly 4-hour sessions, 160 hours of group work	**None of the participants had committed a further sexual offence at 12-24 month follow up.** No statistics provided to use results on psychometrics in the meta-analysis	50%

	Mean IQ for 13 men = 62.9 (range 55-70)	Group 2: 2 x 2-hour session weekly. Every fourth session was individual. 120 hours group work, 20 hours individual treatment		
O'Connor (1996)	Quasi-experimental: Within-group study from single treatment group; Pre and post intervention design. 13 participants recruited from community residential units, a boarding house and a secure unit. Mean age = 28 years (range 17 – 43 years).	Group-based problem-solving using CBT Weekly 1-hour sessions initially. Once intervention goals were achieved, these decreased in frequency to fortnightly, monthly and then three-monthly intervals	**3 of the participants were either charged or reported sexual reoffending during the intervention**	57%
Rose, Jenkins, O'Connor, Jones & Felce (2002)	Quasi-experimental Within-group study from single treatment group; Pre and post intervention design. 5 participants recruited from the community Mean age = 32 (SD = 9.80, range 17-43) Mean IQ = 63.2 (SD = 7.33, range 54-71)	Group-based CBT following Lindsay et al (1998a & b) and Lindsay and Smith (1998) outline. Weekly 2-hour sessions running for 16 weeks.	**QACSO:** Pre-treatment: n = 4; M = 73.0; SD = 17.3 Post-treatment: n = 4: M = 55.75; SD = 15.1 **VES-A:** Pre-treatment: n = 4: M = 35.35; SD = 2.01 Post-treatment: n = 5: M = 28.38; SD = 18.81 **SBL:** Pre-treatment: n = 5; M = 6.6; SD = 1.67 Post-treatment: n = 5; M = 7.2; SD = 0.84	50%

			No further incidents of sexual abuse recorded at 1-year follow-up	
Rose, Rose, Hawkins & Anderson (2012)	Quasi-experimental. Within-group study from single treatment group; Pre and post intervention design 12 participants recruited from community learning disability services across four neighbouring teams Mean age = 39.5 (range 20-65 years) Mean IQ = 58 (range 49-70)	Group-based CBT adapted from Lindsay (2009). Weekly 2-hour sessions running for 40 weeks	**QACSO:** Pre-treatment: n = 12; M = 37.33; SD = 10.77 Post-treatment: n = 12; M = 23.45; SD = 7.98 **SSKAAT-R:** Pre-treatment: n = 9; M = 135.44; SD = 25.70 Post-treatment: n = 9; M = 159.33; SD = 24.40	50%
Sakdalan & Collier (2012)	Quasi-experimental. Within group design from single treatment group; Pre and post intervention design. 3 participants recruited one secure hospital and one secure community service in Auckland, New Zealand. All described as mid-30's NO IQ provided	Group-based CBT called SAFE-ID, based upon SOTSEC-ID (2010). Also incorporated an adapted Dialectical Behaviour Therapy (DBT) group coping skills programme Weekly 2-hour sessions running for 7 months. 1 hour weekly individual psychotherapy	**QACSO:** Pre-treatment: n = 3; M = 37; SD = 13.45 Post-treatment: n = 3; M = 36.67: SD = 21.39 **VES- A:** Pre-treatment: n = 3; M – 38.67; SD = 10.96 Post-treatment: n = 3; M = 9.33; SD = 0.94 **ASK:** Pre-treatment: n = 3; M = 172.33; SD = 24.11 Post-treatment: n = 3; M = 203; SD = 18.15 **All three participants displayed further sexually abusive behaviours, although to a lesser extent.**	43%

Teale & Holt (2018)	Quasi-experimental. Within-group study from single treatment group; Pre and post intervention design 6 participants recruited from the community Age range 22-64 years Mild intellectual disability. No IQ provided 2 participants had a diagnosis of ASD	Group-based CBT called Equipping youth to help one another (EQUIP) 1 session per week running for 10 months	Cognitive distortion data could not be extracted for the meta-analysis. **None of the participants had sexually reoffended at the end of the programme. No follow-up**	57%
Williams, Wakeling & Webster (2007)	Quasi-experimental. Within group study; Pre and post intervention design 211 participants recruited who had completed an adapted sex offender treatment programme within the HM Prison Service between 1997 and 2003. Recruited from 8 prisons across England and Wales Mean age = 40.3 years (SD = 12.1) Mean IQ = 71.9 (SD = 5.9; range 56-80)	Group-based CBT using the Adapted Sex Offender Treatment Programme Runs over approximately 89 treatment sessions averaging a total of 200 hours of treatment	**SOOT:** Pre-treatment: n = 156; M = 42.27 Post-treatment: n = 156; M = 35.59 **Adapted Victim Empathy Consequences Task:** Pre-treatment: n = 146; M = 6.51 Post-treatment: n = 146; M = 9.66	71%

Quality Ratings and Data Extraction

All data were extracted by the author. The full text articles found to be relevant to the analysis were obtained and then the author rated their quality and extracted data relating to methods, participants, interventions and outcomes.

The current study looks at research reporting pre and post intervention outcomes and/or rates of further sexually abusive behaviour. In an intervention study the author will extract the treatment outcome reported as a mean or mean difference, a standard deviation and an n size for pre and post treatment groups if available. If standard deviations are not reported for pre and post treatment groups individually then the pooled standard deviation may be substituted. If means, standard deviation and n-sizes are not reported but the sample sizes are, then Student t or F statistics will be directly transformed into estimates of Cohen's d. Finally, effect sizes as calculated within the studies will be considered if neither summary statistics nor t or F statistics are reported.

This meta-analysis will also investigate the reported number of participants who reoffended or displayed sexually abusive behaviour following treatment. For this outcome it is expected that the data will be reported as event rates. It is expected that studies would report number of occurrences of participants reoffending in the post treatment group or number of participants who displayed further sexually abusive behaviour.

Risk of Bias Assessment

A series of quality criteria were created to assess for any risk of bias within the literature identified from the search. Higgins et al. (2011) described substantive difficulties in using "off the shelf" research quality assessments. Firstly, quality scales tend to combine assessments of aspects of the quality of reporting with aspects of trial conduct. Instead, Higgins suggests that meta-analysts should separate assessment of internal validity (the extent to which a study is free from bias) from that of external validity (generalisability or applicability) and precision (the extent to which study results are free from random error). Therefore, meta-analysts should assess the risk of bias in trial results, not the quality of reporting or methodological problems that are not directly related to risk of bias. Finally, Higgins notes that meta-analysts should undertake outcome specific evaluations of risk of bias. It is possible, and indeed likely, that a single trial may report multiple outcomes, each of which may have different risks of bias depending upon the methodological and measurement of characteristics of the individual outcomes.

Mindful of the Higgins et al.'s. (2011) critic of the use of "off the shelf" research quality assessments, we have chosen to operationalise seven areas of risk of bias with regard to the specific outcomes here reported. These, and their outcome specific ratings are described in Table 4.

Table 4: Quality ratings for risk of bias assessment

Domain	Details	Risk of Bias
Selection Bias	Were efforts made to minimise selection bias in the intervention studies such as consecutive sampling? Was convenience sampling used? If so, studies should potentially be penalised.	High Risk-Within-subject design. Retrospective data collection. Convenience sampling with additional bias. Unclear Risk-Convenience sampling without additional bias. Low Risk-The study participants were consecutively recruited, and the data were collected prospectively.
Performance Bias	Are the outcome measures used valid and reliable for this population? Have they used a CBT specific outcome? Have they considered and accounted for social desirability which is potentially high within this population?	High Risk- Any one of the following conditions: data were obtained through self-report methods and social desirability was not taken into account; a clear case of interviewer bias; a clear case of recall bias; participants were motivated to complete due to upcoming court cases, parole hearings or mental health tribunals. Unclear Risk- It is unclear if social desirability was taken into account. It is unclear if participants were influenced to complete the treatment due to upcoming court cases, parole hearings or mental health tribunals. Low Risk-Data obtained through self-report measures, but social desirability taken into account; motivations to complete were not motivated by upcoming court case, parole hearings or mental health tribunals.
Treatment Fidelity	Was the treatment sufficiently well described so that it could be replicated? Did the actual treatment correspond to intended treatment? Were procedures in place to assess the fidelity of the administered treatments/manipulations.	High Risk – No mention of treatment fidelity tests or processes used to ensure fidelity. Combined with another treatment, no protocol. Unclear Risk – Treatment fidelity undertaken but not described or evaluated. Unclear if following treatment protocol. Training of those delivering the intervention not reported. Low Risk – Treatment fidelity described and adequate adherence to model demonstrated. Valid treatment conducted by someone with suitable experience.

Domain	Details	Risk of Bias
	Is it reasonable to consider that the treatment (or exposure or experimental manipulation) would obtain the intended result?	
Detection Bias	Are the outcome assessors blind to participant allocation?	High Risk- No blinding of outcome assessment has taken place. Unclear Risk- Not reported on. Low Risk- Outcome assessment is blind.
Statistical Bias	Have appropriate statistical methods been used? Is there incomplete data due to attrition? Has completer analysis been performed only, or have the studies included an "intention to treat" analysis?	High Risk- Completer only analysis. Greater than 20% attrition). Unclear Risk – Completer only analysis. Less than 20% attrition. Low Risk – Appropriate statistical methods used. Less than 20% attrition. Intention to treat analysis performed.
Reporting Bias	Is there evidence of selective outcome reporting? i.e. only significant results reported. Are there measures that have not been reported in the results that have been mentioned in the method section?	High Risk – Not reported full outcome measures that are stated in the method section/reported only a subsample of results/only significant results. Unclear Risk – Not all descriptive and/or summary statistics are presented. Low Risk – Reported all results of measures as outlined in the method.
Generalisation	Can the research findings be applied to settings other than that in which they were originally tested? Are there any differences between the study participants and those persons to whom the review is applicable?	High Risk- Small sample with or without idiosyncratic features (<20 per group). Unclear Risk- Sufficient sample for generalisation but with some idiosyncratic features (>20 per group). Low Risk- Sufficient sample for generalisation and representative of target population (>20 per group).

Study.name	Selection Bias	Performance Bias	Treatment Fidelity	Detection Bias	Statistical Bias	Reporting Bias	Generalisability	Quality.Index
Craig, Stringer & Moss, 200	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Low risk	Low risk	High risk	57%
Craig, Stringer & Sanders,	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Low risk	High risk	50%
Heaton & Murphy, 2013	High risk	Unclear risk	Unclear risk	Unclear risk	Low risk	Low risk	Low risk	64%
Keeling Rose & Beech, 2006	Unclear risk	Low risk	Unclear risk	Unclear risk	High risk	Low risk	High risk	50%
Keeling, Rose & Beech, 2007	Unclear risk	Low risk	Unclear risk	Unclear risk	Low risk	Low risk	High risk	64%
Lindsay, Marshall, Neilson, Quinn & Smith, 1998	Unclear risk	Unclear risk	Unclear risk	Low risk	Unclear risk	Unclear risk	High risk	50%
Lindsay, Michie, Steptoe, Moore & Haut, 2011	Low risk	Unclear risk	Unclear risk	Unclear risk	Low risk	Low risk	High risk	64%
Lindsay, Neilson, Morrison & Smith, 1998	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Unclear risk	High risk	43%
Lindsay, Olley, Baillie & Smith, 1999	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Low risk	Low risk	High risk	57%
Lindsay & Smith, 1998	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Low risk	Low risk	High risk	57%
Murphy, Powell, Guzman & Hays, 2007	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Unclear risk	High risk	High risk	36%
Murphy, Sinclair, Hays, Heaton, Powell, et al, 2010	Low risk	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Low risk	Low risk	71%
Newton, Bishop, Ettey, McBrien, 2011	Low risk	Unclear risk	Unclear risk	Unclear risk	High risk	Low risk	High risk	50%
O'Connor, 1996	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Low risk	Low risk	High risk	57%
Rose, Jenkins, O'Conner, Jones & Felce, 2002	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Low risk	High risk	50%
Rose, Rose, Hawkins & Anderson, 2012	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Low risk	High risk	50%
Sakdalan & Collier, 2012	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Unclear risk	High risk	43%
Tearle & Holt, 2018	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Low risk	Low risk	High risk	57%
Williams, Wakeling & Webster, 2007	Unclear risk	Unclear risk	Unclear risk	Unclear risk	Low risk	Low risk	Low risk	71%

Figure 2: Summary of applied quality criteria. Red indicates high risk of bias, amber marks an unclear risk of bias and green is a low risk of bias.

Selection bias. Overall, selection bias was unclear within the studies. Ten studies were rated as unclear risk of bias with four rated as low risk of bias. The low risk studies either used consecutive sampling and made this clear within their methodology or outline a clear recruitment process (Lindsay et al., 2011; Murphy et al., 2010; Newton, Bishop, Ettey & McBrien, 2011). The unclear studies sampling methods were often vague but, on the whole, they appeared to use convenience sampling.

Performance bias. Performance bias was mixed within the studies. The majority of studies used self-report measures without taking social desirability into account. Given the client group, it is likely many participants were completing treatment as part of their sentence or it was court ordered treatment and therefore, they were rated as having an unclear risk of bias. Two studies were classed as low risk of bias as although self-report measures were used, social desirability measures were put into place (Keeling, Rose & Beech, 2006; Keeling et al., 2007). One study also utilised a social desirability scale which had been built into one of their baseline assessments (Craig, Stringer & Moss, 2006), however one of their participants had previously completed an adapted sex offender treatment programme and state "his benefits from attending this group were more difficult to gauge." Therefore, this study was classed as unclear.

Treatment fidelity. This area of bias was overwhelmingly unclear. None of the studies provided a clear description of treatment fidelity processes they undertook or models they adhered to. However, the majority of studies had other methods in place to ensure validity, such as regular supervision and adequate training of facilitators. All studies outlined the treatment protocol they were following thoroughly or referred to other papers they had written with the protocols described (for example Lindsay, et al, 2011).

Detection bias. The majority of studies did not report on whether those administering outcome assessments were blinded or not. Only one study mentioned that blinding of post and follow up data, but baseline assessments were completed by the intervention facilitator (Lindsay, Marshall, Neilson, Quinn & Smith, 1998). Therefore, the potential non-blinded outcome assessment may have led to a biased estimate of treatment effect.

Statistical bias. Nine papers were rated as low risk for this area of bias, with eight as unclear and two as high risk. The unclear studies had dropout rates of 20% or less and completer analysis only was available with no intention to treat analysis (Craig, Stringer, Sanders, 2012; Murphy et al., 2010; Rose, Jenkins, O'Connor, Jones & Felce, 2002; Rose, Rose, Hawkins & Anderson, 2012). The two high-risk studies had a greater than 20% dropout rate with completer analysis only (Keeling et al., 2006; Newton et al., 2011).

Reporting bias. Overall, the full reporting of the outcomes within the studies was considered to be good, with thirteen being classed as low risk of reporting bias. Three papers were found to be of unclear risk due to presenting data in graph form, where the total raw scores were ambiguous and the author of the current study was required to estimate (Lindsay et al., 1998; Lindsay, Neilson, Morrison & Smith, 1998; Lindsay and Smith, 1998; Sakdalan & Collier, 2012). One study was rated as high risk as the effect sizes in all outcome measures needing calculating from z scores due to no standard deviations being reported (Murphy et al., 2007).

Generalisability. Small sample sizes contributed to generalisability being found to be the largest risk area amongst the studies with eighteen being rated as high risk due to having less than twenty participants in the sample. This makes it difficult to apply the results found

within each study to other male sexual offenders with intellectual disabilities and thus the results obtained in the current meta-analysis should be interpreted with caution.

