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**Treatment of Individuals with Autism Spectrum  
Disorders who Display Sexual Offending  
Behaviours.**

**Clare L. Melvin**

**PhD Applied Psychology**

**93,612 words**

**September 2019**

## Acknowledgments

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### **Abstract:**

Most individuals with autism spectrum disorders (ASD) do not display criminal behaviours, and a penchant for adherence to rules may in fact act as a protective factor against breaking the law in those with ASD. It has however been suggested that the cognitive and behavioural features of ASD such as atypical communication and social interaction styles, difficulties with theory of mind and empathy, inflexibility of thought and repetitive interests, have the potential to leave an individual vulnerable to committing offences, including sexual crimes.

The Autism Act (2009) and later changes in social policy have led to increased recognition and support for autistic offenders, both in the community and those detained at her Majesty's pleasure or under the Mental Health Act. This includes the need for evidenced-based treatment and as such, research has continued to speculate over the presence of ASD in sexual offenders and any potential impact of the clinical features on positive treatment outcomes. It has thus been suggested that the cognitive and behavioural profile referred to above may result in barriers to treatment, particularly in programmes for sexual offending. Sexual offending treatment is typically delivered in groups and includes therapeutic objectives to increase victim empathy and address cognitive distortions to reduce 'pro-offence thinking styles' and attitudes conducive to offending. While many have supposed the ASD phenotype as challenging within treatment programmes, this has not been subjected to rigorous empirical investigation, with autistic offenders frequently being studied within intellectual disability or neurotypical samples rather than as a distinct population. Three studies have therefore been undertaken to begin to address this gap in the evidence based regarding sexual offending treatment for individuals with ASD.

It is widely acknowledged that many adult sexual offenders displayed inappropriate or abusive sexual behaviours during childhood and adolescence, with many missed opportunities for intervention. This pattern also appears to be present in adult autistic sexual offenders, therefore an online prevalence survey (Chapter Five) was undertaken to identify children and young people with ASD who display risky sexual behaviours within services across the UK, and explore current assessment and treatment provisions. Response rate to the survey was low however the data attained illustrated inconsistency in practice across services for both assessment and treatment, with little use of tools or measures adapted specifically for intellectual or developmental disability.

A second study (Chapter Six) provided empirical evidence for sexual offending treatment for individuals with ASD. This was done through interviews with thirteen men with ASD who had completed an adapted sex offender treatment programme and twelve clinicians who facilitated said treatment programmes. The study recorded the collective views and experiences of service users and group facilitators, exploring whether they felt treatment was helpful in reducing risk of re-offending. The findings provided some support for existing propositions regarding the features of ASD and their potential impact on positive treatment outcomes. However, they also illustrated that adapted group sexual offending treatment groups can be beneficial to men with ASD despite potential social or communication difficulties. Challenges remain in shifting cognitive distortions and increasing theory of mind, with changes in affective empathy being a particular caveat in treatment.

To explore empathy in a non-forensic sample (due to challenges in accessing a youth forensic sample), a final study piloted an adapted empathy course for adolescents with intellectual and developmental disabilities (Chapter Seven). This study examined empathy amongst autistic adolescents, particularly in relation to those with ASD who display challenging or offending behaviours and those who do not, and to those without ASD. A six-week empathy course was run with sixteen students (mean=17.3yrs; SD=11.42). Measures of empathy were taken at (i) baseline, (ii) following a six-week control period, and (iii) after completion of the empathy course. Whilst the measures did not yield any significant increases in empathy, qualitative data from staff and students highlighted improvements in social skills, including increased understanding and awareness of the thoughts and feelings of others. This study illustrated that a short empathy course can be of benefit to adolescents with and without ASD, however for those with more complex needs further input is required to impact behaviour change.

These three studies contribute to the developing body of literature on sexual offending treatment for autistic offenders, providing empirical support to some of the existing suggestions in the literature. The findings from the three studies illustrate the need for appropriate and effective treatment for autistic sexual offenders, and that there are benefits to completing an adapted sex offender treatment programme. Many of these benefits are implicit and relate to improvements in identity, self-esteem and quality of life,

with reduction of risk stemming from external or indirect treatment outcomes (e.g. development of external management strategies such as staffing levels, or increased monitoring opportunities) rather than internal change (e.g. shift in cognitive distortions or increases in victim empathy). The empathy profile seen in autistic sexual offenders was echoed in a non-forensic sample of autistic adolescents and further investigation is required into the role of empathy in the development pro-social behaviours and risk of sexual offending.

## A note on terminology

This PhD is concerned with the treatment of harmful acts of sexual behaviour in individuals with autism spectrum disorder.

### Sexual Behaviours

Harmful or abusive sexual acts, when brought to the attention of the Police and Criminal Justice System become classified as sexual offending. As this PhD has focused on the perpetration acts by those who have, and have not been through the criminal prosecution, both terms shall be used and encompass the following definitions:

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

NSPCC, 2019.

*“... any sexually related behaviour for which:*

- *The other person was non-consenting, and*
- *The behaviour would be defined as illegal within the jurisdiction in which it occurred.”*

SOTSEC-ID, 2002

The term **re-offending** has been used where the individual has been arrested or prosecuted for further sexual offending behaviours, whereas **recidivism** has been used to describe where there are further instances of abusive or harmful sexual behaviours without criminal processing or procedures.

### Autism

The term autism spectrum disorder (ASD) has been selected for use in this PhD. The author recognises the social movement calling for autism to be classed as a condition or difference (as opposed to a disorder) and this is discussed in Chapter Two.

This PhD has explored a diagnosis of autism specifically in relation to treatment responsiveness in sexual offenders. Based on the existing literature for treatment of autistic sexual offenders, and the findings from the three empirical studies, it is felt that for this particular

group of individuals, the cognitive and behavioural profile diagnostic of autism can result in disordered responsivity to treatment. Therefore, in this context, it is considered to be, and constructed as, a disorder and not a condition or difference.

The terms autistic and the abbreviation ASD within this PhD (except where the term autism is explicitly referred to in a research paper, as a theory title, within social policy or as diagnostic categories or in participants' own language) and are used to cover all classifications under the diagnostic umbrella of autism. This includes Asperger's Syndrome and childhood or classic (Kanner's) autism (discussed further in Chapter Two).



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## **PART ONE: LITERATURE REVIEW**

### **INTRODUCTION**

Individuals with ASD who display sexual offending behaviours can be detained under the Mental Health Act in in-patient services. Having spent time working in inpatient services for individuals with intellectual and developmental disabilities who have forensic needs, including those with ASD, I became interested in this complex, niche population. The men I worked with frequently had displayed early onset behaviours, with many missed opportunities for intervention in their histories. Perceptions of responsivity to treatment are crucial in rehabilitation and recovery and progress along an individual's care pathway, and the men with ASD in the adapted treatment groups appeared less responsive than men with intellectual disabilities alone. This led me to question whether an ASD diagnosis created a specific vulnerability in which current treatment approaches for sexual offending are left wanting.

In developing my practice for working with autistic sexual offenders I found myself limited by the dearth of literature and sparse evidence-base regarding treatment for this population of individuals. The scant research available contained little empirical evidence pertaining to treatment outcomes, despite much theoretical proposition on therapeutic responsivity in offenders with ASD.

This PhD therefore set out to explore the treatment of autistic individuals who sexually offend and the current provisions for service and support once they become part of 'the system'. The PhD begins with a literature review in the areas of sexual offending, autism spectrum disorders and finishes discussing relevant social policy and practice.

Chapter One explores sexual offending and the treatment of individuals who display harmful or abusive sexual behaviours. The chapter considers how the occurrence of sexual offending is accounted for in criminological and psychological perspectives, exploring the role of the individual and society, and the underlying psychological processes that may play a part. Sexual offending in adults and youth populations is described and the challenges of attaining information regarding prevalence are considered. Sexual offending theories are examined and applied to neurotypical and intellectual disability populations for both adults

and children and adolescents. The chapter concludes with the exploration of rehabilitation and therapeutic treatment models for sexual offending behaviours.

Chapters Two and Three focus upon Autism Spectrum Disorders. Chapter Two provides an account of the presentation, prevalence and history of ASD before moving on to examine current theories of ASD, including implicated psychological, biological, genetic and neurological factors. The second part of Chapter Two explores offending in those with ASD, reviewing the evidence base regarding incidents and types of offences, with a focus on sexual offending. The models of criminality and sexual offending discussed in Chapter One are applied to ASD and used to explore the possibility that ASD manifests as a vulnerability to sexual offending behaviours.

To examine treatment for sexual offenders with ASD a systematic review of treatment for offenders with ASD was completed in Chapter Three. All types of offences were considered within the review due to the scarcity of research on treatment for sexual offenders with ASD, but also due to the fact that a number of the cases often reported multiple offending behaviours. The review specifically sought to identify papers that provided original empirical data regarding treatment and/or its outcomes for an individual/individuals with ASD. A narrative review was completed following the search due to the quantity and quality of the studies identified.

The final chapter of the literature review examined social policy and legislation relevant to individuals with ASD who display harmful sexual behaviours (Chapter Four). This chapter identified the myriad of systems that an adult or child can take following a display of abusive sexual behaviour. It illustrates that despite a number of changes to policy and legislation, including the Autism Act (2009) and Children & Families Act (2014), individuals with ASD who display harmful sexual behaviours or commit a sexual offence are not subject to a clear or consistent care and treatment pathway.