Summary. Overall, there was a mixed level of bias across the studies included in the meta-analysis. The included studies are all within-group designs meaning there is no control group, no randomisation using appropriate methods to reduce bias and without methods to ensure allocation concealment. Sample sizes were small, without independent data management or masked assessors. Papers also did not include a pre-specified primary outcome with most reporting multiple outcomes. There was a notable high risk of bias across studies in the area of generalisability and adherence to treatment fidelity and detection bias was ambiguous across studies. Due to the low number of studies in this field, studies with medium to high risk of bias were included. Consequently, the results of this meta-analysis should be interpreted with caution. However, the studies included are felt to be a representative summary of the research literature as it stands currently, and it is hoped that future research will include higher quality research with larger sample sizes.

Data Analysis Strategy

Software. The software package used to complete the meta-analysis was R: A language and environment for statistical computing (R Core Team, 2019).

Transformation to effects for calculations and back transformations for presentation. The standardised mean differences were transformed into Hedges G prior to numerical synthesis. Hedges G corrects the tendency of Cohen's d to favour the intervention effect in studies with a small n size. When the meta-analysis has been calculated the effect size is back transformed into Cohen's d for clarity of presentation in table and figures.

The omnibus test. The omnibus test can be calculated using either the fixed effects model or the random effects model. The fixed effects model assumes that the true effect size for all studies is identical and variations in effect sizes are only due to sampling error. The fixed effects model could be used if it is believed that all studies included in the analysis have a uniformly excellent methodology and if the goal is to calculate the common effect size for the identified population and not to generalise to other populations. Effects in psychological studies are likely to differ due to several uncontrolled factors such as distribution of methodological weakness across the studies. The fixed effects model therefore would not be appropriate to apply in the current meta-analysis as it assumes a single effect and that all studies are of equal methodological bias.

Under the random effects model the goal is not to estimate one true effect but to estimate the distribution of possible effects. Each study provides unique information about the treatment effect and sample variability and differences in treatment protocols both contribute to the generalisability of the summary effect. This means that a study cannot be discounted by giving it a very small weight (as in the fixed effects model which assumes that an effect reported in a small study may not be precise). In contrast, the random effects model also penalises studies for sample size and marked deviation from the effects reported in the other studies.

The goal of the random effects model is to estimate the mean effect in a range of studies. It assumes that the effect varies across individuals and therefore measures the average and distribution of effect across individual variation.

The random effects model was calculated using the DerSimonian and Laird method, which is the most commonly used method for calculating the between studies variation (tau) in meta-analysis.

Handling Problematic Variance

Defining problematic variance. In meta-analysis, between study variation is perceived to have two causes. Firstly, variation can result from true differences in the individual participant response to the intervention. This source of variation is considered to be an inherent property of the effect being estimated. The second source of variation results from uncontrolled nuisance factors, errors in measurement or methodological variation within the studies. This type of between studies variation is referred to as heterogeneity, or problematic variance. A commonly used measure of heterogeneity is Higgins I^2, with greater values of I^2 indicating variation in effect that cannot be attributed to true variation in the distribution of effect in the population. As there is considerable variation in methodologies of the primary studies calculated in the meta-analytic synthesis, problematic heterogeneity was defined as a Higgins I^2 value greater than 75%.

Identifying influential studies. In order to determine if a specific study is exerting a disproportionately high influence on the overall effect observed, a "leave-one-out" analysis will be conducted. This analysis removes each study in turn and examines the impact each individual study has upon the overall synthesis. If omitting a study results in an effect that lies outside of the 95% confidence interval found in the complete meta-analysis, then this study is deemed to have a disproportionate influence and is removed from the omnibus test.

The quality effects model. The quality effects model (Doi & Thalib, 2008), is understood as the meta-analytic synthesis that would have been obtained if all of the primary studies had been of equal methodological quality to the best study in the analysis. It extends upon the random effects model by explicitly including ratings of methodological quality in addition to the sample size when estimating the precision of an effect and provides a measure of reduction in the omnibus effect which is attributable to methodological variation. The current

review calculates the quality effects model by using the total score from the risk of bias ratings reported earlier for each of the primary studies.

Results

Cognitive Distortions and Attitudes

The treatment effects reported in the primary studies for the outcome of cognitive distortions and attitudes are described in a forest plot in Figure 3. Twelve primary studies using thirteen sets of data (Lindsay et al, 2011) were considered which reported on changes in cognitive distortions and attitudes for a total of 296 participants.

Omnibus tests. A random effects model was calculated using the generic inverse variance method. A weighted average standardised mean difference of SMD = 1.5797 (z = 5.15, p = < 0.0001) was suggested by the random effects model, with a 95% confidence interval of between 0.9787 to 2.1808. This is considered to be a large treatment effect size[1].

There was an unacceptable level of unexplained variance or heterogeneity found within the studies analysed for this outcome, (tau² = 0.8238, Higgin's I² = 83%, Q = 71.83, p =

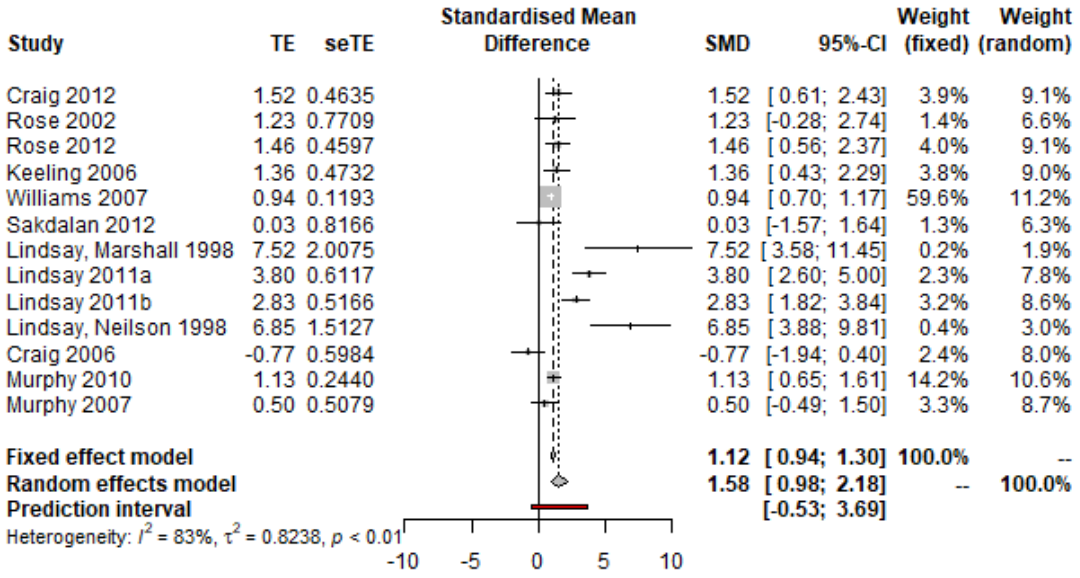

Figure 3: Forest plot of the omnibus test for the treatment effect of cognitive distortions

[1] A Cohen's d effect size of 0.8 or above is considered to be large, (Cohen, 1977).

<0.0001). This suggests that the estimated effect size obtained in the synthesis is biased by the presence of confounding or uncontrolled factors within the primary studies.

As can be seen from the Forest Plot depicted in Figure 3, there are two studies with a large effect size reported. These are Lindsay, Marshall, (1998) and Lindsay, Neilson (1998), with an SMD of 7.52 and 6.85 respectively. Further analysis of the studies is required to assess the impact influential studies may have upon the overall effect size and problematic heterogeneity.

Impact of influential studies.

Assessing influence. Baujat, Mahè, Pignon and Hill (2002), introduced a scatter plot to explore heterogeneity in meta-analysis. Using a leave-one-out procedure, the contribution of each study to the overall heterogeneity statistic is plotted on the x-axis. On the y-axis, the impact of each study on the effect size is plotted; the quantity describes the influence of each study on the overall effect. Figure 4 depicts the Baujat scatterplot for this meta-analysis. As can be seen, Williams, Wakeling & Webster, (2007) has a large influence on the overall result but has a low contribution to heterogeneity. Lindsay, (2011a), appears to have a large contribution to heterogeneity but a low influence on the overall result. The two papers with particularly large effect sizes, (Lindsay, Neilson, 1998; Lindsay, Marshall 1998), appear to contribute to heterogeneity, but not significantly and their influence on the overall result is low.

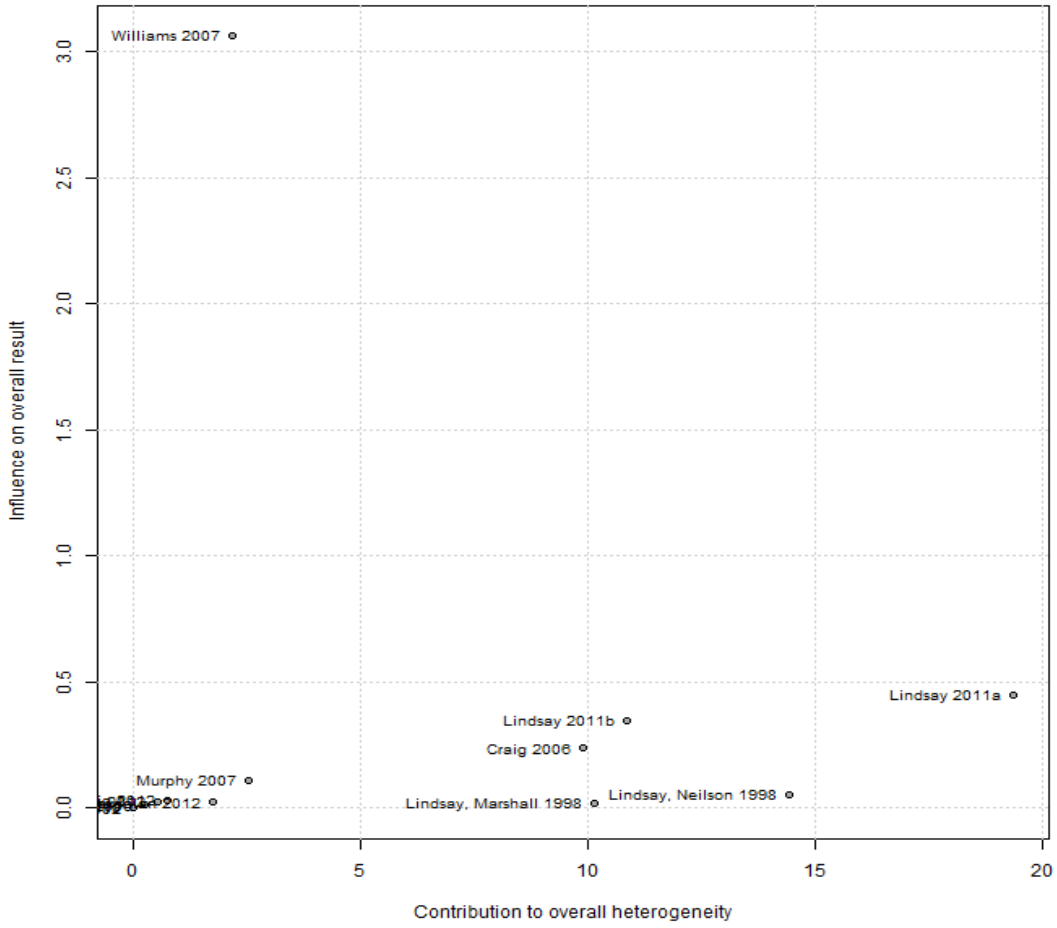

Figure 4: Baujat scatterplot exploring heterogeneity for cognitive distortions and attitudes synthesis

The impact of disproportionately influential studies was assessed using a "leave-one-out" analysis, in order to determine the influence each study had upon the overall synthesis. The random effects model was calculated with each of the thirteen studies removed in turn. The leave-one-out analysis results are depicted in the effect sizes shown in forest plot in Figure 5. The leave-one-out analysis shows that when Lindsay 2011a is omitted, the effect size would be reduced, with a SMD of 1.35, (95% CI 0.79 to 1.90). This is still considered to be a large treatment effect size. If the 95% confidence interval of an effect with a study omitted does not include the effect that is obtained from the complete data set then it should be considered that

a quantitively different conclusion would be found if that study was removed from the analysis and that this study it is disproportionately influencing the outcome. The confidence interval for Lindsay (2011) still includes the value of the overall synthesis from the complete data set, (SMD = 1.5797), which suggests the study does not have a disproportionate influence over the overall synthesis.

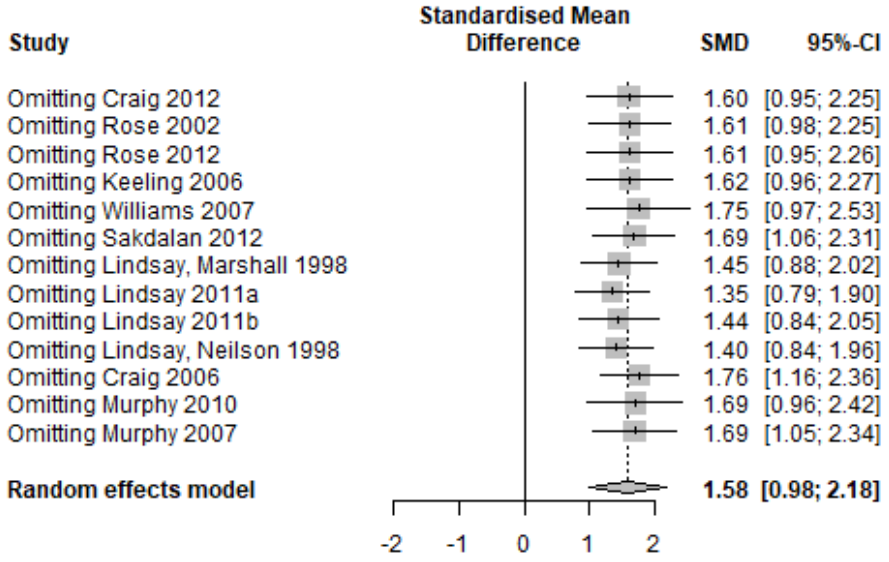

Figure 5: Forest plot of leave-one-out analysis for cognitive distortions

The meta-analysis for this treatment outcome was conducted again without the two studies reporting particularly large effect sizes (Lindsay, Marshall 1998; Lindsay, Neilson, 1998). When these two studies are omitted, a weighted average standardised mean difference of SMD = 1.2908 (z = 4.87, p = < 0.0001) and a 95% confidence interval of between 0.7714 to 1.8103 is found. A treatment effect of this magnitude is still considered to be large, although this is 18.29% smaller than the effect size found when including the two studies, (SMD = 1.5797).

Impact of methodological variation. To understand the impact that methodological variation may be having upon heterogeneity, a series of subgroup analysis were conducted on the frequency of low, unclear and high risk of bias for each of the seven types of methodological bias. The results of this subgroup analysis are depicted in Table 5.

Table 5: Impact of methodological bias upon heterogeneity

	Low Risk			**Unclear Risk**			**High Risk**				
	N	***SMD***	***CI***	***N***	***SMD***	***CI***	***N***	***SMD***	***CI***	***Q***	***P***
Selection Bias	3	2.5215	0.8454; 4.1977	10	1.2387	0.5610; 1.9164				1.93	0.1643
Performance Bias	2	0.9624	0.7357; 1.1890	11	1.8197	0.9502; 2.6892				3.50	0.0615
Treatment Fidelity				13	1.5797	0.9787; 2.1808				NA	NA
Detection Bias	1	7.5153	3.5807; 11.4498	12	1.4494	0.8781; 2.0207				8.94	0.0028
Statistical Bias	4	1.6791	0.1126; 3.2456	8	1.5979	0.7607; 2.4351	1	1.3606	0.4332; 2.2880	0.19	0.9111
Reporting Bias	9	1.4645	0.8847; 2.0443	3	4.6156	- 0.8001; 10.0313	1	0.5050	-0.4905; 1.5005	4.16	0.1249
Generalisability	2	0.9749	0.7648; 1.1849				11	1.8931	0.9441; 2.8420	3.43	0.0641

Key: N = number of studies, SMD = Standardised Mean Difference, CI = 95% confidence interval, = no studies with this risk level

Detection bias evidenced a statistically significant treatment effect suggesting that studies with a lower risk of detection bias tend to report a higher standardised mean difference than studies at a higher risk of detection bias. However, it should be noted that there is only one study which is rated as low risk of detection bias and therefore this result might be an artefact relating to the peculiarities of this study, (Lindsay et al., 1998).

Sexual Knowledge

The treatment effects reported in the primary studies for sexual knowledge are described in a forest plot in Figure 6. There were seven primary studies considered which reported on changes in sexual knowledge following treatment, reporting a total of 87 participants. The remaining participant key features are the same as reported for the outcome of cognitive distortions and attitudes.

Omnibus tests. The random effects model suggested a weighted average standardised mean difference of SMD = 0.5276 (z = 2.54, p = 0.0112), with a 95% confidence interval of between 0.1201 to 0.9352. This is considered to be a medium treatment effect size.

There was an acceptable level of heterogeneity found within the studies analysed for this outcome, (tau² = 0.0787, Higgin's I² = 27%, Q = 8.21, p = 0.2230). An I^2 value of 20% would be considered acceptable between study variation and that the variation between studies can be attributable to variation in the participants response to group-based treatment for the sexual knowledge of sexual offenders with intellectual disabilities.

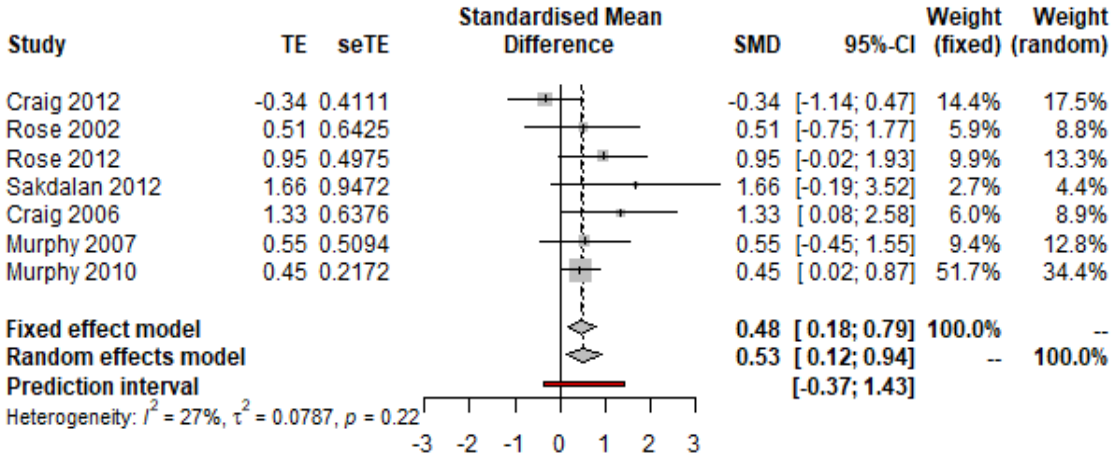

Figure 6: Forest plot of the omnibus test for the treatment effect of sexual knowledge

Influential studies. The random effects model was calculated with each of the seven studies removed in turn to identify any disproportionally influential studies for the sexual knowledge outcome and the resulting effect sizes s are depicted in the forest plot in Figure 7. The leave-one-out analysis shows that all studies confidence intervals include the value of the synthesis from the complete data set, (SMD = 0.5276), which suggests that none of the studies have a disproportionate influence over the main synthesis.

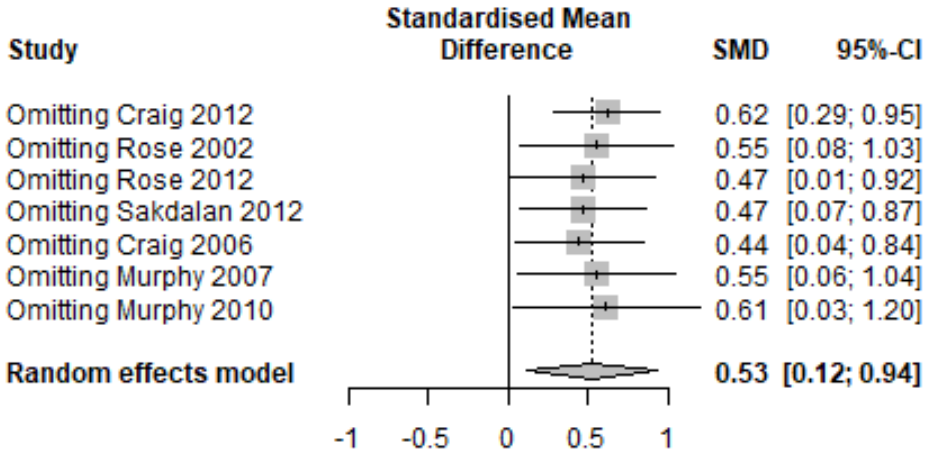

Figure 7: Forest plot of leave-one-out analysis for sexual knowledge outcome

Impact of methodological variation. The quality effects model was calculated using the total score from the risk of bias ratings reported in the method. The quality effects model controls for variation in the methodological quality of the primary studies by estimating the synthesis of the sexual knowledge outcome that would have been observed if all of the studies had the same methodological quality as the best study reported within this review. The quality effects model reported a synthesis of SMD = 0.7132 and a 95% confidence interval of 0.2503 – 1.7161, (z = 3.0200, p = 0.0025). This evidences a 35.17% increase in comparison to the random effects estimate, suggesting that better quality studies were reporting higher effect sizes.

Victim Empathy

The treatment effects reported in the primary studies for victim empathy are described in a forest plot in Figure 8. Seven of the primary studies were considered which reported on changes in victim empathy, reporting a total of 223 participants.

Omnibus tests. A weighted average standardised mean difference of SMD = 0.7773 (z = 4.08, p = < 0.0001) was suggested by the random effects model with a 95% confidence interval of between 0.4039 to 1.1507. This is considered to be a large treatment effect.

An acceptable level of unexplained variance or heterogeneity was found within the studies analysed for the outcome of victim empathy, (tau² = 0.0970, Higgin's I² = 47%, Q = 11.22, p = 0.0818), indicating the studies are reporting consistent effect sizes for the effectiveness of CBT group-based programmes on improvements in victim empathy for sexual offenders with intellectual disabilities.

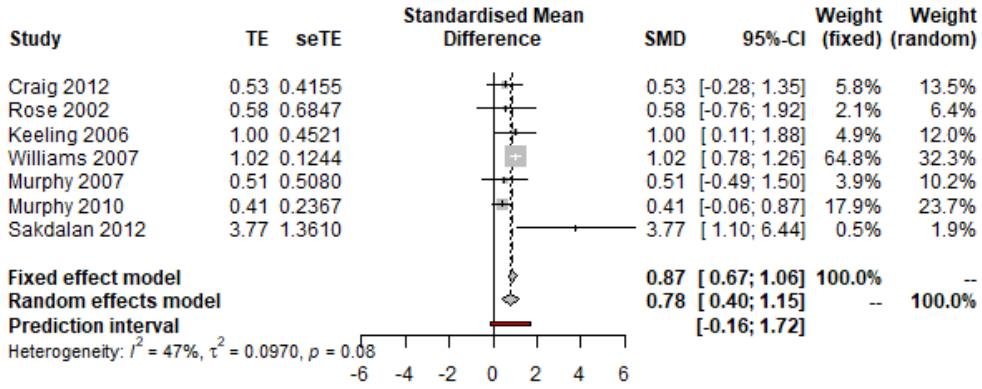

Figure 8: Forest plot of the omnibus test for the treatment effect of victim empathy

Impact of influential studies.

Assessing influence. The impact of disproportionately influential studies was assessed using a "leave-one-out" analysis, which is depicted in the forest plot shown in Figure 9. The leave-one-out analysis indicates that none of the studies had a disproportionate influence over the overall synthesis.

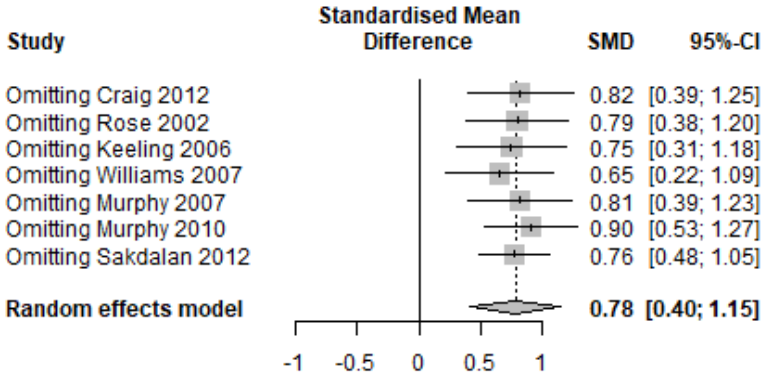

Figure 9: Forest plot of leave-one-out analysis for victim empathy

Quality effects model. The quality effects model reported a synthesis of SMD = 1.0431 and a 95% confidence interval of 0.5644 – 1.5218, (z = 4.2709, p = <0.0001). This evidences a 34.20% increase in comparison to the random effects estimate, suggesting that better quality studies were reporting higher effect sizes.

Further Sexually Abusive Behaviour

The treatment effects reported in the primary studies for rates of further sexually abusive behaviour are described in a forest plot in Figure 10. There were seventeen primary studies considered which assessed this treatment outcome, reporting a total of 179 participants. Further incidents of sexually abusive behaviour were included if there was reported reoffending, and any sexually related behaviour which would be considered illegal or sexually related behaviour where the other person did not consent or their ability to consent was compromised, Follow up periods were varied ranging between end of intervention to 6 years following first offence. This makes it difficult to draw accurate conclusions as follow-periods were relatively short and inconsistent.

Omnibus tests. A random effects model was calculated using the generic inverse variance method. A weighted average raw proportion, PR = 0.1150 (z = 4.77, p = < 0.0001) was suggested by the random effects model with a 95% confidence interval of between 0.0678 to 0.1622. This suggests that 11.5% of participants engaged in further sexually abusive behaviour following the intervention.

An acceptable level of heterogeneity was found for this outcome, (tau² = 0.0004, Higgin's I^2 = 4.5%, Q = 15.71, p = 0.4016. This suggests that the studies are reporting a consistent effect size for further reports of sexually abusive behaviour following a CBT group-based intervention for sexual offenders with intellectual disabilities.

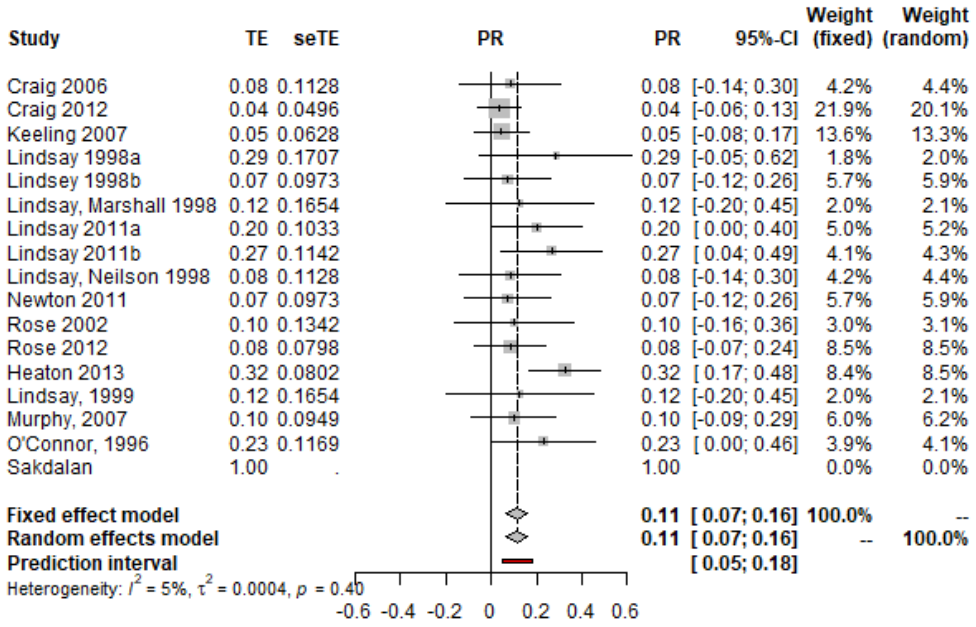

Figure 10: Forest plot of reported further sexually abusive behaviour following a CBT group-based intervention

Impact of influential studies.

Assessing influence. The impact of disproportionately influential studies was assessed using a "leave-one-out" analysis, which is depicted in forest plot of leave-one-out effect sizes shown in Figure 11. The leave-one-out analysis shows that one study (Heaton &Murphy, 2013), may have a disproportionate influence over the main synthesis as its confidence interval does not contain the value found in the main synthesis, (0.1150).

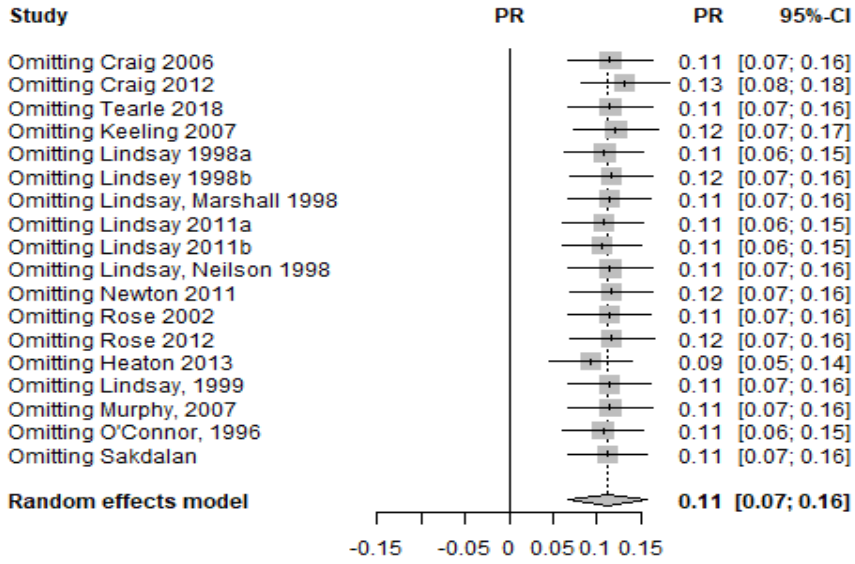

Figure 11: Forest plot of leave-one-out analysis for further sexually abusive behaviour

The meta-analysis for this treatment outcome was conducted again without the Heaton & Murphy, (2013) study. When this study is omitted, a weighted average raw proportion of 0.0934 (z = 3.85, p = < 0.0001) and a 95% confidence interval of between 0.0459 to 0.1409 is found. This is 18.78% smaller than the raw proportion found when including the study, (PR = 0.1150). This suggests that incidents of sexually abusive behaviour following treatment, were found in 9.34 per cent of participants compared to the original 11.50 per cent found.

Quality effects model. The quality effects model reported a synthesis of PR = 0.1488 and a 95% confidence interval of 0.0914 – 0.2061, (z = 5.0863, p = <0.0001). This evidences a 29.39% increase in comparison to the random effects estimate suggesting that better quality studies were reporting higher rates of further sexually abusive behaviour.