# 1 CHAPTER ONE: SEXUAL OFFENDING - PREVALENCE, THEORIES & TREATMENT

## 1.1 Prevalence of Sexual Offending

It is consistently reported that approximately 1% of all convicted crimes in the UK are sexual offences (National Home Office Statistics for England and Wales, 2012-13), with the same percentage also found in youth crime statistics (1,384 sexual offences out of 98,837 proven youth offences; Youth Justice Board, 2013). National figures regarding sexual offences come from various judicial sources including police recorded data, the Ministry of Justice and the Crown Prosecution Service. Studies in other settings, such as forensic health services, will necessarily provide different figures as not all incidents will come to the attention of the police or proceed through the Criminal Justice System. Moreover, the hidden nature of sexual crimes, and well-known under-reporting make it likely that victim surveys provide a better guide to the incidence and prevalence of harmful sexual behaviour. The most recent Crime Survey for England and Wales (2019) showed approximately 700,000 adults aged 16-59 years had experienced a sexual assault in the previous twelve months, this equates to 2.1% of the population with women nearly four times more likely to have experienced sexual assault than men (3.4% compared to 0.9%) (Office for National Statistics, 2019). Figures for young people are less clear as will be discussed in detail below.

The population of individuals who present with sexual offending or harmful sexual behaviour display heterogeneity across multiple domains. In relation to offender characteristics, a predominance of white males is reported in adult and youth figures however, despite smaller numbers, females and ethnic minorities are also present across the lifespan. For example, reports have suggested approximately 13% of adult sexual offenders in prison identify as of non-white ethnicity ('Black', 'Asian' or 'other') (Patel & Lord, 2001). For children, a service provision review by Hackett et al. (2005) found that 28% of youth offending teams and 40% of other services in England, Scotland and Wales, were working with youth from Black, Asian or other ethnic backgrounds. There are suggestions that these apparently low prevalence rates of ethnic minorities may be the result of societal bias in criminal proceedings and admission to custody rather than diversion to health or social care services for treatment (Felizer & Hood, 2004; Cowburn, 1996).

Females who present with harmful sexual behaviour are uncommon, although figures between 15% and 20% of sexual offences being committed by females have been reported (Faller, 1996; Synder & Sickman, 2006). There are reports of far lower figures, for example, a meta-analysis by Cortoni et al. (2016) found only 2.2% of sexual offences committed by women were reported to the police. However, the same analysis, based on seventeen samples from twelve countries, put prevalence rates from victimisation surveys at 11.6%. In looking at children and young people, Erooga and Masson (2006), and Taith Service Reports (2012/13; 2013/14) have suggested an increase in the recognition of harmful sexual behaviour being displayed by young girls and adolescents. However, despite this apparent increase female prevalence rates remain low in comparison to males in sexual offending populations e.g. Vizard et al. (2007) report 24 females in their cohort of 280 adolescents (8.5%), and The Taith Service 10-year review also identified a female referral rate of 8.5% (Moultrie & Beckett, 2011). Female sexual offending is frequently placed within the context of the perpetrator's own experience of sexual abuse, a de-stabilised or dysfunctional upbringing and psychiatric conditions such as post-traumatic stress disorder (PTSD) (Vick, McRoy & Matthews, 2008; McCleod et al, 2015). Emphasis appears to be placed on these factors rather than the deviance or aggression often used to frame male sexual aggression. If harmful sexual behaviour in females is viewed as a facet of psychiatric conditions or consequence own sexual trauma, it may not be recorded as an 'index behaviour' or documented as a primary concern. Furthermore, reluctance by professionals to appropriately identify or label harmful sexual behaviour in young females (Hayes et al., 2014) may also contribute to low prevalence figures.

In addition to ethnicity and gender, there is further diversity in children and young people who sexually offend in their developmental history, cognitive ability, psychosocial and psychiatric profile, and in the severity, nature and duration of harmful sexual behaviour displayed (Erooga & Masson, 2006; Vizard, 2013). Recognising the heterogeneity of individuals within this group of children and young people is vital in understanding differences in aetiology, motivation and possible developmental trajectories of those at risk of displaying harmful sexual behaviour. For instance, Lussier et al. (2012) differentiated between those who become persistent offenders and those whose sexual offending is isolated to adolescence. Research has also distinguished between those who commit sexual

offences as part of a wider repertoire of criminal activity from those whose risk is centred predominantly on the basis of harmful sexual behaviours (Bulter & Seto, 2002; Pullman et al. 2014).

Further variability in children and young people who display harmful sexual behaviour can be seen in cognitive ability. Hackett et al. (2013) reported 241 individuals in their cohort of 700 child and adolescent sexual abusers (34%), who were diagnosed with an intellectual disability, with research repeatedly showing an over-representation of individuals diagnosed with an intellectual disability within this offender/risk population (O'Callaghan, 2002; Masson & Hackett, 2003; Erooga & Masson, 2006). Furthermore, a proportion of individuals diagnosed with developmental disorders, including Attention Deficit Hyperactivity Disorder (ADHD) and ASD have been recognised as displaying sexually harmful behaviour (van Wikj et al., 2007; Hellemans et al., 2006). Sutton et al. (2012) identified that 60% of their sample of adolescents assigned to a state facility for those adjudicated as sexual offenders met the criteria for an ASD. In The Taith Service 10-year review, 26% of referrals had a diagnosed ADHD/ASD/physical/sensory or communication disorder, with the total rising to 40% to include suspected cases. The same report identified 9% of referrals as diagnosed with an intellectual disability, and this figure rose to 39% when including those suspected of having an intellectual disability (Moultrie & Beckett, 2011).

The scale of sexual offending is expected to be larger than that recorded by official statistics from organisations such as the Home Office, Ministry of Justice and Youth Justice Board. It is widely recognised that sexual abuse and sexual assault in adults and youth are persistently under-reported (Davies & Leitenburg, 1987; Ryan et al., 1996).

National prevalence rates for sexual offending are limited by the legalities of capacity to stand trial (*mens rea*), the age of criminal responsibility<sup>1</sup>, and the reliability of the Criminal Justice System to record and detect sexual offences. Further information can be gained from charities, children's services and mental health providers, however victim reluctance, denial/minimisation and potentially biased court proceedings means that these figures are

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<sup>1</sup> In England, Wales and Northern Ireland the age of criminal responsibility is 10 years old. In Scotland it is 8 years old but a child must be 12 years old to be prosecuted.



likely to be an underestimate. Therefore, as illustrated in Cortoni et al. (2016), victim surveys may better reflect the occurrence of harmful sexual behaviour.

Mental health and forensic services can supplement data regarding sexual offending cases that are diverted from Court due to questions over competency related to psychiatric conditions or intellectual and/or developmental disabilities. For example, in a sample of 309 referrals to community forensic intellectual disability services between 1987 and 2008 (females n=27), 156 were for sexually abusive or offending behaviours (all males). This figure is in comparison to 126 males referred for general offences, illustrating that the sexual abuse/offending referrals constituted just over 50% of the sample (Carson, Lindsay et al., 2010). From the same research, O'Brien, Taylor et al. (2010) identified 29% of all referrals to community intellectual disability services for anti-social/offending behaviour across three health regions in the UK (n=477), were for sexual offending behaviours.

Charities such as Barnardo's and the NSPCC can provide information on the prevalence of harmful sexual behaviour in children and young people due to their contact both with the victims and perpetrators of such behaviours. These organisations can report upon on cases that do not progress through prosecution channels and acknowledge perpetrators below the age of criminal responsibility. In relation to children and young people, a national survey investigating the prevalence, severity and impact of childhood maltreatment (including sexual abuse) by Radford et al. (2011) identified that as many as 69.5% of contact sexual abuse victims were assaulted by peers or another young person. Whilst percentages this high have not been consistently replicated, research has identified that between a quarter and a third of child sexual abuse is committed by those under 18 years old (Hackett et al., 2005; Vizard, 2013; Lovell, 2002; A Criminal Justice Joint Inspection, 2013).

Adolescents (mean age of typical samples approximately 14 years old e.g. Hackett, 2013; Vizard et al., 2007) are responsible for the majority of youth sexual crime, however services are recognising that a number of younger children, including those under 10 years old, display harmful sexual behaviour (Smith et al., 2014; Hackett et al., 2013). A Criminal Justice Joint Inspection Report (CJJI) (2013) identified that nearly 50% of the cases inspected (aged 13-18yrs) displayed "previously concerning sexualised behaviour" at younger ages (p8). It is important to note that higher referral rates of younger children to services in recent years

may not necessarily be indicative of an increase in harmful sexual behaviour in this age group but may be the result of improved identification of those at risk and provision of earlier interventions. Charities and services providing these interventions are therefore able to supplement official crime data.

The under reporting of sexual offending and/or harmful sexual behaviour displayed by children and adolescents may not solely result from a victim's reluctance, shame or fear of reporting the abuse, or, from being too young to comprehend the significance of the event at the time (Erooga & Mason, 2006). Lower prevalence figures may also be the consequence of parental or adult management of the incident. Developing sexuality in young people is often denied or minimised, particularly in pre-pubescent children (Erooga & Mason, 2006). Adults may assign a child's conduct to curiosity or a 'phase' rather than recognise any potential pathology behind the behaviour as it does not fit with societal pre-conceptions of children and sexuality.

Another factor which may contribute to the under reporting of youth sexual offending may result from parental attitudes and mores. It has been recognised that a percentage of those who display harmful sexual behaviours have been raised in environments with pro-criminal attitudes or a lack of parental boundaries in relation to sexual behaviours e.g. watching pornography or witnessing sexual behaviour between adults (Dennison & Leclerc, 2011; Beauregard et al., 2004; Vizard et al., 2007). It is possible that individuals raised in these environments who display signs of deviant sexual development are not brought to the attention of outside agencies due to differing moral or parental perspectives on what constitutes harmful sexual behaviour. Alternatively, families may not be equipped, emotionally or socially, to address or manage such behaviour and thus it is left unattended.