Discussion

Summary of Findings

This meta-analysis sought to understand the effects of CBT group-based sex offender treatment adapted for individuals with intellectual disabilities. The findings suggest that cognitive distortions are significantly reduced following this type of treatment and there are significant improvements in sexual knowledge and victim empathy. A large treatment effect was found for both cognitive distortions and victim empathy, with a moderate effect found for improvements in sexual knowledge. This meta-analysis also demonstrated that 11.5 per cent of individuals with intellectual disabilities who have completed these programmes will go on to display further sexually abusive behaviours. However, when one influential study was removed, (Heaton & Murphy 2013), this figure reduced to 9.34 per cent. Although the quality of studies included in the synthesis was mixed, none of the studies were found to have a large influence over the overall synthesis in the areas of cognitive distortions, victim empathy and sexual knowledge. However, as all studies included were within-group designs, the outcomes of this meta-analysis should be considered with caution due to the risk of bias.

Convergence with Other Reviews

Previous reviews examining the impact of psychological sex offender treatment for this client group analysed between 6 – 18 papers, making this the most comprehensive review to date. Systematic reviews have found significant treatment effects for improvements in cognitive distortions, sexual knowledge and victim empathy, (Cohen & Harvey 2016; Jones & Chaplin, 2016; Marotta, 2016). The current meta-analysis is consistent with these findings. The only other known meta-analysis investigating this topic (Patterson, 2018) also found significant

improvements in cognitive distortions for sex offenders with intellectual disabilities following treatment, consistent with the conclusion of the current study.

The previous studies also found inconsistencies in terms of sexual reoffending during reported follow up periods. This meta-analysis found a rate of 11.5% for further reported sexually abusive behaviour during follow up periods. This is higher than the 10 per cent sexual reoffending rate found in the Mews et al., (2017) paper assessing the impact of SOTP for mainstream sex offenders. Implications of this are considered below.

Implications for Sexual Offenders with Intellectual Disabilities

Despite the literature having a number of methodological flaws, the results from this meta-analysis could have significant clinical implications for sexual offenders with intellectual disabilities. It has demonstrated that 11.5 per cent of treated participants went on to display further sexually abusive behaviours. Whilst this figure is higher than the mainstream treated participants in the previous studies discussed, (Schmuker & Losel, 2013; Gannon et al., 2019), it is still lower than those who did not receive treatment in those two studies, (13.7% and 14.1% respectively). However, it is higher than the 8 per cent of non-treated mainstream sexual offenders who went on to reoffend in the Mews et al., (2017) study. Interestingly when Heaton & Murphy (2013) was omitted from the synthesis, this figure fell to 9.3 per cent, which is lower than previous statistics found. In this paper, Heaton & Murphy (2013), included all reported incidents of further sexually abusive behaviours which would be considered illegal if they came to the attention of the police, or if consent was not provided. Five other studies included this, (Murphy et al., 2007; Newton et al., 2011; O'Connor, 1996; Rose et al., 2002; Sakdalan & Collier, 2012), which may have inflated the rate found in this meta-analysis compared to other reviews. On the other hand, all other research used within this meta-analysis relied on the

criminal justice system for reoffending rates. But as previously stated, sexual offending in this client group, often goes unreported, meaning reoffending rates identified in the studies could be an underrepresentation of the actual figure. Either way, it highlights the importance of consistency in recording sexually abusive behaviour.

The meta-analysis has identified that CBT group-based sex offender treatment programmes for this client group, improve cognitive distortions, sexual knowledge and victim empathy. As previously discussed, cognitive distortions are thought to be central to the sexual offending process, not only in mainstream offenders, but also those with intellectual disabilities, (Beech et al., 2005; Courtney et al., 2006). Contrarily, there is uncertainty in the literature that focusing on sexual knowledge with this client group improves treatment effects and reduces reoffending. Part of the counterfeit deviance hypothesis suggests that inappropriate sexual behaviour is precipitated by a lack of sexual knowledge as the individual is unclear how to initiate and maintain appropriate relationships, (Lindsay and Taylor, 2008). However, some research refutes this, suggesting no differences in sexual knowledge between untreated sex offenders with intellectual disabilities to non-offenders with intellectual disabilities, (Talbot and Langdon, 2006), or that sex offenders with intellectual disabilities have more sexual knowledge than a control group, (Michie, Lindsay, Martin & Grieve, 2006). Lunsky, Frijters, Griffiths, Watson and Williston (2007) found that sexual offenders with intellectual disabilities who had committed repeated or forced offences, had higher levels of sexual knowledge than non-offenders and individuals who had committed inappropriate sexual behaviour such as public masturbation did not differ in sexual knowledge compared to their matched sample. They concluded that counterfeit deviance was more appropriate to explain offending in the latter group of individuals. Griffiths, Hinsburger, Hoath & Ionnou (2013), sought to clarify the theory of counterfeit deviance and highlight that it had not been suggested that having a lack of sexual

knowledge was a definitive path to sexual offending, more that its contribution was an area worth exploring within treatment. The results from the current research support this argument.

Implications for Researchers

This meta-analysis has provided additional support for previous systematic reviews suggesting further research is required with more robust methodology and study design, to investigate the impact of CBT based group sex offender treatment for individuals with intellectual disabilities fully. This includes the use of a controlled non-treated group through the "gold standard" randomised control trial (RCT). None of the studies included in the meta-analysis adopted an RCT and to the author's knowledge, none exist in the current literature within this field. There are many ethical dilemmas to consider in regard to conducting an RCT for treated compared to non-treated sexual offenders in this client group and these have been widely debated, (Brown, 2010). Some researchers are of the viewpoint that withholding sex offender treatment from randomly allocated sex offenders is unethical because of the impact upon potential victims of untreated offenders, (Marshall & Marshall, 2007). Others have stated that currently the impact of these sex offender treatment programmes, is not fully understood. This means potential victims could still be harmed if individuals are deemed safe following treatment, when actually this cannot be said for certain and an RCT is the only method that can be used to examine any treatment benefits fully (Quinsey et al, 1993). If RCT's in this area are completed, further systematic reviews and meta-analyses can be completed to examine the positive or negative effects of CBT based group sex offender treatment with this client group fully.

Implications for Service Providers

Unlike the Mews et al (2017) research investigating treatment effects for mainstream sexual offenders, where treated sexual offenders were found to reoffend at a higher rate than non-treated sexual offenders, there is currently no research to suggest that this is the same for sexual offenders with intellectual disabilities. Significant treatment effects were found in reducing cognitive distortions and increasing sexual knowledge and victim empathy which are important criminogenic factors in sexual offending, (Beech et al., 2005). The findings from the meta-analysis, suggest that service providers should continue to refer clients for CBT based sex offender treatment at this present time, until further, more robust research has been completed.

Strengths and Weaknesses of Review

This study is the first of its kind to assess the effects of CBT based treatment for sexual offenders with intellectual disabilities on improvements in cognitive distortions, sexual knowledge and victim empathy. It is also the first meta-analysis to investigate further reports of sexually abusive behaviour during and following treatment.

The methodological quality of the literature obtained for this meta-analysis, was found to be relatively poor, with a high level of heterogeneity found when assessing the impact of treatment upon improving cognitive distortions. Sample sizes were generally small, meaning it is difficult to generalise the findings to other sexual offenders with intellectual disabilities. Treatment fidelity, sampling, performance and detection bias was also overwhelmingly unclear for the majority of the studies. Furthermore, all studies included were within-group designs, with no controlled non-treated groups used in an RCT. Therefore, the results obtained from this study should be met with caution.

It would have useful to examine publication bias; however, this would potentially have been confounded due to the limited number of studies and small sample sizes.

Assessing reported rates of further sexually abusive behaviour is flawed in that follow up periods were inconsistent, ranging from end of intervention to six years after first offence. Additionally, many studies only reported known reoffending to the criminal justice system, whereas five included any incidents of further sexually abusive behaviour, whether the police were involved or not. This meta-analysis has provided additional evidence that more robust research studies, with longer follow up periods after treatment are required to fully assess the impact of CBT group sex offender treatment for individuals with intellectual disabilities.

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VOLUME I

CHAPTER II: EMPIRICAL PAPER

MEN WITH INTELLECTUAL DISABILITIES AND SEXUAL OFFENDING HISTORIES: AN EXPLORATION OF THEIR EXPERIENCES OF LIVING WITHIN A SECURE HOSPITAL SETTING

Abstract

Background

There is a national drive to transform services for individuals with intellectual disabilities, where care is provided within the community rather than hospital settings. However, there are limited quality community provisions for those with more complex care needs such as posing forensic risks like sexual offending. There has been limited research focusing on this client groups experiences of inpatient services and the treatment they have received from their own perspective. This study aimed to explore their experiences of living in a secure service focusing on treatment for sex offences and makes recommendations for community services.

Method

Ten men with intellectual disabilities and sexual offending histories took part in an interview designed to explore their experiences of living within a secure hospital setting. The data were analysed using Thematic Analysis.

Results

Three key themes relating to the participants' experiences within the hospital were identified. These were: "hospital environment," "personal journey through secure services" and "closeness to home."

Conclusions

Men's experiences at a secure hospital were generally positive in terms of a supportive staff approach. Difficulties existed around the hospital organisation affecting the support they received. Some participants experienced a struggle to become more independent and move to less restrictive environments due to their perceived risk levels. Many participants found being

away from home to be hard and longed to closer to their family. In contrast around half of the participants did not want to live near their hometown due to family difficulties, negative peer influences or fears of consequences for their sexual offending. Implications for community service planning are considered.

Introduction

Winterbourne View was a privately run, inpatient hospital for individuals with intellectual disabilities and challenging behaviour. In 2011, an undercover journalist exposed widespread and systematic abuse of some of the individuals being treated there (British Broadcasting Corporation, 2011). A following investigation found that staff had abused their patients and misused restraint (Department of Health, (DoH) 2012). Furthermore, despite concerns raised and reported by staff, several key agencies such as the Care Quality Commission (CQC) had failed to recognise the abuse or intervene and respond to complaints (DoH, 2012). The investigation into Winterbourne View triggered a government review of the quality of care for individuals with intellectual disabilities and challenging behaviours across England. At the time around 3400 children and adults with intellectual disabilities, autism and challenging behaviour were in inpatient hospital settings (DoH, 2012). It was considered that too many people were placed in hospitals and they were staying there for longer than necessary. Despite government policy that people should have access to their family and friends, many people were placed far from home and poor quality of care was found in other services besides Winterbourne View (DoH, 2012; Bubb, 2014).

This led to an initiative focusing on transforming services for vulnerable people with intellectual disabilities, named "***Transforming Care"*** (DoH, 2012). The main aims of this programme were to review all current placements by June 2013 and move anybody found to be inappropriately placed, into the community by June 2014 with an individual package of support (DoH, 2012; 2015a). Unfortunately, this aim was not met and there have been ongoing difficulties in achieving this. Population data are flawed, however at the end of September 2019, there were still 2,250 children and adults with intellectual disabilities and/or autism in inpatient hospitals (NHS Digital, 2019). Sadly, in May 2019, a further BBC programme aired abuse

occurring at a private hospital named Whorlton Hall, confirming that abuse of individuals with intellectual disabilities and autism continues seven years after Transforming Care was launched (BBC, 2019).

Reasons for the failure of Transforming Care centre around the lack of investment and development of quality community services to support this population (Taylor, McKinnon, Thorpe & Gilmer, 2017). This is particularly important for much of the population within secure services, who have been described as relatively high functioning, having mild to borderline intellectual disabilities, high levels of psychiatric comorbidity and/or personality disorder. Furthermore, as well as displaying behaviour which challenges, this population may show high-impact offending behaviour such as violence, sex offences, and fire-setting, which has resulted in being detained under the Mental Health Act (MHA, 1893, amended in 2007), (Taylor et al., 2017; Sinclair, 2018). This is different from the intended population Transforming Care was originally aimed at (Taylor et al., 2017). When designing community provisions for this population forensic needs also need to be considered as figures suggest that 21% of those under the MHA within hospitals, are subject to Ministry of Justice (MOJ) restrictions, meaning they cannot be discharged into the community without a Mental Health Act Tribunal or approval from the Secretary of State (Taylor et al., 2017). Any community services would need to provide specific support to manage their risks.

A census completed in 2015 to discuss Transforming Care progress, reported that 35% per cent of the intellectual disability hospital population were reported as being in danger of exhibiting sexual behaviour causing risk to others, with 8% of those as being severe enough to require treatment. Additionally, 22% were reported as being at risk of sexual behaviour causing risk to themselves, with 3% being classed as severe enough to require treatment (Health & Social Care Information Centre [HSCIC], 2015). Treatment and management of such

individuals therefore is one vital aspect of supporting them to be able to live in the community with a reduced risk of sexualised behaviour.

Research into the efficacy of treatment for sex offenders with intellectual disabilities has been conducted across a variety of settings, with few studies purely focused on treatment delivered with secure hospitals. The research methodology within this area has been found to be poor, with no randomised control studies and short follow up times to assess recidivism (Marotta, 2017). Nevertheless, systematic reviews focusing on therapeutic changes have found reductions in cognitive distortions on attitudes towards sexual offending and an increase in victim empathy and sexual knowledge following adapted Sex Offender Treatment Programmes (SOTP), utilising Cognitive Behaviour Therapy approaches (CBT), (Cohen & Harvey, 2016; Jones & Chaplin, 2016).

Research has also investigated the quality of life (QOL) of sex offenders with intellectual disabilities. It is suggested that those who do not receive treatment for their sexual offending are restricted throughout the duration of their lives and therefore, the freedom they receive as a result of any successful intervention is significant (Courtney and Rose, 2004). Sexual offenders with intellectual disabilities have been found to have a poorer QOL in terms of contact and support from significant others as well as life experience when compared to a non-offending control group of people with intellectual disabilities (Steptoe, Lindsay, Forest & Power, 2006). The authors suggest that attachment to societal influences and integration is imperative in learning the laws of society and therefore improving QOL should be considered in treatment programmes for this population.

There has been limited research focusing on individuals with intellectual disabilities experiences of inpatient services and the treatment they have received from their own perspective (Young & Chesson, 2006). However, there is recognition that they should be

consulted as experts by experience when designing services for them (DoH, 2012; 2015a) and it has been found that such individuals have a desire to be included in research which allows their voices to be heard, their lives to be improved and allows for equal opportunities (McDonald, 2012). Additionally, the benefits of involving this population in research include gaining the perspectives of an underrepresented client group in public policy, providing an understanding of their experiences of having an intellectual disability, giving an insight into their quality of life and helping others to understand their reality (Doody, 2018). Studies that have focused on this have found mixed experiences from service users particularly around the use of restraint, medication and restrictions (Murphy, Estien & Clare 1996, Longo and Scior, 2004). More recently, a study focusing on patients with intellectual disabilities experiences of moving out of hospital following Transforming Care found that their view of themselves changed, in that when in hospital people talked about them as if they were "bad" but when in the community people talked about them more positively (Head, Ellis-Caird, Rhodes & Parkinson, 2018). However, none of these studies have investigated this for a specific sexual offending with intellectual disabilities population. To the researcher's knowledge, there have been no recent studies investigating the experiences of people with intellectual disabilities living in secure settings for sexual offending, following the Winterbourne scandal and subsequent Transforming Care policy. It seems important to gain service-users' perspectives on their experiences of secure services, their wishes for future residence and whether this can inform the community services being provided for such individuals.

Aims of the current study

This study aims to explore individuals with intellectual disabilities experiences of living in a secure service focussing on treatment for sex offences. It also aims to explore their hopes and wishes for their future, particularly in considering future housing arrangements.

Understanding the experiences of service user's treatment and care in secure services is a potentially important source of information in providing individuals with intellectual disabilities with effective support and establishing the most meaningful treatment and care pathways appropriate to their psychological needs.

Methodology

Ethical Approval

Ethical approval for this study was granted by The University of Birmingham's Science, Technology, Engineering and Mathematics Ethical Review Committee (see Appendix A), and research governance approval from the private company's Research and Development Board. The study was sponsored by The University of Birmingham.