As noted, sexual offences in both adults and juveniles constitute approximately 1% of all reported crime, however the possible impact on victims of sexual abuse or assault is far reaching, with many commonly experiencing chronic effects. Many adult sexual offenders display early 'warning' behaviours or possess extended histories of involvement with services (Chester et al., 2019), as such there is the presumption that young offenders will continue their sexually abusive behaviours into adulthood leading to a plethora of victims. Early intervention is considered imperative however addressing sexual offending behaviours

and reducing future victims is complicated by the heterogeneity of sexual offenders, and needs to be taken into account by sexual offending theories and treatment interventions.

The remainder of this chapter will explore sexual offending theories and treatment in relation to male sexual offenders, firstly in neurotypical adult populations, followed by adult intellectually disabled offenders (sexual offending theories and treatment applied to autistic offenders are discussed in Chapter Two), before moving onto neurotypical juvenile sexual offenders and finally, children and young people with intellectual disabilities.

## **1.2 Theories of Sexual Offending in Adults**

### **1.2.1 Criminological Approaches to Crime and Sexual Offending**

The field of Criminology places sexual offending in the context of general delinquency and offending, without differentiating it from other types of crimes e.g. arson, theft, burglary, etc. (Agnew, 1992; 2013; Durkheim, 1964; Gottfredson & Hirschi, 1990). In their seminal work, Gottfredson & Hirschi's (1990) Self-Control Theory (originally referred to as General Theory of Crime) posits *all* crime as a consequence of a deficit in self-control and proclivity towards crime. They argue that an inability to delay gratification coupled with opportunity manifests in criminally-responsive behaviour, and that this behaviour pervades across multiple social and personal domains.

Sexual offending therefore is not perceived as a specific offender typology, but rather it is public reaction and subsequent governmental focus on 'community protection' that sets it apart from other crimes (Simon, 2000; Lussier, 2014). Strain theory also adopts a generalist view of crime, arguing against individualistic explanations of offending types. Merton (1938) proposed that crime is the result of societal strain and comes from a 'blockage' in attaining "*culturally prescribed aspirations*" (Merton, in Marsh, 2006, p102). Strain theory, in its original form, viewed crime as a consequence of an individual being unable to attain socially desirable goals through legitimate means. Criminological Control and Strain theories propose that sexual offences are simply a component in a larger repertoire of general criminal behaviour, rather than being 'specialised' in order to meet criminogenic needs (Harris et al., 2009; Simon 1997).

In exploring sexual offending, Harris et al. (2009) contrast Gottfredson and Hirschi's Self-Control Theory (1990) with Laws and Marshall's (1990) Conditioning Theory, suggesting that Conditioning Theory is a specialisation theory as it only seeks to explain sexual offenses irrespective of any other offending behaviour. Harris et al. defined specialisation (as stipulated by Cohen, 1986) as being when more than 50% of individual's crimes are of a particular type. Versatility was assessed in the form of analogous behaviours e.g. drug taking, gambling, promiscuity (Cleary, 2004; Lussier, 2005). In order to examine the two theories, Harris et al. examined the specialist and versatile behaviours of 374 men (mean age at index offence= 29.85 years; SD=9.72; range=15.47–64.55), who had been convicted of a sexual offence and referred to the Massachusetts Treatment Centre for Sexually Dangerous Persons between 1959 and 1984. The findings illustrated that child molesters (sexual offence victims were exclusively <15 years old) appeared to show more specialisation than rapists, however Harris et al. argued that this specialisation could still be accommodated by Gottfredson & Hirschi's (1990) Generalist (Self-Control) Theory, with both child molesters and rapists demonstrating versatility in criminal behaviour.

Simon (1997) and Lin and Simon (2016) also argued against the idea of a 'specialist sex offender', suggesting that the lack of consideration given to other facets of a sexual offender's criminal behaviour can restrict treatment, hamper law enforcement efforts to solve crimes and create a substantial gap between social policy and evidence base. In her 1997 study, an examination of past criminal records of violent offenders, rapists and child molesters illustrated rapists to be comparable to violent non-sexual offenders in their level of offence versatility (Simon, 1977). Like Harris et al. (2009), Lin and Simon (2016) reported less versatility in the child molester group, however this was attributed to possible differences in data source and reporting method.

Criminological Control theories have, and continue to have, substantial support with an established evidence-base developed to sustain the argument against offender specialisation (Gottfredson & Hirschi, 1990; Klein, 1984). In a special edition, the *Journal of Criminal Justice* (2014, vol 2) focused upon the debate regarding sexual offending as a speciality with many re-asserting the relevance of criminological approaches to sexual offending such as Self-Control Theory, and arguing against the specialist theories (e.g. Lussier, 2014). On the other hand, generalist theories such as Agnew's early Strain Theory

came under much criticism for idolisation of middle-class goals (as the cultural aspirations) and also in its failure to account for crimes such as hooliganism, domestic violence/rape, and juvenile delinquency as these crimes do not readily translate into material 'status' or socially desirable gains (Agnew, 1985). This form of Strain Theory would also be unable to account for child molestation and its prospect as a desirable social goal.

Since 1985, Agnew has developed the concept of 'strain' from Merton's original theory (1938) and produced General Strain Theory (GST) (1992, 2006, 2013). In his later revisions, Agnew's focus shifts from attainment of positive goals to negative situations or occurrences that an individual cannot escape from. Agnew posits crime as the result of maladaptive coping methods utilised to manage negative emotions generated by aversive events or conditions. Three forms of criminogenic strain are identified in his theory - (i) inability to achieve expected goals, (ii) loss of positive stimuli, (iii) presentation of negative stimuli. GST differentiates between idealised goals and expected goals, proposing that the gap between what an individual expects to achieve and the disappointment of actual achievement has a greater impact in producing negative emotions than failing to attain aspirational or desired goals. Loss of positive stimuli may encompass a death or loss of someone important (romantic partner or parent) and the presence of negative stimuli could be the occurrence of verbal or physical abuse.

GST has been applied to a wide range of criminal behaviours and deviant conduct including violent offences, white collar crime, property offences and youth offending (Warner & Fowler, 2003; Langton & Piquero, 2007; Sigfusdottir et al., 2012; Froggio, 2007; Agnew, 1985, 2013; DeLisi, 2011), however little work has been undertaken to explore GST in relation to sexual offending. Ackerman & Sacks (2012) investigated recidivism amongst registered sex offenders, examining the impact of strains associated with the Registration and Community Notification Laws<sup>2</sup> (RCNL) on self-reported recidivism rates. Although they found a relationship between strain associated with the RCNL and general recidivism, their findings for sexual offences were small, and negative emotions were not associated with sexual recidivism and thus only providing partial support for GST.

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<sup>2</sup> the US equivalent to the Sex Offender Registration Act and Mappa legislation

Agnew has further extended GST to identify situations where 'criminal coping' is more likely (Agnew, 2013). In doing this, it could be argued that he has brought GST in line with psychological approaches to crime. In his latest revision Agnew focuses on the interaction between the individual's responses to the 'strains', looking at personality traits and internal resiliency, the potential likelihood of using crime as a coping mechanism for managing negative emotions and situations, and the criminal conduciveness of their environment. As will be illustrated below, these aspects, whilst they may still not render sexual offending as 'specialist' *per se*, could be said to parallel the psychological constructs of heritable personality traits, emotional regulation and resiliency, psychosocial development, attachment style and deviancy as a consequence of childhood development, particularly in the context of a dysfunctional or chaotic (potentially pro-criminal) family environment, and thus render the theory more 'individualistic' rather than generalist in nature.

### **1.2.2 Psychological Approaches to Crime and Theories of Sexual Offending**

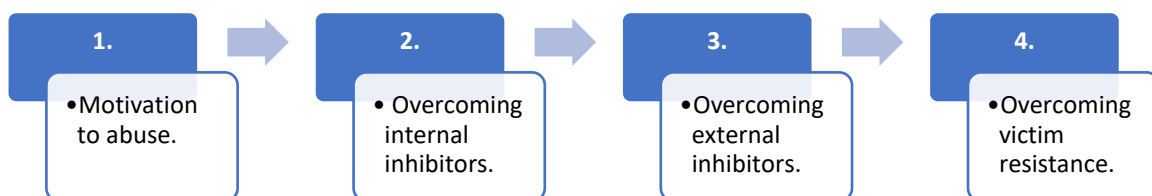
In contrast to criminological approaches, psychological theories of crime utilise individualistic and systemic approaches and stress the importance of psychological traits and states, developmental factors, family environments and peer relationships (Bonta & Andrews, 1988, 2017). Due to the individual focus and emphasis on psychological factors as an explanation of crime (rather than societal causes), a number of these approaches, mainly those working from a clinical perspective using formulation-based methods, position sexual offending as specific or discrete category of crime and seek to explain why a sexual crime is committed as opposed to a non-sexual offense (Finkelhor, 1984; Woolfe, 1985; Ward, 2014).

A large body of work exists on sexual offending and has been categorised by discipline or approach e.g. psychodynamic theories (Cohen et al., 1969; Hammer & Glueck, 1957), evolutionary and biopsychological theories (Malamuth, 1996; Thornhill & Palmer, 2000) or social learning theories (Akers et al, 1985; Marshall & Barbaree, 1990), etc. Ward and Hudson (1998a) developed a 'levels of theory' framework for sexual offending theories based on their focus of explanation. This method identifies theories that seek to account for sexual offending as a general entity (Finkelhor, 1984; Marshall & Barbaree, 1990; Hall & Hirschman, 1992; Malamuth, 1996), from those which look at specific features that

influence or determine offending (Abel et al., 1984; Lalumiere & Quinsey, 1994; Cossins, 2000; Baker et al., 2006), and from those which explain relapse or the offence cycle (Ward, Hudson & Thomas 1998; Ward & Hudson, 1998b; Wolf, 1984; Lane & Ryan, 2010).