Design

A qualitative design was used for the study, in that men with intellectual disabilities living in a secure rehabilitation hospital were invited to take part in semi-structured interviews to explore their experiences of residing at the hospital, their treatment and their future wishes in terms of housing and support. These interviews were transcribed and analysed using a thematic analysis framework and key themes relating to their experiences in the hospital were identified in participants' accounts. Thematic analysis is described as "a method for identifying, analysing and reporting patterns (themes) within data," (Braun & Clarke, 2006, p. 79). Thematic analysis is a flexible methodology as it is not affiliated with a particular theoretical or epistemological perspective (Maguire & Delahunt, 2017). It aims to organise and detail a data set but can also go one step further and interpret different aspects of a research topic (Boyatizis, 1998; Braun & Clarke, 2006).

Procedure

Providing information to services. All participants were based in a single secure hospital, for men with intellectual disabilities and associated complex care needs specifically a history of offending behaviour. Prior to commencing the research, a meeting was held with the

qualified psychologist at the hospital in order for the researcher to brief her about the purpose of the research, share the participant information sheet and capacity to consent questions, as well as explaining the role of the psychologist within the recruitment process. The psychologist then disseminated this information to the manager of the service to ensure they were informed of the research. The manager agreed for the research to take place within the hospital.

Recruiting participants. All participants were recruited using a purposive sampling method in order to maximise homogeneity. Participants were all based at one intellectual disability secure hospital. All participants had been detained under the Mental Health Act (1983, 2007), under Section 3 or 37/41. A psychologist working within the service was asked to identify potential participants who met the inclusion criteria for the study (see Table 6). The psychologist identified eleven participants who were eligible for the study. Eligible participants were approached by their assigned psychologist to explain the purpose of the research and read through a participant information sheet (see Appendix B). The potential participants were given the opportunity to keep this information sheet to read through and consider whether they would like to take part in the research. The assigned psychologist then met with them at least a day later and then referred them to the researcher if they agreed to participate.

Table 6: Participant inclusion criteria

Inclusion criteria
1. Males only were recruited to ensure a homogenous sample for which the research question will be meaningful. **2.** Aged 18 years or older **3.** Have a diagnosis of an Intellectual Disability or Borderline Intellectual Disability as defined by the International Classification of Diseases (ICD-10). All participants had an IQ score of less than 80 and a significant impairment in adaptive functioning. IQ scores were collected by their allocated psychologist from the participant's WAIS assessments which were kept on file. **4.** Have a history of sexual offending. All individuals had an index offence of sexual offending, prior sexual offending or had been diverted away from the criminal justice system for inappropriate sexual behaviour. **5.** All participants were able to provide informed consent and to demonstrate they had understood the participant information sheet, their right to withdraw and they did not feel obliged to take part for fear of repercussions. **6.** Sufficient command of the English language in order to take part in a semi-structured interview.

Determining capacity to consent. The researcher met with individuals who had expressed an interest in taking part, in order to read through the participant information sheet for a final time and ask a series of questions to assess capacity to consent (see Appendix C). Arscott, Dagnan and Stenfert-Kroese (1998) developed a method of assessing the ability of individuals with intellectual disabilities to provide informed consent by asking four questions.

A fifth question was added by the author to ensure participants understood that partaking in the research would not affect their care or treatment plan, as this has been highlighted as a concern during the ethics process.

At this stage one of the potential participants withdrew their expression of interest, explaining that they did not want to discuss their experiences at the hospital. Ten participants demonstrated that they understood the information provided and completed the consent form. The researcher then provided them with a date and time to complete the interview. All ten completed an interview.

Participants

The participants were aged between 25 and 50 years (M = 36.7) and had an IQ ranging between 56 to 66 (M = 62.2). Average length of stay within the service ranged between 2 to 52 months (M = 21.3). The key demographic information for each participant is provided in Table 7 below. The information was collated from file reviews completed by their allocated psychologist and provided to the researcher on completion of the interviews. The researcher did not have access to these files in order to avoid and minimise researcher bias.

Interviews

Each participant was interviewed in a private room at the hospital and was recorded using a Dictaphone. The researcher was pregnant during the interview period and therefore it was risk assessed that she was accompanied by the assistant psychologist of the hospital to ensure safety. Prior to the interview, the researcher ascertained each participant's feelings around completing the interview to ensure they felt comfortable during the process. This was facilitated by using symbol cards depicting different emotions. If any participant had indicated feeling a negative emotion prior to the interview, they would have been given time to discuss

their concerns and offered the opportunity to withdraw. However, this was not required. Participants were also aware that they could take a break if required and could withdraw their consent to partake at any time. One participant utilised the opportunity for a break during the interview (Michael[1]). The emotions cards were available for participants throughout the interviews to signal any changes in the way they felt during the interview.

Each interview followed a semi-structured interview guide (see Appendix D). This focused on five main topics: exploring the participants' experiences of living in a locked rehabilitation hospital, their understanding and experiences of the treatment they had received, their feelings regarding living away from home, their experiences of the progress they had made whilst living in the hospital and their plans, hopes and wishes for the future. This interview guide allowed the interview to be flexible in nature in order to generate a dialogue with the participant and evoke detailed conversations regarding their experiences living at the low secure hospital. Prompting was utilised in order to further aid participants' understanding of the questions and gather additional information. A participant-friendly interview guide was also provided to enable individuals to follow the guide as interviews progressed (see Appendix E). The emotions cards were available to facilitate discussion for participants who had difficulties in explaining their feelings regarding a topic question. Two participants (Michael and Shaun) used these cards at times but were also able to converse regarding the topic questions.

Following the interview, the researcher provided a debrief form (see Appendix F) which thanked participants for taking the time to contribute to the research and informed them of where they could seek support should they require this. Entries of participation were also recorded in their nursing and psychology notes to ensure that hospital staff were aware they had taken part in the research and may need support from staff regarding this at a later time.

[1] All names have been changed to pseudonyms to protect anonymity.

Table 7: Demographic characteristics of participants

Participant (Age) Ethnicity	Intellectual Disability	Additional Psychiatric Diagnoses	Sexual Offending History	Previous Levels of Security	Reason for Admission, Section Status (Time in placement)	Length of Interview
Daniel (28) White British	Mild Learning Disability FSIQ 62 (WAIS-III)	Not Applicable	Rape of a Minor	Low Secure	Step down from low secure hospital for rehabilitation into the community Section 37/41 MHA (8 Weeks)	16 minutes, 32 seconds
Grant (36) White British	Mild Learning Disability FSIQ 66 (WAIS-III)	Psychopathy	Prostitution Sexual Assault of a Minor x 3	Medium Secure Low Secure	Step down from low secure hospital for rehabilitation into the community Section 37/41 MHA (11 months)	25 minutes, 54 seconds
Jake (27) White British	Mild Learning Disability FSIQ 62 (WAIS-III)	Bipolar Disorder Atypical Autism	Indecent Exposure	Low Secure	Step down from low secure hospital for rehabilitation into the community Section 37/41 MHA	17 minutes, 17 seconds

					(24 months)	
Thomas (27) White British	Mild Learning Disability FSIQ 62 (WAIS-III)	Mild Learning Disability Dysexecutive Syndrome Autistic Spectrum Disorder Complex Post Traumatic Stress Disorder	Rape and Sexual Assault of Minors x 2	Medium Secure Low Secure	Has been in secure hospitals from the age of 16 so rehabilitation placement sought for slow integration back into the community Section 37/41 MHA (21 months)	22 minutes, 19 seconds
Michael (46) White British	Mild Learning Disability FSIQ 64 (WAIS-III)	Not Applicable	Bestiality	Low Secure	Step down from low secure hospital for rehabilitation into the community Section 37/41 MHA (52 months)	16 minutes, 2 seconds
Shaun (45) White Irish	Mild Learning Disability FSIQ 65 (WAIS-IV)	Anxiety Depression Mixed Personality Disorder	Sexual Assault and Rape of a Minor. Buggery and Oral Sex of a Minor	Prison High Secure Medium Secure Low Secure	Has been in prison/secure hospitals for over 20 years. Rehabilitation placement sought for slow and planned	49 minutes, 51 seconds

		(Emotionally Unstable/ Dissocial) Psychopathy			reintegration into the community Section 37/41 MHA (29 months)	
Peter (39) White British	Mild Learning Disability FSIQ 56 (WAIS-III)	Emotionally Unstable Personality Disorder Social Anxiety Disorder	Sexual Assault of a Minor	Low Secure	Step down from low secure hospital for rehabilitation into the community Section 37/41 MHA (8 weeks)	21 minutes, 46 seconds
Amir (25) Asian British	Mild Learning Disability FSIQ 62 (WAIS-III)	Not Applicable	Sexual Assault of a Minor	Medium Secure Low Secure	Has been up and down levels of security in hospital since adolescence. Rehabilitation placement sought to help reintegrate back into the community. Section 37/41 MHA (29 months)	23 minutes, 10 seconds
Bashar (44) Asian British	Mild Learning Disability FSIQ 61 (WAIS-III)	Schizoaffective Disorder	Sexual Assault of a Female	Prison Medium Secure	Has been in prison/secure hospitals for a number of years.	26 minutes, 29 seconds

				Low Secure	Rehabilitation placement sought for slow and planned reintegration back into the community Section 37/41 MHA (7 months)	
Richard (50) White British	Mild Learning Disability FSIQ 62 (WAIS-III)	Emotionally Unstable Personality Disorder	Sexual Assault of a Female	Medium Secure Low Secure Supported Living	Significant risk of self-harm causing previous supported living placements to break down. Rehabilitation placement sought to keep him safe. Section 3 MHA (36 months)	25 minutes, 52 seconds

All participant names are pseudonyms to protect their identity. Abbreviations: FSIQ (Full Scale Intelligence Quotient), WAIS-III (Weschler Adult Intelligence Scale version three, 1997), WAIS-IV (Weschler Adult Intelligence Scale version four, 2010), MHA (Mental Health Act 1983, 2007).

Table 8: Semi-structured interview guide

The individual's experience of living within a locked rehabilitation hospital

The aim was to elicit the participant's individual experience of living at the hospital, the treatment they had received, feelings regarding living away from home and plans and hopes for future housing arrangements.

Here is a picture of the hospital. Tell me a bit about what it is like.
Do you like the hospital and the staff? Why/why not?
What sort of things do they help you with?
How useful do you find this help?
Can you think about anything that could be better at the hospital?

How much time do you spend outside of the hospital?
How do you feel about the amount of time you spend outside of the hospital?
What stops you from having more time outside of the hospital?

How do you feel about living away from hometown?
How far away from home do you live?
Do you get to see your family/friends? (How often? Where?)
If not: why is this?

How do you feel you are progressing at the hospital?
Where were you before? (secure/residential/community?)
Why were you moved to the hospital?
What is better/worse about being here?
What things are you better with now?
What do you still need to work on?
Is there anything you would like to change whilst you are here?

Have you done any work on not ok sexual behaviour? *If yes:*
What did you like/not like about this work?
Why were you asked to do this work?
What do you think it could help you with?
Has it been helpful? Why?

What other behaviours have you had problems with?
Have you had any problems with those behaviours here?

What do you see as your treatment here?
How do the different workers help you with your treatment?

What are your plans for the future?
Where would you like to be living?
Do you want your life to stay the same or be different?

Analysis

Interviews were transcribed verbatim by the author and participants were assigned a pseudonym with any identifying information removed or modified to protect their identity. Braun and Clarke's (2006) six phases to thematic analysis guide was then employed to analyse the data from the interviews, (see Table 9). An inductive approach was utilised, meaning the thematic analysis was data driven, with the themes identified being strongly related to the actual data. Therefore, the data was coded without making attempts to fit it into a pre-existing coding framework and analytical biases held by the author were minimised (Braun & Clarke, 2006). The themes were identified at a latent or interpretative level, meaning that the data was analysed by identifying the underlying ideas and conceptualisations that shaped its thematic meaning (Braun & Clarke, 2006). To ensure the findings and themes identified were consistent with the data, the coding and emerging themes were discussed in supervision with two supervisors experienced in thematic analysis and any alternative perspectives were considered. The triangulation of data helped to reduce researcher bias in identification of the themes in the experiences of the men interviewed.

Table 9: Process utilised during thematic analysis, (adapted from Braun & Clarke, 2006)

Phase	**Description of Process**
1. Familiarising yourself with the data	Transcribe data, read and re-read the data and note down initial ideas
2. Generating initial codes	Code interesting features of the data systematically across the whole data set. Collate data relevant to each code
3. Searching for themes	Collate codes into potential themes. Gather all data relevant to each potential theme
4. Reviewing themes	Check if the themes work in relation to coded extracts (Level 1) and then the whole data set (Level 2). Create a thematic map of the analysis
5. Defining and naming themes	Refine the specifics of each theme and the overall story the analysis tells. Generate clear names and definitions for each theme
6. Producing the report	Select compelling extract examples relating back of the analysis to the research question and literature. Produce final report of analysis.

Reflections

I faced several challenges when conducting the interviews and completing the research process and therefore it was important to use supervision to reflect upon these. Although the interviews were not focused on the participants' sexual offending, inevitably at times during the interview, a small number of them discussed their offences. This was mainly in relation to the length of time they had been in the hospital/prison system as well as offender treatment they had completed. At the time of completing the interviews, I was six months pregnant with my first child. Many of their offences related to children and although I have worked with this client group before, for the first time, I noticed myself feeling uncomfortable when hearing about these offences. I was able to manage this during the interviews as the focus was regarding their hospital experience and not their offending and therefore, I could redirect back to the question. As an added support, in order to reduce my own biases as well as to reduce any rumination regarding this, I utilised supervision and kept a reflective diary of my thought processes and feelings throughout the interview process. This also helped me when feeling saddened by some of the experiences the participants discussed during their time in different services, which I found particularly important when completing the analysis process to ensure my own thoughts and feelings did not add further bias to the thematic findings.

Being a relatively young pregnant researcher, may also have impacted upon the participants responses to the interview questions in relation to their experiences at the hospital. Many appeared keen to please me and portray the hospital and themselves in a positive light. This could be related to me being visibly pregnant. However, to ensure my safety during the interview process, I was required to have an escort with me. This was usually the assistant psychologist of the hospital and although it was explained that their responses to the questions would have no impact upon their treatment plans or care, undoubtedly this may have influenced the way some participants responded.

Results

Three superordinate themes were identified through the thematic analysis, with some subthemes. These themes reflect the importance of the hospital environment in terms of support available to participants at the hospital, what this had meant to them and future hopes and wishes in terms of homes and care required.

The first superordinate theme "hospital environment" captures the participants' experiences of the staff approach at the hospital, the personal, therapeutic and emotional support received and how hospital organisation can impact upon the supportive approach they find so useful. The second superordinate theme "personal journey through secure services" considers the positive changes, personal realisations made, and the contrasting difficulties participants experienced in terms of gaining more independence during their time at this hospital and other secure services. The third theme "closeness to home" highlights the conflictual feelings the participants expressed, between the struggle of wanting to be closer to family or wanting to live elsewhere to make a fresh start due to difficult memories associated with home.

Each superordinate theme and subtheme are presented in a thematic map in Figure 12. They are then written in detail below, strengthened by illustrative quotes from participants. All participants required prompts throughout, such as "tell me more about that", as well as encouragement, such as "hmhmm" or "yes", due to their intellectual disabilities and communication difficulties. This resulted in short sections of dialogue at times, and therefore to aid understanding, quotes used to support themes will be presented without the researcher's prompting or speech not relevant to the theme, such as filler words like, "erm, ok, sort of."

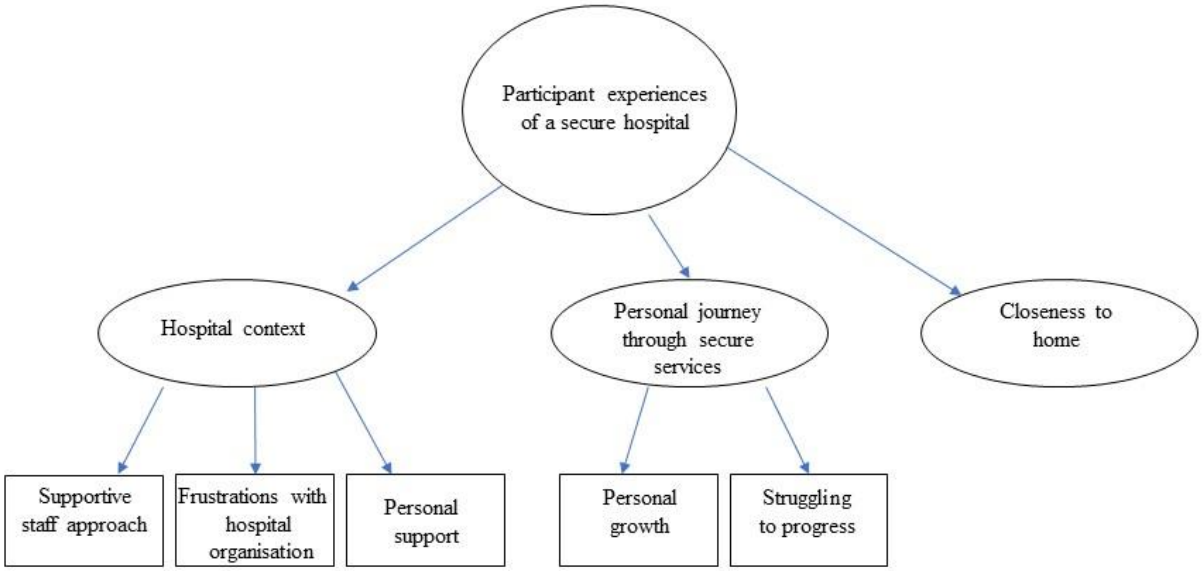

Figure 12: Thematic map of superordinate themes and subthemes

Superordinate Theme 1: Hospital environment

Overall, the participant's appeared to find the staff approach to be supportive and this theme captures how this was important to them in several areas of their care, including emotional support, feeling able to request staff assistance and support with activities. However, it also considers how hospital organisation can sometimes impact upon the support staff are able to offer, and participants' thoughts and feelings regarding this.

Supportive staff approach. Many of the participants highlighted the importance of the staff approach in feeling supported during their admission. For example, Daniel, who had been admitted to the hospital only 8 weeks prior to the interview, felt that the hospital offered more support than his previous low secure unit, and he was able to tell them if and when he required further staff input. Here he provides an example of such a time:

Daniel: "*Cause at my old place the staff just left me to struggle. But since I've been here, I've had help from the staff and…Cause I told one of the staff, cause I went home last week and I said to them I wouldn't mind like one of the support off one of the staff just to ask me if I'm alright after from my home visit and there was plenty of staff round."*

Shaun had been in secure services for a number of years following his index offence, including prison and different levels of hospital security. His admission to this hospital was the lowest level of security he had been placed within since the mid-1990s. Shaun was extremely complimentary of the hospital and their approach, and the basis of his interview centred around this. Feeling treated as an equal was important to him:

Interviewer: *So, something about their approach. What do you think it is that they do, that's different?*

Shaun: [Pause] they treat you like a human being. They don't treat you like a patient. They talk to you like a human being…And other placements I been to, it's we're staff, you're patient. Do you know what I mean?

Interviewer: It's very them and us…

Shaun: Yes

Several participants mentioned that they felt the hospital approach was less invasive compared to previous placements, in that room searches were not as common, they were allowed access to more items, such as knives under supervision in the kitchen, and could clean their own rooms. This helped make them feel more independent and more trusted. Peter had been at the hospital for 8 weeks:

Peter: And they don't come around and shout at you. They do shout on ya, but they don't come in your bedroom to do it and don't go through the drawers to see what you got.

Interviewer: So, they don't go through your drawers or into your bedroom?

Peter: Yeah

Interviewer: Is that something they used to do in […] then?

Peter: Every week.

Interviewer: So, every week they'd do…was it a room search?

Peter: Yeah, a room search. Make sure you've got nothing in there.

Interviewer: So why don't they do that here?

Peter: Fink they trust ya."

Bashar had previously received an imprisonment for public protection (IPP) sentence and although he was post-tariff, he had remained in secure services due to his mental health needs and level of risk for several years. His admission to this hospital was the lowest level of security he had resided in. He spoke positively of the future and felt the hospital staff were helping him to move forward by helping him set goals:

Bashar: They're, they're doing their best to help get me back in the community, looking at forward for my future and seeing what goals I can aim ahead of me or if there's no further work to for me to be doing, that's up to the doctors probably.

The approach of the staff at the hospital, appeared to be essential for the participants in order to feel supported and valued. However, a number of participants expressed frustration regarding the organisation of the hospital at times, which affected this vital support.

Frustration with hospital organisation. Many of the participants mentioned that there were several patients on enhanced observations, resulting in there being less time available for those on general observations. Daniel felt that having more staff would make the hospital better, explaining that staff being on enhanced observations of other patients meant that some activities were cancelled. He reasoned that if there were more staff employed, then activities could go ahead as well as patients requiring one-to-one supervision being looked after:

Interviewer: Can you think of anything that could be better at the hospital?

Daniel: More staff

Interviewer: What do you mean by that? More staff?

Daniel: Because most days they always short and all the one-to-ones and they gotta like put all the activities, most the activities for the patients and just…more better for more just more staff then they can like do all the activities and also look after the ones who's on one-to-one's at the same time.

Peter also mentioned this, explaining that having a lack of staff meant he was unable to go out of the hospital as much as he would like.

Peter: Not enough staff on is there? Always on one-to-one's or, you know what I mean.

Amir had been living at the hospital for 29 months. He clearly valued the one-to-one time with his key staff members, and this contributed to him feeling supported with his emotional and mental health needs. Unfortunately, he too felt his one-to-one time had reduced due to other patients requiring constant supervision:

Amir: I do like my one to ones chats. But we haven't, seen that person for ages and I do like to like sit down and talk to em about stuff, but doesn't happen most of the time because they're stuck on somebody like two to ones or one to ones.

Interviewer: Is there anyone else, so if your key workers not free are there other people you can talk to?

Amir: Yeah there's a lot of other people that talk to me but it's the obs that I'm bothered about because every time that you wanna talk to somebody they're on obs all the time.

This subtheme identifies, just how important availability of staff is for patient's living with a secure hospital, particularly to provide therapeutic and emotional support.

Personal support. Support when feeling low, scared or anxious appeared to be fundamental to most of participants' experiences at the hospital.

Grant did not like being in hospital and preferred to be independent, however, he did appear to appreciate staff being available when he required help with problems he was experiencing, particularly after a difficult therapy session or in the evenings:

Grant: Well I find it very useful is that they're there just to speak to if I have problems or they're there to, I wouldn't say that much they don't need to remind me because I'm sort of very thing on myself anyway. But they just sometimes, I just find them useful just to get on with. Specially some staff that I can sit down and talk to if I've come out of a session or something. I know there's going to be a staff member there that I can just go up to and to and speak to. I know that there's always staff members here that I can speak to if I get that worried. And basically [staff member's name] always said if there's any problems in the evening just come to us.

Michael and Peter also felt that there were staff for them to speak to regarding their emotions, mainly around feeling angry or frustrated, as well as helping Peter to refrain from engaging in damage to property/self-harm:

Michael: When you're pissed off you can go and talk to em and then they help you to calm down.

Peter: I want to say those words, talk about things, all sorts, about me punching the walls.

Jake highlighted how the staff appeared to recognise when he required more support with his mental health when he first came to the hospital:

Jake: When I first came here was a bit poorly.

Interviewer: And how did staff help you with that when you first came?

Jake: Maybe I was put on a 1:1 basis.

Interviewer: Do you think that helped you?

Jake: Yes it did

Interviewer: How did it help you?

Jake: Because I had somebody there if I wanted to talk

One participant, Richard, had been living in supported accommodation but was admitted to the hospital following a serious incident of self-harm, however, he had been in and out of inpatient services for twenty years. He was on one-to-one observations at the hospital due to his level of self-harm risk, which escalated every time reduced observations were attempted. He felt he needed constant supervision and that he could not cope on his own. He reflected upon this during the interview:

Richard: We have, we have tried, we have tried before to put me off one-to-ones before, on 15 minutes check, that's when…I were on me own at the time…that's when I self-harmed. That's when they put me back onto one-to-one's again.

Interviewer: So, there is something about having those staff there do you think that you find useful, helpful?

Richard: I think the most, I think the most if I come off one-to-one's, I think I am scared.

Interviewer: Scared? Ok. So, do the staff help you feel less scared?

Richard: Mmm

Superordinate Theme 2: Personal journey through secure services

It became apparent throughout the interview process and analysis of transcripts that several participants had made personal positive changes during their time at the hospital as well

as personal realisations. Changes related to feeling more independent, being able to let go of previous experiences and a reduction in aggressive outbursts. However, participants also found making changes and steps towards independence to be scary, particularly those who had been in services for several years. The second subtheme "struggling to progress" highlights the need to take this at their own pace. It also considers the pace of the system which can understandably be quite conservative in its approach with these individuals due to the potential level of risk.

Personal growth. Participants discussed the positive changes they had been able to make during their stay at the hospital, including those who had a shorter length of admission. Daniel had been at the hospital for eight weeks but appeared to appreciate the new independence he had at the hospital. He also felt happier:

Daniel: For me, I think I'm improving here than I was at my other place. I try and do it on my own but here the staffs support me and I got all my, I got my happy mood back

Interviewer: And what things do you think you're better at now since you've moved here?

Daniel: Probably doing more activities on the ward and keeping meself busy, make sure I'm keeping my room tidy.

Interviewer: Is that something you struggled with before?

Daniel: Yeah cause in me other place we did we didn't get to do our own rooms, the cleaners did it for us. I always ask in me old place if I could tidy my room but they wouldn't let us have all the items to use, so it had to wait for the cleaners to come on the ward in the afternoons.

Jake also felt he had made positive changes at the hospital, particularly relating to going out independently. The staff had put some measures in place to help him with this:

Jake: Maybe going out by myself now

Interviewer: Is that something you struggled with before?

Jake: Yeah

Interviewer: So how has the hospital helped you with going out by yourself?

Jake: Every Saturday I set diary plan out. If I feeling not too good I will tell the people.

Michael, aged 46, had been at the hospital for the longest out of all the participants (i.e. 52 months). He did not yet have unescorted leave due to the risk of absconding, however, he had recently moved to the step-down section of the hospital, something he felt pleased about:

Michael: And I've moved up to step down now. I didn't know I were moving up there until I got a shock, the shock, they surprised me. Well you're moving up, I said where? Step down. Yes!

Interviewer: So, what's better about being on step down?

Michael: It's more quieter…. [Shows fob]

Interviewer: You've got a fob, so you can come in and out as you please.

Amir, who had been admitted to the hospital twice, described how the hospital had helped him reduce the number of incidents of aggression he was having:

Amir: I have my up and downs but obviously they're not like bad like they used to be where I'd get restrained and stuff. Yeah, they last for about a minute and then obviously I'm alright after that so.

Interviewer: You said earlier as well didn't you that when you first came here you had more incidents…

Amir: Yeah, I was bad yeah

Interviewer: So how, so how do you think being here's helped you with that?

Amir: Done a lot of psychology work. Erm cause obviously I do a lot of psychology with [psychologist name] and like stress work. Coping strategies, cause obviously [psychologist name] was saying that I have like low esteem and I said yeah, I do have low esteem do you know what I mean I can't disagree with that. So, we are trying to get my low esteem back up so.

Shaun discussed how receiving unescorted leave made him realise some the positive changes he had made since being at the hospital, something he mainly attributed to his psychology sessions:

Shaun: And it's good in a way because it shows me that I'm not holding onto things that's inside anymore. Before I used to let things build up build up build up build up, I don't do that anymore. That is approach an old psychologist who used to be here, she put me through me paces, put it like that, do you know what I mean, and a lot of sessions I'd come out tearful and everything. But I know, no I don't think, I know it's made me the man that I am now. I'm assertive, I'm, more positive about things, do you know what I mean? So at the end of the day she just got me ready.

Whilst the participants were positive about how they were developing in the hospital, there were also personal and organisational constraints which meant they became frustrated with their progress.

Struggling to progress. All but one of the participants had been transferred to the hospital as a step down from a low secure placement, to help prepare them for living back in the community. They had all been in inpatient services or prison for a number of years, ranging from 22 to three years. Therefore, some participants discussed the difficulties they experienced when attempts were made for them to be more independent, such as unescorted leave, and there was a sense that people felt institutionalised.

Grant expressed frustration regarding being unable to attend swimming, an activity he liked to do. He had not been able to go swimming due to concerns around risk, but he did not feel this had been explained to him fully:

Grant: Well the activity that I want to do which I am not doing at the moment but I keep asking about is swimming. Several other people have gone swimming, I've asked before them, but they just say well they haven't sorted it yet.

Bashar reflected upon the length of time he had spent in secure services. Despite receiving a relatively short IPP sentence (exact tariff unknown), Bashar had been in secure services for eleven years and he commented on only spending one night in his own home during that time:

Bashar: I got IPP, one month's IPP. That's public protection I got. But they're only minor offences, but my record is big you see. I've been locked up since […], 11 years, nearly 12 years I've done. And that's sleeping one night in my house.

Many of the participants had also come into secure services straight from living at home with parents and had therefore not had an opportunity to experience independence, which is something they were fearful of. Thomas, aged 27, had been in services for eleven years following his index offence, and reflected upon the impact this had upon him requesting unescorted leave:

Interviewer: So what would help you get unescorted leave?

Thomas: I just talk to people about how I'm feel…coping, how I'm coping if I'm by myself

Interviewer: And how do you think you'd cope on your own?

Thomas: It would be alright it's just how I feel about going out by myself

Interviewer: Do you mean you're a little bit worried about going out by yourself?

Thomas: Yeah. Because I haven't been had unescorted for, I've never had unescorted for rest of my life.

Despite Thomas' fears, he did have plans to request unescorted leave and move into supported living. He had previously discussed taking things step by step and considered this in relation to moving on:

Thomas: Well I have got things heading in the future but it's not set in stone yet

Interviewer: What sort of things?

Thomas: Supported living

Amir had also resided at home before being admitted in secure services. He had previously attempted unescorted leave but struggled accepting this, particularly when he was facing other life stresses. However, he now feels ready to attempt unescorted leave again:

Amir: Yeah I've had it before and then it got too much for me so.

Interviewer: Ok, was that your decision to…

Amir: Yeah I didn't, I just won't ready for it at the time. But I am ready for it now, just got to do a bit more work with psychology before I get to that point.

As previously stated, Shaun had been in secure services for over twenty years, with this hospital being the least restrictive in that time. Shaun very much felt he was institutionalised and continued to feel this way during his first year of being at the hospital. When unescorted leave was attempted, his mental health relapsed, and his behaviour deteriorated, with Shaun acknowledging during the interview that he had felt pushed into taking this step before he was ready. However, with support from the hospital team, and allowing him to go at his own pace, he described no longer feeling institutionalised, a personal change he made whilst at the hospital:

Shaun: I thought at one stage I didn't want my unescorted leave, I thought at one stage I don't want no shadowed leave, I thought at one stage look I'm institutionalised, I don't want to do this, I don't want to do that…Do you know what I mean? And about five five months ago something like that, I turned around and said yeah I am ready for this. And this is the way I

want it to be. And my whole team said you tell me when you're ready. You you tell us what you want, do you know what I mean, you tell us the approach you want want us you want us to go on, do you know what I mean, so I did exactly that. Do you know what I mean and at the moment the doctors writing off to the home office this week for me unescorted leave. Do you know what I mean so, I'm so proud of meself to get that.