Regardless of categorisation method, one of the earliest and most widely recognised accounts of sexual offending is Finkelhor's (1984) preconditions model (Figure 1). Finkelhor sought to explain child sexual abuse and proposed four preconditions to the sexual abuse of children: motivation to sexually abuse; overcoming internal inhibitors to sexually abuse; overcoming external inhibitors to sexually abuse; and overcoming the resistance of the child. Finkelhor's model has received criticism for being too simplistic (Ward et al., 2006) and due to its era of development, the model does not include advances and insights into offending that have developed since the 1980s. It is however still widely referenced, and is incorporated into sexual offending treatment programmes to aid offenders in understanding the offence cycle along with the cognitive and behavioural mechanisms at work in sexual offending (Fisher, 1994).

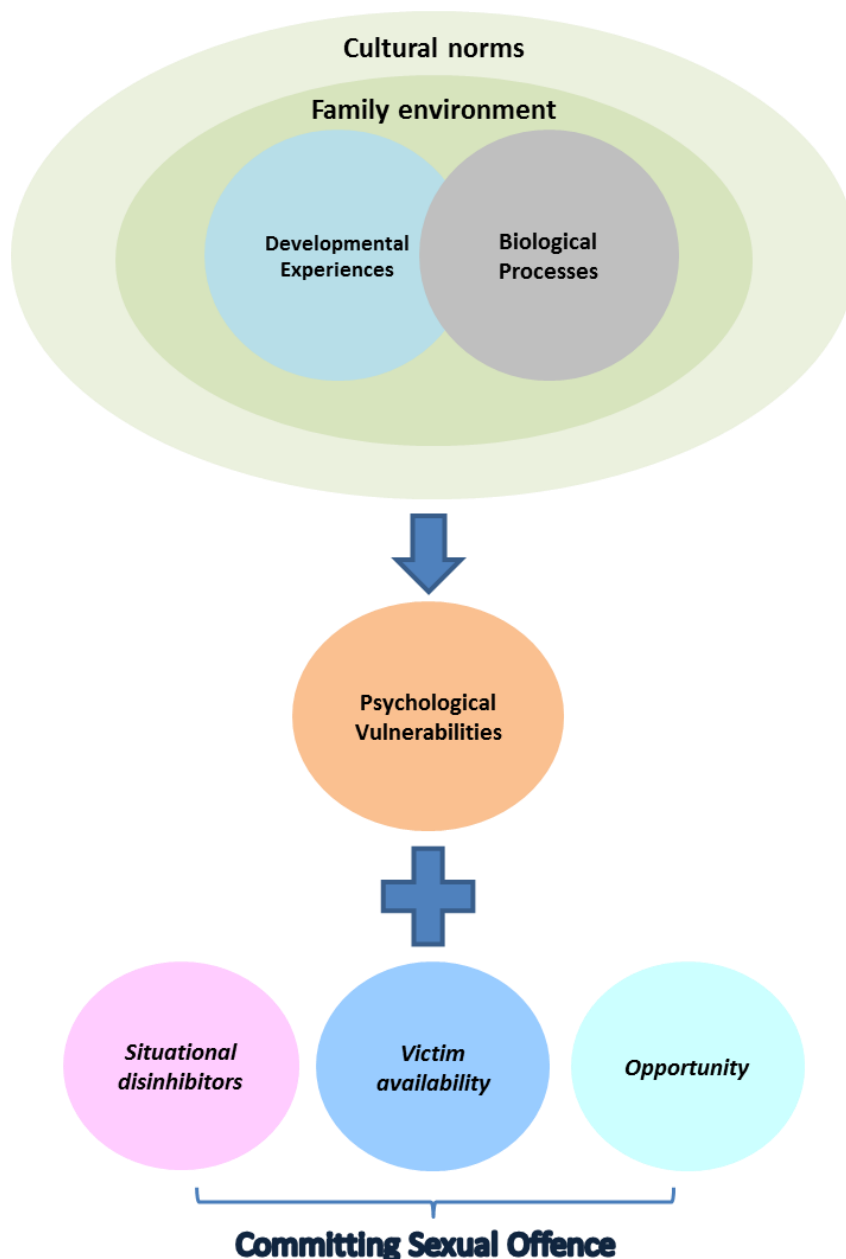
**Figure 1: Finkelhor (1984) Four Stage Model of Child Sexual Abuse**



A second influential theory for sexual offending is Marshall and Barbaree's Integrated Model (1990) (Figure 2). Marshall and Barbaree argued that vulnerability factors developed from aversive childhood events such as parental rejection, childhood abuse (e.g. sexual or physical), neglect and loss, could inhibit a child's ability to develop self-regulation skills including being unable to distinguish between aggressive and sexual urges. Such inhibition might lead to the formation of maladaptive coping strategies, including using sexual release as a coping strategy for negative emotions. This model was one of the first to highlight the importance of attachment and intimacy deficits in sexual offending, a line of thinking which has generated much research into attachment and its potential role in offending and

sexually abusive behaviour (Baker et al., 2006; Van Ijzendoorn et al., 1997). Criticisms of Marshall & Barbaree's theory include why coercive or abusive behaviour is chosen over soliciting prostitutes for those with intimacy deficits, and in the lack of detail provided by the theory to explain the process of learning (or failure to learn) to differentiate between sexual and aggressive drives (Ward et al., 2006).

**Figure 2: Marshall and Barbaree (1990) Integrated Theory of Sexual Offending**



For those proposing sex offender typologies, Hall and Hirschman's quadripartite model (1992) highlighted four factors they considered imperative in committing a sexual offence:



(i) deviant or inappropriate sexual arousal, (ii) cognitive distortions, (iii) affective dyscontrol and, (iv) personality problems. These factors can operate independently or interact, and as such, result in different pathways to committing a sexual offence, potentially explaining the heterogeneity of offending profiles seen in the prevalence data. Despite this strength in recognising different pathways to offending, the model has received criticism for failing to explain why one factor is more important in some people and for a lack of detail in how the factors interact (Ward, 2001).

In line with Ward and Hudson's levels of theory framework (1998a), Ward and Siegert (2002) identified the strengths of the three seminal theories referred to above (Finkelhor, 1984; Marshall & Barbaree, 1990, and Hall & Hirschman, 1999) and attempted to unify them by 'theory knitting'. This exercise was undertaken subsequent to critiques of Finkelhor (Ward and Hudson, 2001), Marshall and Barbaree (Ward, 2001) and Hall and Hirschman (Ward, 2002), and produced a multi-factorial Pathways Model (Ward & Seigert, 2002). The model spans cognitive, social, emotional and interpersonal variables and across multiple domains which culminate in five pathways accounting for the aetiology of child sexual abuse (a later model allows for other trajectories resulting in the sexual abuse of a child). Each pathway is viewed as the result of vulnerability factors created by dysfunctional psychological processing, permitting variability in the clinical presentation of child sexual offenders. The model argues that this variability can be categorised into four clusters which can be ultimately be broken down into the underlying psychological mechanisms of: emotion dysregulation, intimacy and social skills deficits, cognitive distortions, and distorted sexual scripts. The model argues that it is these mechanisms and their processing of personal, social and physiological experiences that are the causal factors of child sexual abuse. The strengths of this model are augmented by the strengths of the theories and models it incorporates, however it remains open to criticisms for lacking empirical support for certain elements of the model e.g. if it is more suitable to heterosexual pathway experience (Connolly, 2004), and failing to provide sufficient details regarding the interaction between the causal factors (Ward et al., 2006). Additionally, the model in the current form is only applicable to adult offenders.

These multi-factorial theories seek to account for the phenomenon of sexual offending in society. A number of more localised theories have been developed to clarify individual

components of the multi-factorial theories, and to explain specific aspects and features prevalent in the act of committing a sexual offence.

One particularly researched theory of sexual offending is that of neurological structures and cognitive functioning (Hendricks et al., 1988; Wright et al., 1990). Early research indicated that handedness had an impact upon an individual's propensity to commit a sexual offence (Porac & Coren, 1981; Bogaert, 2001), with brain injury, certain forms of tumour, and temporal lobe epilepsy also being implicated (Lisman, 1987; Bear et al., 1984). However, whilst there is some evidence to suggest that neurology or neuroanatomy may play a role or act as a vulnerability factor, research evidence has yet to provide conclusive data for a causal link to sexual offending.

Cognitive functioning in sexual offenders has been explored at a single-factor level with research investigating executive function (Eastvold et al., 2011), theory of mind (Keenan & Ward, 2000), cognitive distortions (Abel et al., 1984) and victim empathy (Ward et al., 2000). Cognitive distortions are patterns of thinking that allow an offender to justify, defend or perceive their crimes as 'acceptable'. They seek to deny, minimise or externalise blame or any harm caused to a victim, and maintain or facilitate offending behaviour (Abel et al., 1984). Within criminology, Matza and Sykes (1957) identified this pattern of thinking as 'neutralisation'. They describe it as a method of 'neutralising' acts or values that would go against their morals or beliefs, i.e. a process for managing that which is ego-dystonic and at odds with their perceived sense of self. This style of 'faulty thinking' is a widely recognised facet of offending profiles and addressing cognitive distortions are a key component of rehabilitation treatment programmes (Gannon, Ward, Beech & Fisher, 2008).