Shaun went on to say that the hospital has helped him realise he is not institutionalised, emphasising this word during interview:

Shaun: Well [pause] they've helped, they've helped me plot the change of my attitude about institutionalisation. Do you know what I mean? Because I'm not ***institutionalised***

Interviewer: So is that how you felt before?

Shaun: Yeah. I'm not ***institutionalised****.*

Superordinate theme three: Closeness to home

All participants discussed their experiences at the hospital in relation to their hometown, and a conflict became apparent during the thematic analysis. This theme identifies how several participants felt that the hospital was too far away from their hometown and family, which they found difficult, wishing to move home or closer to home. In contrast, several participants wanted to be nowhere near their hometown, feeling that this was associated with bad memories and fearing that they may be targeted due to their sexual offending histories.

Daniel expressed that living away from home was difficult for him and one of his goals was to move to supported accommodation closer to home.

Daniel: Very hard. That's the most hardest part. In the meeting I had yesterday, I mentioned that I want to move closer to my family and that's the most important thing for me.

Grant lived a long way from his family, around a seven-hour drive (not including breaks). This meant he had been unable to see his family for some time, although the hospital was making attempts to accommodate a visit halfway between the two. He wished to be closer to home in the future:

Grant: Well because basically it's away from my home. You're looking at about a seven-and-a-half-hour drive. And that's why I just don't like being in hospital because it's too far for me to travel.

Interviewer: So, do you get to see your family and friends?

Grant: No

Interviewer: No? Do you speak to them on the phone?

Grant: I speak to them on the phone, but they are they in the process of possibility of erm arranging for me to meet my mother halfway, but the only problem is she won't do it. Because she can't sit in a vehicle and she can't sit on the train long enough.

Bashar lived around an hour away from his hometown, however, he felt a sense of responsibility for his family and as though he should be helping them financially:

Bashar: I don't like it, I wanna go stay at me mums, cause you know I have to look after my mum and my sister and my brothers, do you know if I get benefit, I get benefit, I get a job, just

give them all the money, if I get proper benefits now I probably send £100 home. I'm not bothered just give money my mum.

Conversely, several participants recognised that they did not want to live at home or closer to home for a number of reasons. Peter was concerned that people knew him back at home and was fearful that he would be targeted because of his history of sexual offending:

Peter: Yeah. Because of what I do in the past, I might end up…. you know

Interviewer: So, if you went back there, the things that you did in the past, that could, people might know about it, is that what you're saying or…?

Peter: People might know me or might do me in or something

Peter also had difficulties with family, meaning he was not concerned about seeing them more now or in the future:

Interviewer: No. How do you feel about not seeing them?

Peter: Ok

Interviewer: You alright, you're not bothered…

Peter: No

Interviewer: About seeing them?

Peter: Nan is old, me old man is, that's Dad's for ya, they don't care.

Shaun also lived a long distance away from his hometown and family. However, he had no wishes or desires to move closer, due to the family difficulties he experiences, as well as

there being bad memories associated with his hometown. He no longer saw his hometown as his home.

*Shaun: No. I don't want to go **anywhere near** [town name]. Far away from [town name] as I can, remember I said…far away as I can, I'd be quite happy to start fresh somewhere else, out in the countryside just me and like two other lads and what not, three other lads and whatever. Do you know what I mean, I'm just quite happy just to get on with my life. Just a place where I can call home*

Amir felt that he knew too many people in his hometown that could negatively impact upon his progress. He wanted a fresh start:

Amir: Alright actually. Cause obviously I don't want to go back to where I [place name], I wanna go somewhere where I can start somewhere fresh. Do you know what I mean?

Interviewer: Why is it you don't want to go back to [place name]?

Amir: Because I know too many people there, I used to get in trouble a lot there.

Furthermore, Richard also felt that due to having no family and many of his original difficulties starting in his hometown, he no longer wished to live closer:

Richard: It doesn't really bother me in any case I haven't got no family. Like that's, that's half of the problem. That's half of the problems I got caused by by drinking.

Discussion

This study aimed to explore the experiences of males with intellectual disabilities and a history of sexual offending, residing in a secure hospital. Utilising thematic analysis, it identified three superordinate themes: (i) hospital environment (ii) personal journey through secure services and (iii) closeness to home. These themes offer an awareness of the experiences of this service user population and an understanding of future wishes and needs, from which service planning can be considered. This has been studied at what appears to be an opportune time given the current climate and drive to restructure services for individuals with intellectual disabilities.

Overview of research findings

The first superordinate theme identified the importance of the staff approach in helping the participants to feel supported during their admission and as an equal. The majority expressed preferring their current hospital to previous placements which included high, medium and low secure hospitals, as well as prison in some cases. They found the approach of the staff at the hospital to be much more supportive particularly regarding being approachable and less invasive. Participants felt they could ask for extra support when needed which was helpful. Participants' found it preferable that they could have access to items that were prohibited in other services and their room was not searched as often. It should be noted that this hospital was not as secure as their previous placements, which will have an impact upon this. Nevertheless, this helped participants to feel more trusted and independent. This contrast of recognising the need for support but also longing for independence has also been found in previous research, (Williams, Thrift & Rose, 2018).

A further area participants' felt they needed staff support was with their personal, emotional and therapeutic support. Some participants would seek staff interaction and support

when feeling low in mood, struggling to regulate their emotions or during times of the day they found more difficult to manage. Several participants would also request staff help in order to contain their anger and frustration, suggesting staff helped to de-escalate the situation to avoid incidents of aggression. Other participants would speak to staff following a difficult therapy session where they may have discussed their history, offending behaviours or other challenging topics.

Despite feeling more supported, there were still frustrations when the hospital organisation affected the availability of staff. Due to patient's requiring enhanced observations, (i.e. requiring one-to-one or two-to-one support), activities were often cancelled, meaning they spent less time out of the hospital and in the community. In addition, participants were unable to meet with their key staff as frequently. It is clear most of the participant's valued having one-to-one time with staff they trusted. Not only to help them with their personal, emotional and therapeutic needs but also to have somebody to talk to in general. Regular one-to-one sessions with the same member of staff or somebody to talk to, has been highlighted to be important in inpatient admissions, as well as access to the community, keeping busy and having structured activities (Vos, Markar & Bartlett, 2007; Howard, Phipps, Clarbour & Raynor, 2015). Availability of staff, access to the community and structured activities appear to be vital.

It is concerning that the majority of participants held negative views of their previous accommodation. In most cases, this had been a low secure hospital, but many had also resided in high secure, medium secure and prisons. Some participants referred to staff at previous accommodation as being unavailable, invasive and verbally hostile. One patient described their previous accommodation experiences as being "them and us" meaning the staff behaved as if they were superior to the patients they were caring for and they didn't feel treated as though they were a "human being." Although these placements were more secure and therefore you

would expect them to be more restrictive and less independent, it is worrying that many participants reported being shouted at and treated as inferior. This is significant as studies have shown that the way individuals with intellectual disabilities are talked about in services, affects the way they think and feel about themselves (Head et al, 2019). Any community services need to consider this when designing services and training staff.

The second superordinate theme captures the personal growth participants had made during their time at the hospital, but this contrasted with frustration regarding the slow progress made and the impact of institutionalisation. A number of individuals were more independent, partly due to being trusted to complete tasks such as cooking and cleaning with previously prohibited items. Some participants were able to go out more frequently and enjoy unescorted leave. Two of the participants had recently moved to the step-down section of the hospital meaning they had more freedom to leave the hospital and more independence. Additionally, some participants felt they had made positive changes in relation to challenging behaviours or forensic risk needs, with psychological treatment being highlighted as an important provision at the hospital to aid this. One participant also discussed having the positive realisation that he had changed his way of coping at the hospital in that he speaks to people now instead of bottling his issues up. He attributed this to his psychology sessions. Psychological treatment has previously been found to result in positive changes which individuals attributed to helping them move on into the community, (Wood, Thorpe, Read, Eastwood & Lindley, 2008).

On the other hand, many individuals discussed their frustrations around how risk was assessed and considered in secure services, and as a result, strengthening independence skills and preparing for life in the community was a slow process. This led to participants feeling institutionalised and fearful of taking steps towards independence such as unescorted leave. It has been found that there are a significant number of inpatients in secure units that remain there

for an extended period, but it has been suggested that one to two-thirds do not require such high levels of security, (Duke, Furtado, Guo & Völlm, 2018). It has also been found that the average length of stay in a medium secure setting is rising rather than reducing, (Shah, Waldron, Boast, Coid & Ullrich, 2011). This has implications for the institutionalisation of such patients and needs to be reviewed, (Duke et al., 2018).

The third superordinate theme considers participants' experiences of living away from home and their thoughts and feelings regarding this. Around half of the participants wished to either move back to their family home, or supported accommodation in their hometown or close by. This half also reported that living away from home was one of the hardest parts of being in an inpatient hospital. Furthermore, many of the participants lived a long way from home or their family, with one patient being around seven hours away, meaning family visits were difficult to arrange. Although they reported the hospital did attempt to help with family contact, this was not always an option for participants with difficult family dynamics or parents who were unable to drive. This finding for half of the individual's supports previous research which has shown that out-of-area placements, or those far from home, are difficult to monitor, placing authorities tend to forget about them and contact with families is affected (Jaydeokar & Piachaud, 2004; Emerson, Robertson & Whelton, 2009) which may result in poorer outcomes for the individuals concerned.

In contrast, the other half of the participants did not wish to live anywhere near their town of origin. There were fears that people in their hometown would know of their sexual offences and use this to become threatening towards them. Others were estranged from their families and therefore did not want to live close by. Additionally, some participants had negative memories of their hometown and did not want to return somewhere that they used to get into trouble, where they feel was the start of their difficulties. This finding appears to

complicate the Transforming Care policy of all individuals with intellectual disabilities in services needing to live close to home. The development of further step-down services provided local to this hospital may provide the answer for some of these individuals.

Methodological considerations

Some threats to validity should be considered when interpreting the findings of this research. The sample size used in this study was ten which is a relatively small sample for thematic analysis, where between 15 to 30 individual interviews tends to be a common number in looking for patterns across data sets, (Braun & Clarke, 2013). However, it has also been suggested that for small projects including interviews, 6-10 participants are recommended, (Braun & Clarke, 2013; Fugard & Potts, 2015). Other forms of analysis were considered when making decisions over the most appropriate qualitative analysis procedure. Interpretative Phenomenological Analysis (IPA, Smith, Flowers & Larkin, 2009) was deemed inappropriate due to the contextual limitations of the data and the relatively short length of the interviews. This meant that forming a fully interpretative account of the participant experiences would have been difficult to complete and potentially heavily biased by the researchers own reflections and experiences. In addition, the sample was purposively selected from one secure hospital to ensure homogeneity, and therefore the generalisability of the research findings are limited to the context in which it took place and not representative of all males in secure hospitals with intellectual disabilities with a history of sexual offending.

As previously mentioned, the researcher was visibly pregnant during the interview process. This meant an escort was required for each interview to ensure the safety of the researcher. The assistant psychologist of the hospital was present for most of the interviews and a staff member assisted for the others. It has been suggested that individuals with intellectual disabilities may feel that somebody without intellectual disabilities has more power than they

do and therefore may be reluctant to express their views through fear of the repercussions (Goodley, 2000). The findings regarding the participants' experiences at the hospital in question were relatively positive and it may be that this was influenced by having both the researcher and a staff member from the hospital present in all interviews. Conversely, other research has found that it is beneficial for a participant with intellectual disabilities to be accompanied by somebody who knows them well, so that they can pick up on cues regarding the participant's mood throughout the research and assist when necessary, (Doody, 2018). Nevertheless, the impact of the researcher's pregnancy should be considered when assessing the implications of this study.

Clinical implications and further research

The results of this research contribute to the ongoing discussions around *"transforming care"* services for individuals with intellectual disabilities, where there is a push for restructure and a significant reduction in the number of inpatient admissions, due to inadequate services and to ensure hospitals do not become homes for this client group (DoH, 2012; 2015a). All targets for this restructure have been missed. Reasons for this failure may be around the lack of quality provisions in the community, specifically those who specialise in supporting and managing forensic risk needs, (Taylor et al, 2017). This research found that participants' experiences at a secure hospital were generally positive in terms of a supportive staff approach. However, difficulties existed around the hospital organisation affecting the support received. This provides information for planning community services for these individual's in terms of the different aspects of their care and treatment that would be helpful to replicate. A supportive staff approach was highlighted, where individuals are respected and talked to as a human being. Individuals appreciated being encouraged to develop independence skills. Having adequate staffing to support individuals personal, emotional and therapeutic needs to help reduce risk

was also important. Unfortunately, such community provisions are currently scarce and a substantial investment in them is required, (Murphy, 2019).

It was also found that some participants experienced a struggle to become more independent and move to less restrictive environments due to their perceived risk levels or the individuals feeling institutionalised. Many of the participants had been in secure services for a number of years due to the risk of reoffending, with the longest admission to secure services being 22 years. This is in line with the transforming care literature regarding hospitals not becoming homes, (DoH 2012, 2015a). It also provides additional support for the design of community services which specialise in managing and treating individuals with intellectual disabilities and continuing forensic risk (Chester, Völlm, Tromans, Kapugama & Alexander, 2018).

Some participants found being away from home to be the hardest part of their inpatient admission and they longed to move home or closer to their family. In contrast around half of the participants did not want to live at or near their hometown due to family difficulties, negative peer influences or fears of repercussions for their sexual offending. Transforming Care's aim to place people as close to home as possible (DoH, 2012) appears to be important for some individuals but this is not the case for all and needs to be considered on an individual basis.

The findings of this study are confined to males with intellectual disabilities and a history of sexual offending in one secure hospital. Similar studies investigating the experiences of such individuals across different levels of secure services would be useful to assess the generalisability of these findings. This is particularly pertinent considering the negative descriptions of more secure services provided by this participant group. It would also be useful to assess the hospital experiences of individual's with intellectual disabilities and other forensic

needs such as violence in order to help design appropriate community services for a range of forensic risk needs in order to keep the individual and others safe from harm.

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Public Dissemination Document

This paper provides an overview of a meta-analysis and empirical research study submitted as partial fulfilment for the degree of Doctorate in Forensic Clinical Psychology.

The Effectiveness of Cognitive-Behavioural Therapy Group-Based Interventions for Males with Intellectual Disabilities and Sexual Offending Histories: A Meta-Analysis

Background

The Core-Sex Offender Treatment Programme (SOTP), has been the main treatment intervention utilised within prisons in England and Wales for medium to high risk sexual offenders (Ho & Ross, 2012). It draws upon cognitive-behavioural therapy (CBT) approaches, targeting criminogenic needs that are thought to be significant in sexual offending. This includes deviant arousal, distorted thinking patterns, lack of victim empathy, denial and minimisation and patterns of offending (Beech, Oliver, Fisher & Beckett, 2005).

The Ministry of Justice evaluated the impact of Core SOTP on the re-offending outcomes of 2,562 convicted sex offenders in England and Wales who started the programme between 2000-2012. The key findings of this research suggest that completion of Core SOTP was associated with little or no change in both sexual and non-sexual reoffending. Indeed, they reported that 10 per cent of treatment completers committed a further sexual offence after eight years, which was higher than the matched control group where reoffence rates were 8 per cent over the same follow-up period. Although small, this was statistically significant (Mews, Di Bella & Purver 2017).

Most programmes for individuals with intellectual disabilities adopt but adapt similar treatment methods used within Core SOTP (Lindsay, Michie, Steptoe, Moore & Haut, 2011) and therefore it is important to consider the treatment outcomes of these programmes. Recent reviews investigating this have reported a number of positive treatment outcomes, mainly by improvements in cognitive distortions, victim empathy and sexual knowledge. However, rates of reoffending were not consistently, recorded mainly due to issues with the studies methodologies, (Cohen & Harvey, 2016; Jones & Chaplin, 2017; Marotta, 2017). One meta-analysis found that adapted SOTP significantly reduced cognitive distortions within this population across six studies, (Patterson, 2018). The current meta-analysis aimed to evaluate the effectiveness of CBT group-based programmes for sexual offenders with intellectual disabilities. It focused on studies which examined the effects of the programmes on changes in cognitive distortions, victim empathy and sexual knowledge. It also looked for papers focusing on whether these changes influenced further sexually abusive behaviours committed by individuals with intellectual disabilities, following treatment.

Method

A search for relevant research was conducted in February 2019 and 18 articles were found. These studies were then rated according to a series of quality criteria to assess for any risk of bias within them. A mixed level of bias was found, particularly in terms of being able to generalise the findings to other relevant populations due to small sample sizes and there being a lack of randomised controlled trials (RCT's). Scores on cognitive distortions, sexual knowledge and victim empathy measures as well as reports of further incidents of sexually abusive behaviour were pooled together to run a meta-analysis which provided effect sizes for each outcome.

Results

A large treatment effect was found for both cognitive distortions (*SMD* = 1.5797) and victim empathy (*SMD* = 0.7773), with a moderate effect found for improvements in sexual knowledge (*SMD* = 0.5276). This meta-analysis also demonstrated that 11.5 per cent of individuals with intellectual disabilities who have completed these programmes will go on to display further sexually abusive behaviours. However, when one influential study was removed, (Heaton & Murphy 2013), this figure reduced to 9.34 per cent. Although the quality of studies included in the analysis was mixed, none of the studies were found to have a large influence over the overall analysis in the areas of cognitive distortions, victim empathy and sexual knowledge.

Conclusions and Implications

This meta-analysis sought to understand the effect of CBT group-based sex offender treatment adapted for individuals with intellectual disabilities. Despite the literature having a number of methodological flaws, the results from this meta-analysis could have significant clinical implications for sexual offenders with intellectual disabilities. The findings suggest that cognitive distortions are significantly reduced following this type of treatment and there are significant improvements in sexual knowledge and victim empathy. This meta-analysis also found a rate of 11.5% for further reported sexually abusive behaviour during follow up periods. This is higher than the 10 per cent sexual reoffending rate found in the Mews et al., (2017) paper assessing the impact of SOTP for mainstream sex offenders. There were difficulties in how further sexually abusive behaviour was recorded in the literature, with many studies relying on the criminal justice system for reconviction rates, despite many incidents not coming to their attention. However, five studies used reoffending rates reported by the staff working with them.

This may have inflated the rate found in the meta-analysis compared to previous reviews. This meta-analysis has provided additional support for previous reviews suggesting further research is required with more robust methodology and study design, to investigate the impact of CBT based group sex offender treatment for individuals with intellectual disabilities. This includes the use of a controlled non-treated group through the "gold standard" randomised control trial (RCT).

Men With Intellectual Disabilities and Sexual Offending Histories: An Exploration of their Experiences of Living within a Secure Hospital Setting.

Background

"***Transforming Care***" (Department of Health, (DoH) 2012), is a programme focused on transforming services for vulnerable people with intellectual disabilities. It aims to provide more care in the community and significantly reduce inpatient admissions. However, at the end of September 2019, there were still 2,250 children and adults with intellectual disabilities and/or autism in inpatient hospitals (NHS Digital, 2019). Reasons for this centre around the lack of investment and development of quality community services to support this population (Taylor, McKinnon, Thorpe & Gilmer, 2017), which are especially important for individual's in hospitals who may have a history of offending.

Men with intellectual disabilities and a history of sexual offending are a particularly complex group and treatment and management of such individuals is one vital aspect of supporting them to be able to live in the community with a reduced risk of sexualised behaviour.

There has been limited research focusing on individuals with intellectual disabilities experiences of inpatient services and the treatment they have received from their own perspective (Young & Chesson, 2006) and none that have focused on those with a history of sexual offending. This study aimed to explore individuals with intellectual disabilities experiences of living in a secure service focussing on treatment for sex offences.

Method

Ten men with intellectual disabilities and a history of sexual offending took part in an interview designed to explore their experiences of living with a secure hospital setting. The interviews were recorded and transcribed. The data was then analysed using the qualitative research method of Thematic Analysis which looks for themes across data, (Braun & Clarke, 2006). Three key themes relating to the participants experiences within the hospital were identified.

Results

The first theme "hospital environment" captures the participants' experiences of the staff approach at the hospital, the therapeutic and emotional support received and how hospital organisation can impact upon the supportive approach they find so useful. The second theme "personal journey through secure services" considers the participant's personal growth during their time in hospital, and in contrast, the difficulties participants experienced in terms of gaining more independence and progressing during their time in secure services. The third theme "closeness to home" highlights the conflictual feelings the participants expressed, between the struggle of wanting to be closer to family or wanting to live elsewhere to make a fresh start due to difficult memories associated with home.

Conclusions and Implications

This research found that the men's experiences at a secure hospital were generally positive in terms of a supportive staff approach. However, difficulties existed around the hospital organisation affecting the support they received. This provides information for planning community services for these individuals to aid the transforming care agenda, in terms of the importance of staff support to help them with their personal, emotional and therapeutic needs as well as aiding independence and reducing risk. Such community provisions are currently scarce and further investment is required, (Murphy, 2019).

It was also found that some participants experienced a struggle to become more independent and move to less restrictive environments due to their perceived risk levels or the individuals feeling institutionalised. This is in line with the 'transforming care' literature around not wanting hospitals to become a home, (DoH 2012, 2015a). It also supports the need to provide community services which specialise in managing and treating individuals with intellectual disabilities and forensic risk.

Some participants found being away from home to be the hardest part of their inpatient admission and they longed to move home or closer to their family. In contrast around half of the participants did not want to live at or near their hometown due to family difficulties, negative peer influences or fears of consequences for their sexual offending. Transforming Care's aim to place people as close to home as possible appears to be important for some of these people but this is not the case for all and needs to be considered on an individual basis.

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VOLUME I

APPENDICES

Appendix A

University of Birmingham Ethical Approval

Dear Professor Rose

Re: "What is the value of treatment for sex offenders with intellectual disabilities in a forensic locked rehabilitation setting?"
Application for Ethical Review ERN_15-1536

Thank you for your application for ethical review for the above project, which was reviewed by the Science, Technology, Engineering and Mathematics Ethical Review Committee.

On behalf of the Committee, I confirm that this study now has full ethical approval.

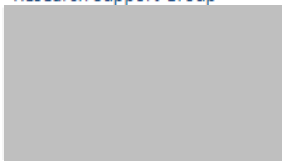
I would like to remind you that any substantive changes to the nature of the study as described in the Application for Ethical Review, and/or any adverse events occurring during the study should be promptly bought to the Committee's attention by the Principal Investigator and may necessitate further ethical review.

Please also ensure that the relevant requirements within the University's Code of Practice for Research and the information and guidance provided on the University's ethics webpages (available at https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Links-and-Resources.aspx) are adhered to and referred to in any future applications for ethical review. It is now a requirement on the revised application form (https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Ethical-Review-Forms.aspx) to confirm that this guidance has been consulted and is understood, and that it has been taken into account when completing your application for ethical review.

Please be aware that whilst Health and Safety (H&S) issues may be considered during the ethical review process, you are still required to follow the University's guidance on H&S and to ensure that H&S risk assessments have been carried out as appropriate. For further information about this, please contact your School H&S representative or the University's H&S Unit at healthandsafety@contacts.bham.ac.uk.

Thank you,

Gemma Williams
Deputy Research Ethics Officer
Research Support Group



Appendix B

Participant Information Sheet

Participant Information

Your experience at hospital

Information

This is Stacey.

Stacey works at Birmingham University.

Stacey is training to be a psychologist.

Stacey is doing some work.

This is some research.

Stacey would like to talk to:

- 

  People

- Who are living at the hospital

- 

  Who have been sexually inappropriate in the past

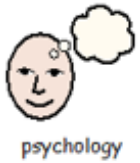
Why is Stacey doing this work?

To understand your experience in hospital.

To understand if hospital has helped.

To help make treatment better for people who have been sexually inappropriate.

What will happen if I work with Stacey?



Stacey will ask your psychologist about your age, previous homes and IQ.

Stacey will come to the hospital.

Stacey will ask you about living at the hospital

Stacey will ask you about the help that you receive for you difficulties at the hospital

She will ask you about living away from home.

There is no right or wrong answer. The interview will take about half an hour.

It will not change your care plan or your treatment.

Stacey will record what you say on a tape.

This will help Stacey remember what you have said.

Stacey will keep the tape protected.

Stacey will be the only person to listen to the tape.

After your conversation Stacey will listen to the tape again.

Stacey will write down everything you have said.

Stacey will not tell anybody your name. When she has listened to the tape she will destroy it. Some of the things you say may be written down but your name will not.

Stacey must tell your hospital and care coordinator if you tell her about a sex offence that they do not know about.

Stacey cannot keep things secret if you tell her about a sex offence that the hospital does not know about.

If you tell Stacey that somebody at the hospital has hurt you, she must speak to your hospital team.

If you had never told anybody about this before, then somebody may come and speak to you and ask what happened.

Stacey cannot keep it a secret if you tell her somebody has hurt you. This is the law.

What if I get upset?

Stacey will have some pictures to help you tell her how you feel.

You can tell Stacey if you want to stop.

If you feel upset it is ok to leave the room. It is ok to have a break.

If you tell Stacey that you feel like hurting yourself or hurting someone else, she will make sure you have a staff member to help you.

Do I have to take part?

It's up to you. You can decide.

If I say yes:

Stacey will ask me to sign a form to say I agree

Stacey will make a time to come and talk to you

If I say no:

Stacey will not come and talk to you.

Nobody will mind if you say no

What if I change my mind?

It is ok to change your mind. If you say "yes" you can say "no" up to a month later.

This will not affect your treatment plan. You will not get into trouble.

It's up to you. You can decide.

You can keep this booklet in case you want to read it again.

Do you have any questions?

Appendix C

Questions to Assess Capacity to Consent

1. **Do you have to take part in this work?**

   Answer: No

2. **What will I talk to you about?**

   Answer: My treatment, if I find it helpful etc.

3. **Will I use your name in her report?**

   Answer: No

4. **Will it affect you treatment or care plan?**

   Answer: No

5. **Can you change your mind later?**

   Answer: Yes

If the above questions are answered correctly:

6. **Will you let me come and talk to you?**

   Answer: If yes, arrange a date and time to meet with participant.

Appendix D
Interview Schedule

Introductions

[Once participant has a drink and appears settled:]

Hello, my name is Stacey and as you know I want to talk to you today about your experiences at the hospital. We met last week/ couple of weeks ago and you said you would like to help me with my research and you signed a form [show consent form]. Are you still happy to take part?

If Yes:

That is good news. I will try not to keep you for long here today. I would like to talk to you for 30 to 45 minutes [show clock as to what time it will finish]. But if you would like to stop or need a break before then, just let me know. I have a copy of some of the questions I am going to ask you here [show sheet]. First of all, how are you feeling about being interviewed? [if no response], point to the symbol that best shows how you feel. [show feelings symbols on talking mat].

If Happy:

Move onto next section.

If sad or other negative feeling is picked:

Ok so you're feeling [say feeling] about being interviewed. What would help?

If no response then:

- Offer to read through participant information again to reassure them.
- Offer 5 minute break

- Ask if they would like a staff member to sit with them during the interview.
- Explain that there will be time for breaks throughout if needed

When happy to continue:

I'm going to use this Dictaphone [show Dictaphone] to record what we talk about today. I will keep this protected and only I will listen to the tape. Is this still ok?

If Yes:

Turn on Dictaphone.

Interview Questions:

Here is a picture of the hospital. Tell me a bit about what it is like.

Prompts: ***Do you like the hospital and the staff? Why/why not?***

What sort of things do they help you with? *(prompts cooking, cleaning, activities, communication, cleaning, therapy, not being sexually inappropriate).*

How useful do you find this help?

Can you think about anything that would be better at the hospital?

How much time do you spend outside of the hospital?

Prompts: ***What do you do outside of the hospital?***

Who do you go with? *(prompts: always with staff/on your own?)*

Why do you go with staff?

What would help you to have no staff?

How do you feel about the amount of time you get to spend outside of the hospital? *(use talking mat if needed with feelings symbols)*

What stops you from having more time outside of the hospital?

Can you think of anything that would be better for your time outside of the hospital?

How do you feel about living away from home town?

Prompts: ***How far away from home do you live?***

Do you get to see your family/friends? *(How often? Where?)*

If not: ***why is this?***

How do you feel you are progressing at *

Prompts: ***Where were you before?***

Why were you moved to the hospital?

What is better about being here?

What is worse about being here?

What things are you better with now?

What do you still need to work on?

Is there anything you would like to change whilst you are here?

Have you done any work on not ok sexual behaviour? *If yes:*

What did you do?

What did you like about this work?

What did you not like about this work?

Why were you asked to do this work?

What do you think it could help you with?

Has it been helpful? Why?

If not, why not?

What other work have you done since you have been at the hospital?

What other behaviours have you had problems with?

Have you had any problems with those behaviours here?

Have staff had to hold you?

What do you see as your treatment here?

How do the nurses help your treatment?

How does the OT help you with your treatment?

How do psychology help you with your treatment?

What are your plans for the future? Do you want your life to stay the same or be different?

Prompts: *If different:* ***How do you feel about that? Who can help you with this?***

If the same: ***Do you think it will stay the same? Why do you want it to stay the same?***

If no: ***Why?***

Appendix E

Participant Friendly Guide

Interview Questions

Stacey is going to ask you some questions about your time here at the hospital

These are written on this sheet to help you understand.

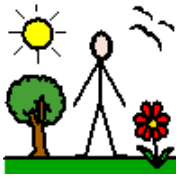
But first, Stacey would like to know how you are feeling about being interviewed?

Say or point to one of the symbols on the mat that best describes your mood.

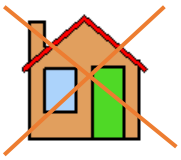
Ok let's begin.

Here is a picture of the hospital. Tell me a bit about what it is like.

How much time do you spend outside of the hospital?



How do you feel about living away from home?



How do you feel you are progressing at the hospital?

Have you done any work on not ok sexual behaviour?

What other behaviours have you had problems with?

What do you see as your treatment here?

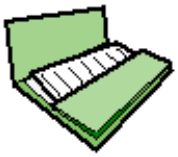
What are your plans for the future? Do you want your life to stay the same or be different?

Appendix F

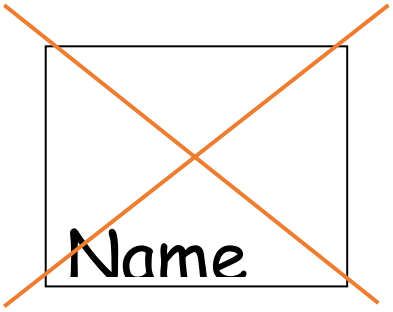
Participant Debrief Sheet

Thank you for talking to me. This will really help

What happens next?



Your conversation with Stacey will only be used for her work. It will not change your care plan.



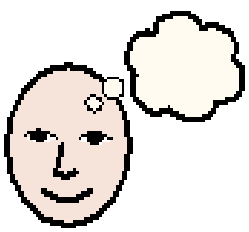
Stacey will not use your name or say where you are from so nobody will know you have taken part.

Stacey will write down what she has found.

This may get written into a book later.

If I am unhappy about my interview I can:

Talk to Stacey or a staff member.



Talk to * (name of named psychologist).

Do you have any questions?