A second theory single factor theory of sexual offending is that of deficits in empathy. Empathy is considered an evolutionary facet that promotes pro-social behaviours and facilitates positive interpersonal relationships and experiences (Hoffman, 2001). It is frequently categorised into affective empathy (emotional resonance) and cognitive empathy (related to theory of mind and 'putting yourself in another person's shoes') (Davis, 1983; Hoffman, 2001). Sexual offending is a context in which the absence of empathy is noted, either in state (dynamic and contextual) or trait (a stable facet of personality) form and is believed to have a subsequent impact on behaviour in social interactions i.e. causing harm

to another. In this theory, empathy is proposed as a construct whereby its presence may inhibit offending behaviour, or its absence may increase motivation to offend (Araji & Finklehor, 1985). Empathy 'deficits' in sexual offending can be framed as a lack of emotional responding or identification with the victim, or as a lack of perspective taking and deficits in Theory of Mind (Marshall et al., 1995; Ward et al., 2000). The deficits in victim empathy hypothesis has received clinical support and utility, however it is criticised for inadequately defining the concept of empathy and what is lacking (as sexual offenders have been shown to display empathy to victims *other than their own*, Marshall et al., 2001), as well as for failing to distinguish between a lack of victim empathy and cognitive distortions as separate constructs (Bumby, 2000; Hanson, 2003; Ward et al., 2006). The challenges of defining and evaluating the impact of empathy in sexual offending were highlight by Polaschek (2002) and continue fifteen years later. Such challenges are considered further in Chapters Two (Autism Spectrum Disorders), Six (Interview Study) and Seven (Empathy Intervention Study).

Intimacy deficits and attachment difficulties in sexual offending have been highlighted in multifactorial theories (Marshall & Barbaree, 1990; Ward & Siegert, 2002), however these concepts have also been investigated at a single-factor theory level (Marshall, 1989; Rich 2006). Attachment is a key concept in theories of juvenile sexual offending (covered in greater depth in the next section) and research on adult sexual offenders has shown a high prevalence of insecure attachment in sexual offenders (Burk & Burkhart, 2003; Baker & Beech, 2004; Baker et al., 2006). However, despite these high levels, additional evidence is suggestive that insecure attachment (including disorganised) is a vulnerability factor for offending in general rather than sexual offending specifically (Smallbone & Dads, 1998; Rich, 2006).

As with attachment difficulties, an increased prevalence of psychiatric disorders, mental illness and personality disorders in sexual offenders is noted. For example, Fazel et al. (2007) reported sexual offenders to be six times more like to have a psychiatric record (in comparison to the general public) in their Swedish case control study of 8495 participants. In relation to personality disorder, a study in the USA by McElroy et al. (1999) noted high

percentages of cluster A<sup>3</sup> (28%), cluster B<sup>4</sup> (92%) and cluster C<sup>5</sup> (36%) (American Psychiatric Association (APA), Diagnostic & Statistical Manual, 4<sup>th</sup> Edition. (DSM-IV-TR), 2000) in 36 male sexual offenders in a residential treatment facility following transfer from jail/prison or probation. This prevalence is not only found in Western cultures, and a random sample of 68 offenders in Taiwan's prison for serious sex offenders identified a lifetime Axis I disorder<sup>6</sup> in 69% of the sample, and 59% met the criteria for an Axis 2 disorder<sup>7</sup> (Chen et al., 2016). Similarly, to neurological abnormalities or dysfunction, a mental disorder in itself is not considered a causal factor of offending (sexual or non-sexual) but may be a vulnerability factor (Hodgins et al., 2000).

Certain psychiatric disorders can be putatively associated as an additional vulnerability to sexual offending with sexual offending, such as attention-deficit-hyperactivity-disorder (ADHD) and psychopathy (a particular variant of anti-social personality disorder). Symptoms of ADHD include lack of interpersonal sensitivity and empathy, sensation-seeking and the appeal of high-risk/dangerous situations, hypersexuality, and self-regulation and impulse-control difficulties (Fago, 2003). However ADHD is more associated with general offending than sexual offending specifically (Langevin & Curnoe, 2011).

Psychopathy is characterised by a core presentation of superficial charm and agreeableness coupled with an underlying cold or callous demeanour, capable of displaying extreme acts of antisocial behaviour without remorse or regard for another individual (Hare et al., 1999). Part of the conundrum of psychopathy is the apparent lack of mental illness or disorder of the psyche that is present in other psychiatric conditions such as schizophrenia or post-traumatic stress disorder (PTSD). The illusion of rationality seen in psychopathy is contradicted by impulsive and frequently abhorrent behaviour that is not typical of a 'sane' individual. This contradiction was recognised by Pinel and later identified by Cleckley in his seminal work *'The Mask of Sanity'* (1951, 1982). The presence of psychopathy within the

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<sup>3</sup> Cluster A Personality Disorders: Paranoid, Schizoid, Schizotypal

<sup>4</sup> Cluster B Personality Disorders: Anti-social, Borderline, Histrionic, Narcissistic

<sup>5</sup> Cluster C Personality Disorders: Avoidant, Dependent, Obsessive-Compulsive, Personality Disorder Not-otherwise-specified.

<sup>6</sup> Axis I Disorders: Substance related-disorders, Mood disorders, Anxiety disorders, Sleep disorder, Impulse control disorders not elsewhere specified, Adjustment disorders, Attention-Deficit-Hyperactivity Disorder.

<sup>7</sup> Axis II Disorders – Cluster A, B and C Personality Disorders

sex offending population has been investigated at a number of levels. For example, Porter et al. (2000) looked at psychopathy amongst incarcerated offenders, both sexual and non-sexual offenders, and found that sexual offenders with both adult and child victims (rapist/child molester) showed higher levels of psychopathy compared to child molesters or rapists alone and compared to non-criminals. The overall presence of psychopathy within this study was relatively low within child molester groups<sup>8</sup> 4.9-14.6% compared to 64% in the rapist/child molester group, 35.9% in the rapist alone category, 34% in non-sexual offenders. This pattern has been replicated in other studies, and although sexual deviance (including sexual interest in children) can present with psychopathy, individuals who offend against child and adult victims have been shown to display higher levels of psychopathy than child molesters alone (Marshall, 1997; Serin et al., 1994; Porter et al., 2009).

Similar to offenders with ADHD, the criminal psychopath typically displays a wide range of anti-social and criminal behaviour, rather than offence specific. However, there is research to suggest that their sexual crimes display higher levels of sadism and violence than other non-psychopathic sexual offenders (Gretton et al., 2001; Greenall & West, 2007). What remains unclear is if the violence employed by psychopaths in sexual offending is 'deviance' or instrumental i.e. if it adds to the offender's sexual arousal or is used as a means to control the victim. Sexual deviancy is considered an important predictor in sexual recidivism amongst psychopaths (Hawes, Coccaccini & Murrie, 2013; Olver & Wong, 2006), but similarly to non-psychopathic sexual offenders, psychopaths have been shown to be more likely to re-offend non-sexually, and specifically, are at higher risk of re-offending violently (Brown & Forth, 1997; Rosenberg et al., 2005; Hare, 1999).

Psychopathy in relation to ASD and sexual offending will be discussed further in Chapter Two (Autism Spectrum Disorders).

A minority of sexual offenders have a diagnosis of paedophilia or alternative paraphilia, however the most common co-morbid diagnoses include substance abuse, mood disorders and personality disorders (Harsch et al., 2006; Marshall, 2007). With the exception of paraphilias and paedophilia, these prevalence rates are comparable to other offending

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<sup>8</sup> Porter et al. (2000) sub-categorised child molesters into extrafamilial, intrafamilial and mixed intra/extrafamilial.

populations, often accounted for by high rates of substance misuse (Harsch et al., 2006; Dunsieith et al., 2004).

As illustrated, single factor theories of sexual offending include impaired executive functioning, theory of mind deficits and a lack of victim empathy in neurotypical populations (Kelly et al., 2002; Suchy et al., 2009; Castellino et al., 2011) but overarching conclusions as to the extent of their impact for most sex offenders have not been reached. Some of the factors identified may be of more pertinence for offenders with intellectual disabilities and/or developmental disorders such as ASD, whose symptomatology includes: deficits in planning and organisation, problem solving difficulties, and poor theory of mind (Woodbury-Smith & Dein 2014; Murphy, 2010; Wing & Gold, 1979), as will be discussed in the next section and following chapter.

### **1.2.3 Intellectual Disability and Sexual Offending**

Intelligence has long been postulated to be associated with criminal behaviour with early prison studies describing the trait of 'feeble-mindedness' in convicts (Sutherland, 1906 in Auden, 1911) and eugenicist fears of genetic contamination leading to compulsory sterilization of 'undesirables' and 'degenerates' (Grenon & Merrick, 2014). The average IQ score for the general population is 100, with 68% of the population scoring within one standard deviation of this mean (between 85 and 115). An intellectual disability is classified as *"a state of arrested or incomplete development of the mind which includes significant impairment of intelligence and social functioning"* (The Mental Health Act, Section 3(4) Amendments, 2007, p2),. An intelligence quotient (IQ) score of below 70 is diagnostic of and intellectual disability, with a score ranging between 71-85 considered borderline (APA, DSM-V, 2013; World Health Organisation (WHO), International Classification of Diseases. Tenth Edition (ICD-10), 2016).

Prevalence rates of individuals with intellectual disabilities in offending populations, both sexual and non-sexual, have been hotly debated. Early studies in prisons in the USA, UK, and elsewhere, suggested high prevalence rates whereas later studies with better methodology resulted in lower rates (Murphy & Mason 2014). Additionally, the inclusion of individuals with learning difficulties, such as dyslexia, included in intellectual disability

populations also increases prevalence rates in offending populations e.g. Talbot (2008) and Rack, (2005). A systematic review by Fazel et al. (2008) explored prevalence of intellectual disability amongst 12,000 prisoners. The inclusion criteria within this review *did* specify clinically identified intellectual disability as defined by an IQ of <70 and identified using a clinical assessment of IQ or expert opinion (this was evidence of a registered diagnosis and not simply identified or noted within case files). Ten studies from four countries were identified, and although no meta-analysis was completed due to the variation in assessment measures and samples, prevalence rates of intellectual disability were typically between 0.5% and 1.5% (range=0%-2.8%).

In exploring offending prevalence within non-forensic intellectual disability populations, McBrien et al. (2003) reported that within 1,326 adults with intellectual disabilities known to health and social services in a single Local Authority, 9.7% (n=128) had a history of contact with the Criminal Justice System, with 2.9% (n=38) with a previous conviction and 0.83% (n=11) with a current conviction. Three-hundred and forty eight individuals in the sample were reported to display risky behaviours or those that may be construed as offending (including those with historic or convictions), and 41% of these (n=141) were what the study referred to as 'sex-related', i.e. soliciting for sexual activity, making sexual approaches to adults or children, exposing oneself, etc.

Applications of theories for offender populations under the term 'learning' or 'intellectual' disability usually include those with other neuro-developmental disorders, such as ADHD and ASD, and acquired brain injury. The amalgamation of these conditions is questionable due to the differentiating features of each condition, however it does distinguish them from neurotypical sexual offenders. Sexual offending theories applied specifically to Autism Spectrum Conditions will be covered in more detail in the next chapter whereas intellectual disability alone is considered below.

Counterfeit Deviance (Hinsburger et al., 1991) was one of the first theories of sexual offending proposed specifically for individuals with intellectual disabilities. Counterfeit deviance hypothesised that sexual offending was the result of social and sexual naivety, proposing that sexually inappropriate or abusive acts were the consequence of deficits in social and interpersonal skills, a lack of sexual knowledge and reduced opportunity to

establish sexual/romantic relationships through legal or socially acceptable means. There is evidence to suggest that lack of sexual knowledge may contribute to sexually 'inappropriate' forms of behaviour and offences such as public masturbation, with programmes focusing on increasing sexual knowledge and developing appropriate social skills showing reductions in inappropriate sexual behaviours (Grubb-Blubaugh et al., 1994; Griffith et al., 1989).

However, the counterfeit deviance hypothesis lacks the explanatory scope to account for all sexual offences committed by individuals with an intellectual disability. Furthermore, when Talbot and Langdon (2006) compared the sexual knowledge of sexual offenders with an intellectual disability who had received treatment to those who had not, and to neurotypical controls, no significant differences were found in knowledge between the three groups potentially making it an unlikely causal factor in sexual offending. Additionally, Lunsky et al. (2007) distinguished between individuals with intellectual disabilities who displayed sexually inappropriate behaviours from those who committed repeated offences or used force. They found higher levels of sexual knowledge in those who used force or committed repeat offences than those who displayed behaviours such as inappropriate touching or public masturbation.

One of the few multi-factorial theories that has been explored in relation to individuals with intellectual disabilities who sexually offend is the Pathways Offending model (Ward & Hudson, 1998; Keeling et al, 2009; Langdon et al., 2007a). Langdon et al., (2007a) used the model to investigate the offending pathways of a cohort of individuals with intellectual disabilities undertaking a group cognitive behavioural therapy (CBT) sex offending treatment programme. The study showed some success in categorising the offenders into the Pathways proposed in the model, however only partial support was provided for further application, in relation to Approach/Avoidant or Active/Passive offender profiles for intellectual disability populations, suggesting the need for further research and potential revisions and adaptations to the model.

Marshall and Barbaree's (1990) Integrated Model of sexual offending can also be considered in relation to individuals with intellectual disabilities. To recall, the model proposes that early adverse experiences can lead to insecure or disorganised attachment resulting in intimacy issues, emotional loneliness or poor social skills which may lead to individuals gratifying their emotional and sexual behaviours through offending. Janssen et al. (2002)



highlighted research showing higher patterns of insecure and disorganised attachments in individuals with intellectual disabilities and identified precursors to insecure attachment that could account for a higher presence of such attachments in individuals with intellectual disabilities. These included parental stress, ineffective parenting, limited cognitive skills and institutionalisation (Janssen et al., 2002). Additionally, individuals with an intellectual disability may face a further risk of attachment disorders due to increased vulnerability to physical, emotional and sexual abuse from family, peers and/or carers (e.g. in schools or institutions).

Specific features of neurotypical sexual offending theories may be more salient to offenders with intellectual disabilities. Deviant sexual interests are reported in intellectual disability populations (Murphy et al., 1983), with *some* evidence suggesting a tentative correlation between intelligence and victim selection, as referred to earlier in the work by Blanchard et al. (1999) and Cantor et al (2005) and their findings on IQ and child molesters and paedophiles. It has been proposed that emotional/cognitive congruity with children make men with intellectual disabilities more attracted to them.

As in neurotypical sexual offenders, victim empathy deficits and cognitive distortions are prominent amongst sexual offenders with intellectual disabilities (Broxholme & Lindsay, 2003; Langdon et al., 2007a; Murphy, et al., 2007; Lindsay et al., 2013), potentially impacted by delayed cognitive and/or moral development deficits in theory of mind (Melvin et al., 2019; Langdon et al., 2013). It may be that offenders with intellectual disabilities have reduced reflective abilities to consider their own distortions and 'faulty thinking' style, or the victim's perspective along with impulsivity (Caparulo, 1991; Hayes, 1991).

Poor mental health in intellectual disabilities is further identified as a 'risk' or vulnerability factor in committing an offence, and research has consistently shown increased risk of a mental illness amongst individuals with an intellectual disability, with Chaplin et al. (2010) citing findings of mental health needs in 20%-74% of men. Although actual estimates of increased risk vary, 'dual diagnosis' (intellectual disability and additional psychiatric condition/mental illness) is a robust finding in intellectual disability offender populations, including sexual offenders (Lindsay et al., 2002; Lindsay et al., 2009; Prison Reform Trust, 2008).

Lindsay (2005) drew on theories of sexual offending to inform a treatment model for sexual offenders with mild intellectual disabilities. He included counterfeit deviance, personality (traits and state characteristics such as impulsivity), developmental/psychological factors and as well as theories of criminality and social context in the development of delinquency and sexual offending behaviours. Lindsay's model highlighted elements of treatment to target the development of pathways leading to sexual offending, including the maintenance of behaviours, both at an individual and social level. Primary motivators for sexual offending should be considered and treatment should focus on increasing self-restraint and control, however Lindsay, also emphasised the importance of engagement in the community and integration of social values. The propositions for treatment by Lindsay in this model for sexual offenders with intellectual disabilities are in line with strength-based approaches to treatment which are discussed in Section 1.4 of this chapter.

### **1.3 Theories of Juvenile Sexual Offending**

Theories specific to sexual offending in neurotypical populations and those with intellectual disabilities or neuro-developmental disorders have focused predominantly on adult offenders and deviant sexual behaviours in mature populations. Historically, adult models have been applied to children and young people, however current thinking is that this is suboptimal and does not take into account the developmental factors involved in harmful sexual behaviours by those who have not yet reached adulthood.

Early identification of sexually deviant behaviour by individuals under eighteen was often labelled as experimentation, curiosity or viewed within the cultural ideology of 'boys will be boys' (early work focused almost exclusively on boys) (Reiss, 1960; van Wijk et al., 2005). When this perspective shifted and society acknowledged these behaviours as criminogenic or pathological, young offenders were viewed as 'mini-adults', often treated punitively by the courts without regard for age, cognitive or emotional maturity, and moral development (Marshall & Barbaree, 2008; Ryan et al, 2010). Social changes in the 1980s brought the prevalence of child sexual abuse into the public eye and put a spotlight, not only on the victims of sexual abuse, but also the offenders. This led to the revelation of a significant number of child/adolescent perpetrators and the need for theories to recognise

developmental aspects in sexually harmful behaviour and to differentiate between adults and juveniles (Knight & Sims-Knight, 2004).

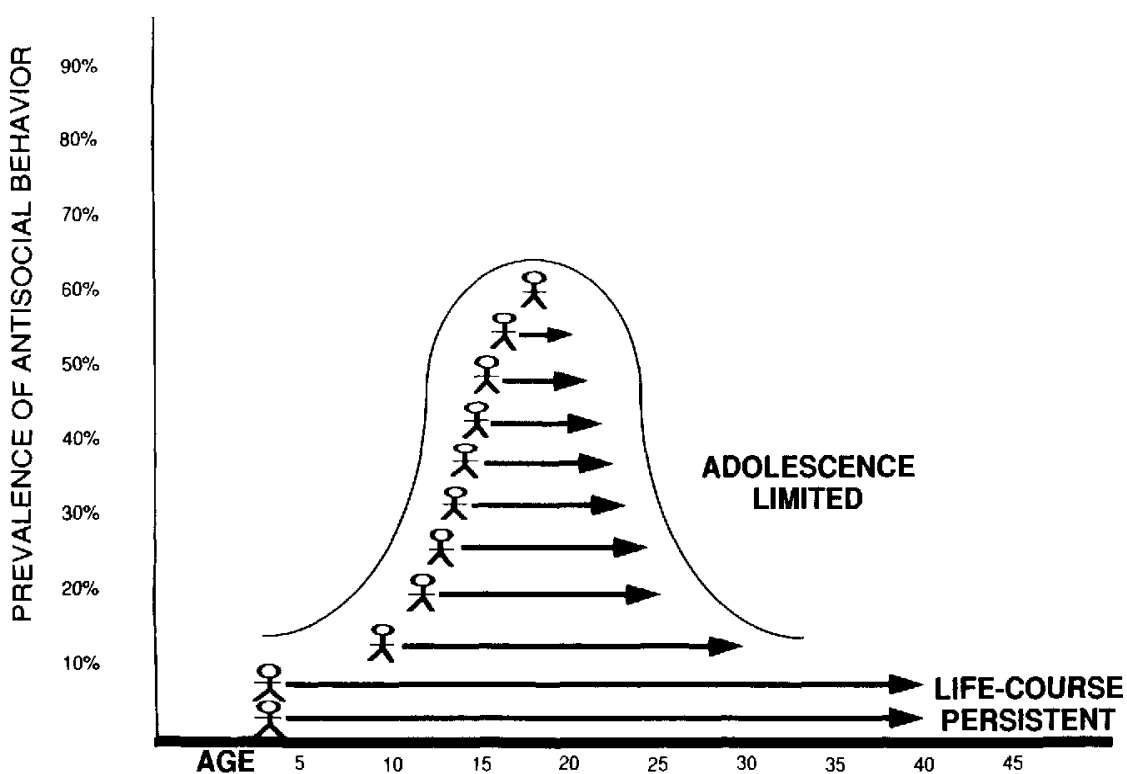
A developmental approach to sexual offending emphasises the process of/evolving nature of a child or adolescent as one who has not fully matured to adulthood, physically, cognitively, emotionally or socially. Developmental theories propose that individuals transition from the simple to the more complex, with the earlier stages laying the foundational skills needed in the later stages. For example, in Piaget's Theory of Cognitive Development, children progress from the simple sensorimotor stage to the formal operational stage (Piaget & Cook, 1952). The sequential nature of development is important and disturbances or interruptions at one stage impact upon the next. A famous example, though without an evidence-base, is Freud's Theory of Psychosexual Development and the supposition that disruptions at the oral, anal or phallic stages of childhood persist to fixation in adulthood e.g. smokers as orally fixated (Freud, 1905).

Developmental approaches also incorporate the individual strengths of the child and the protective factors available to them. Together, these can aid development of emotion regulation, resiliency, autonomy and can mediate adverse effects of trauma or disturbances, thus supporting development to the next stage. For example, emotional resilience has been viewed as a protective factor against trauma (Ford & Courtois, 2013; Agabali et al. 2005).

In the domain of juvenile sexual offending, developmental approaches focus on the factors and situations which led to the point of offending - the trajectory. It is important to recognise that the path to offending is not simply a series of behaviours matched to developmental stage or age, but the synthesis of personality, environment, and emotional and behavioural aspects that culminate in offending (including sexual offences). Leam et al. (2010) identified several important features in developmental pathways to offending including that the majority will have shown previous signs of behaviour at earlier developmental stages (but these may not have been attended to); that not all will progress to chronic or severe offences; and, that repetition, ageing and increased antisocial behaviour will likely increase the severity of acts/behaviours.

A robust and well-established taxonomy of developmental trajectories for offending is Moffitt's account of juvenile delinquency and anti-social behaviour. Moffitt (1993) highlights the relationship between age and crime, and the finding that most crime is committed during adolescence (Figure 3). This pattern of prevalence is well known across criminology, psychology and sociology literature (Farrington, 1986; Hirschi & Gottfredson, 1983; Bonta & Andrews, 2016).

**Figure 3: Moffitt (1993) Anti-social Behaviour Taxonomy: *Life-Course-Persistent* and *Adolescent-Limited* Offender Trajectories (from Moffitt, 1993, page 100)**



Within her original taxonomy, Moffitt identified two typologies and distinguished between those whose delinquency is isolated to adolescence and those whose antisocial behaviour continues across their lifespan - the *Adolescence-Limited offender* and the *Life-Course-Persistent offender*. Moffitt proposed that neural development and criminogenic family environment impact upon the stability (or instability) of anti-social behaviour and continued manifestation of criminality. Later research has led Moffitt to suggest a third trajectory - the *Low-Level Chronic offender* (Moffitt et al., 2002), which is similar to the *Life-Course-Persistent offender*, particularly in early childhood with frequent displays of aggressive or antisocial tendencies. The Low-Level Chronic offender however 'suspends' anti-social

behaviour, or it is intermittent at times throughout adolescence and young adulthood and thus differentiated from the chronic and persistent high levels of antisocial behaviour seen in the *Life-Course Persistent offender*.

As with adult sexual offending, there is the debate of a general delinquency hypothesis versus offence specialisation in juveniles (Agnew, 1984, 2006; Butler & Seto, 2002; Seto & Lalumier's meta-analysis, 2010). Moffitt does not explicitly address sexual offending and places its aetiology within an antisocial behaviour framework defined by continuation or desistence following adolescence. Other research however *has* focused specifically on the developmental trajectories of juvenile sexual offenders (Hunter et al. 2004, 2010). Lussier et al. (2012) examined a cohort of juvenile sexual offenders looking at early childhood, retrospectively, and at late childhood and adulthood, prospectively. From this, they proposed five separate nonsexual offending pathways and two trajectories specific to sexual offending – the *High-Rate Slow Desister* and the *Adolescent-Limited offender*. These two trajectories mirror Moffitt's original two trajectories (*Life-Course-Persistent* and *Adolescence-Limited*) in relation to age of onset (High-Rate-Slow-Desister have earlier display of behaviours than adolescence-limited offenders), and that only the High-Rate-Slow-Desisters continued offences into adulthood (post-18 years). However, Lussier et al. suggests that juvenile sexual offenders potentially follow different trajectories to general juvenile delinquency due to the nonsynchronicity of sexual and nonsexual trajectories.

Further sexual offending trajectory research has been undertaken by Vizard and colleagues (2007) on a specific subgroup of juveniles displaying harmful sexual behaviour. Their sample (n=280) consisted of individuals referred to non-residential forensic CAMHS specialising in sexually abusive behaviour between 1992 and 2003, and explored the influence of age of onset and presence of emerging severe personality disorder traits. The findings showed that those with early onset harmful sexual behaviour (<11years) differed significantly to those with late onset (>11year) on a range of psychosocial characteristics including difficult temperament, inadequate parenting, high levels of abuse and, high levels of insecure attachment. Regression analysis isolated four predictive risk factors for early onset sexually abusive behaviour (inadequate family sexual boundaries, lack of parental supervision, early difficult temperament and insecure attachment), however substance abuse was the sole predictive risk factor for late onset. Late-onset abusers were found to target specific victim

groups (females and much younger children) and used verbal coercion whereas early onset individuals were more likely to abuse a number of victim types and showed higher levels of antisocial behaviour. The presence of emerging severe personality disorder traits was found to distinguish a particular subgroup of juvenile sexual abusers. These young people displayed more predatory behaviour (including grooming and abusing adults and/or strangers) and used higher rates of force and verbal coercion than those without emerging severe personality disorder traits. This study also found that the emerging severe personality disorder subgroup was more predictive of chronic general offending and, that there was an interaction between early onset sexually abusive behaviour and emerging severe personality disorder traits.

In the trajectory research discussed the persistent offender groups contain smaller numbers. In Moffitt's cohort (2002), 10% of the 477 men were on the *Life-Course-Persistent trajectory*; for Lussier et al. (2012), approximately 10% of the juvenile sexual offenders were *High-Rate-Slow-Desisters* (52 out of 498); and in Vizard et al. (2007) 32 out of 187 were in the early onset sexual abusive behaviour and emerging severe personality disorder group associated with chronicity (17%). Despite these small figures, the potential trauma to victims can be seen in the vast number of crimes these persistent offender groups are responsible for. Research across a number of disciplines, from a variety of theoretical approaches, has repeatedly shown figures suggesting that between 5% and 6% of offenders are responsible for more than 50% of crimes (Farrington et al., 1986; Wolfgang & Tracey, 1982).

In addition to developmental trajectories, several other themes are prominent in explanations of juvenile sexual offending (perhaps more so than in adult sexual offending theories); these include attachment, a history of child abuse or neglect and family environment and hostile environment (Becker, 1998; Saunders et al, 1984; Craissati et al., 2002).

Attachment has been referred to on numerous occasions in the previous sections. It lies as a premise within Marshall and Barbaree's Integrated Model (1990) and is also key in Ward et al. (1998, 2002) Pathways Model. Although neither of these are attachment theories *per se* they nevertheless highlight that the relationship or interaction style of individuals who

display harmful sexual behaviours consists of interpersonal difficulties and social deficits associated with an insecure attachment style.

Attachment is, in essence, an entity of biology. Attachment theory, proposed by Bowlby, is a theory of process and product and concerns an individual's interactional style and pattern of relating to another (Bowlby, 1969; Ainsworth & Bowlby, 1991). The attachment process is said to occur during the first 18 months and refers to the primary-carer's (typically mother) ability to respond to the child when they seek re-assurance or protection at times of fear or in novel/anxiety-provoking situations. These early experiences can be said to be the *prima-facie* of relationships, forming the foundation for all subsequent relationships across the child's lifespan. Through this proximity-seeking behaviour, and the carer's response, individuals create internal-working models and develop their sense of self and 'other'.

Ainsworth (1979) identified three distinct attachment styles – secure, anxious-avoidant (insecure) and anxious-resistant (insecure). An additional insecure attachment style – disorganised - has been identified following subsequent research (Main & Solomon, 1986).

A robust evidence-base underpins the supposition that secure attachment is central in the healthy development of a child and vital for the successful transition into a secure, autonomous, socially competent adult (Fonagy et al, 2003; Ainsworth 1979), with Marshall (1989) drawing attention to the potential connection between intimacy deficits and sexual offending.

A large body of work has correlated insecure attachment with offending and antisocial behaviour in general, rather than sexual offending specifically (Marshall et al., 2000). Some studies have specifically looked at sexual offending and attachment (Marsa et al., 2004; Jamieson & Marshall, 2000), and further research has looked at particular attachment styles and sexual offending. Anxious-avoidant and anxious-resistant attachment styles are considered suboptimal attachment styles, whereas disorganised attachment is considered to be related to the development of psychopathology (West et al., 2000). Hypotheses regarding disorganised attachment and why it is considered conducive to sexual offending include the use of sexually coercive or abusive behaviours as a method of controlling and

stabilising emotional turbulence (Burk & Burkhart, 2003). However, evidence for the disorganised attachment hypothesis is tentative, and support for this attachment being specific to sexual offending alone is inconclusive e.g. Rich (2006) cites evidence suggesting that instances of disorganised attachment are far rarer than incidents of sexual offending and arguing that work in this field is “*driven by theory rather than empiricism*” (p166).

The impact of an individual’s own history of sexual abuse on future sexual offending remains unclear (van Wijk et al., 2007; Vizard et al., 2007; Brown & Finkelhor, 1986). It is widely recognised that not all who experience sexual abuse go on to repeat the cycle, however Hackett et al. (2013) reported as much as 50% of their cohort had, or were suspected of having,<sup>9</sup> some form of sexual trauma history. Other studies have reported varying prevalence figures between 40% and 71% (Becker et al., 1998; Vizard et al., 2007). One persistent pattern that is found across the research on juvenile sexual abusers is the high percentage of some form of abuse (physical, sexual, emotional) or neglect in the child’s history (Vizard et al., 2007). In addition to the aspects already referred to (re-enacting the abuse, identifying with the abuser, etc.), for children and adolescents the experience of their abuse is likely to be more immediate and present, simply due to the shorter time passed since the abuse as a consequence of their young age (and may even be ongoing). Childhood sexual trauma can lead to early sexualisation and thus the potential to display sexual behaviours earlier than non-abused peers (Finkelhor, 1979; Chromy, 2007; Johnson, 1988). Coupled with this, children and adolescents do not possess the cognitive or emotional maturity of adults, further impacting upon their resiliency and ability to process the experience. In their trajectory research Vizard et al. (2007) proposed that for some on the Late Onset trajectory their sexually abusive behaviour may have been the consequence of maladaptive strategies for managing interpersonal and social relationships associated with peers and teenage development; whereas the sexually abusive behaviour of those on the early onset trajectory may be the manifestation of strategies designed to cope with and make sense of their own sexual abuse experiences.

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<sup>9</sup> ‘strong professional suspicion’ – e.g. no documented evidence or allegations but no prosecution, see p232 for full details.



In addition to attachment and early adverse experiences, learning and social learning are also components within theories of juvenile sexual offending. For example, Marshall and Barbaree (1990) incorporated the pairing of negative emotions with the positive reward of orgasm as conditioning the development of sex as a maladaptive coping strategy within their model.

Social learning theory has clear applications to sexual offending, outside of Marshall and Barbaree's model, with its central concepts of observation, imitation, punishment and reward in addition to conditioning (Bandura, 1977; Pavlov, 1927). Social learning theory is frequently cited in relation to the media and popular culture, such as in the Columbine high school shooting (Ferguson, 2008; Anderson & Bushman, 2001), and advances in modern technology have led to concerns over the accessibility of pornography by children and young people. Recent National Society for the Prevention of Cruelty to Children (NSPCC) statistics from their specialist service for young people who display harmful sexual behaviours, Turn the Page, noted that the most common technology-assisted harmful sexual behaviour was developmentally inappropriate use/access of pornography, with 61% of users referred meeting this criterion (Hollis & Belton, 2017). Of the 275 children referred to the service, 91 displayed technology-assisted harmful sexual behaviours, including 'sexting', grooming and making/taking/distributing child sexual abuse images, as well as developmentally inappropriate use of pornography. Whilst the correlation between pornography use and offending in adults is weak or inconclusive, (with the exception of violent offenders and paedophiles/child pornography e.g. Svedin et al., 2011), the findings from the NSPCC data and concurrent literature reviews suggest the relationship may be more complex for younger offenders. For example, 61% (n=35) of young people recognised as 'dual offenders' (displaying online and offline harmful sexual behaviours), had used or accessed pornography as their only online behaviour, whereas 54% accessed pornography and committed other online and technologically assisted harmful sexual behaviours i.e. grooming, 'sexting', etc. Concerns regarding children and young people accessing sexually explicit material have emphasised the potential for early sexualisation, the development of distorted perceptions of sex and relationships, and the impact on emerging sense of self, attitudes towards women and expectations of sexual/romantic interactions.

Social learning theory is important, not only with regards to pornography or other accessible sexual content but also in relation to family environment. As discussed in Section 1.1, a potential reason for the under-reporting of juveniles perpetrating harmful sexual behaviour may be due to the family's moral perspective or judgement on what constitutes harmful sexual behaviour. Criminogenic or dysfunctional family environments may further facilitate the development of risky behaviours, for example by allowing access to pornography (through lack of boundaries or awareness), encouraging exploitative interaction styles (through rewarding this behaviour) or by modelling and displaying aggressive or abusive attitudes towards women or children, or cultivating the development of an external locus of control (Vizard et al, 2007; Worling, 1995; Ryan, 2010).

### **1.3.1 Theories of Sexual Offending for Juveniles with Intellectual Disabilities**

As discussed in Section 1.1, a proportion of adolescents with an intellectual disability display harmful sexual behaviour. However, this has been less investigated than adult sex offenders with intellectual disabilities and neurotypical adolescent sexual offending populations.

Theories of adolescent sexual offenders who possess a learning or developmental disability fall in the conceptual space between adult intellectual disability theories and neurotypical juvenile theories with a very scant evidence-base. As with adults with intellectual disabilities and neurotypical juveniles displaying harmful sexual behaviour, minimisation and denial can be a key factor in young people with intellectual or developmental disabilities (Tudiver & Griffin., 1992). Refusal to acknowledge sexuality or accept that the behaviour displayed is sexual in nature can lead to ignoring early signs of harmful behaviour, and failure to acknowledge or address the behaviours when initially displayed. This provides support for the Counterfeit Deviance hypothesis in that denying or minimising the behaviour can lead to a belief in the individual that the behaviour is not wrong as it is not recognised or corrected.

The denial of sexuality in individuals with intellectual disabilities can be illustrated by the lack of sex education received. For example, McCabe (1999) reported young people with an intellectual disability received less sex education than those with physical disabilities, and Murphy (2003) identified a 44% difference between those with intellectual disabilities who

completed sex education those without intellectual disabilities (55% for the former, and 98% for the latter). This not only restricts the prospects of acquiring biological/functional knowledge (as adapted for level of cognitive ability) but also the chance to learn about social and safety aspects of sexual relationships (Fyson, 2007; O'Callaghan, 1999). Many parents are uncomfortable discussing sex or relationship so sex education may be the only place a child or young person has to discuss sex and ask questions.

Juveniles with intellectual disabilities can also experience a lack of opportunity to discuss sex and relationships due to their potential social isolation or lack of peer group (Stokes et al., 2007). Young people with intellectual disabilities may not have the chance to talk with friends who have experienced romantic or sexual relationships, or ask questions of their peers that they are too embarrassed to ask an adult about. Additionally, adolescents with intellectual disabilities face similar difficulties in developing socially appropriate romantic or sexual relationship as adults. For example, residential placements or home schooling may lead to social isolation from peer groups and less integration with the community providing fewer opportunities to develop age appropriate relationships. The population or age range of peer groups within a residential placement or school may be considerably smaller or more varied. The typical age range in specialist schools is 2yrs-19yrs which is different to non-specialist education establishments which are generally larger and have separate primary, and secondary schools, and colleges (where the peer group is frequently restricted to a five-year age gap).

As with neurotypical juveniles, histories of abuse and attachment are relevant in theories of sexual offending by young people with intellectual disabilities. Children and young people with intellectual or developmental disabilities may experience disrupted attachment, not only as a consequence of sexual abuse but also through physical abuse or neglect (Hayes, 2004, 2010). Kendall-Tacket (2005) identified that children with intellectual or physical disabilities are at least twice as likely to be maltreated as children with no disability and it has been found that individuals with intellectual disabilities are at increased risk of being sexually abused than those with no disability or physical disabilities alone (Browne & McManus, 2010). Child sexual abuse for young people with intellectual disabilities holds the same potential impact and associated risk of repeating the abuse cycle as in those without disabilities. Additionally, attachment may be disrupted because of behaviours associated

with their condition which lead to the need for specialist support or residential placement, potentially removing them their primary care giver and placing them at risk of abuse.

Social learning theory concepts are relevant to those with intellectual disabilities, particularly as research has identified a proportion of males (adults and youths) with intellectual disabilities living in hostile and aggressive environments, including family homes, residential placements and young offender institutions (Craig et al., 2010).

Hayes (2010) identified a number of cautions that have been made with regards to the application of neurotypical developmental trajectories to child and young people with intellectual disabilities. For example, Lober et al. (1997) proposed a series of antisocial and disruptive acts in children which develop as they age, culminating in delinquency, involvement with the police, and recidivism. Additionally, work by Smallbone and Wortley (2004) identified a link between general rule-breaking behaviour and later sexual offending. The behaviours included within Lober et al (1997) such as academic problems or hyperactivity, and those associated with general rule-breaking, are however frequently seen in young people with intellectual disabilities as a concomitant of their diagnosis. These features, plus a low verbal IQ, may leave children and young people with intellectual disabilities vulnerable to experiencing difficulty in problem solving or resolving conflicts without utilising disruptive or aggressive behaviours (Hayes, 2010). Additionally, Hayes (2010) highlights that in these individuals, early signs of antisocial behaviour may be missed if they are viewed as an association of the intellectual disability itself. Alternatively, if these behaviours are a considered an affiliation/condition of the diagnosis rather than a tendency towards general delinquency, using them as early markers for later sexual behaviour problems may be inappropriate or excessively risk-orientated, especially if children and young people with intellectual disabilities follow a different trajectory to neurotypical juveniles to offending.

As has been shown in this and the preceding section, theories of sexual offending for adults and juveniles, and neurotypical and intellectually disable offenders, remain in flux. Common themes including attachment and history of abuse have been identified; and factors such as cognitive distortions and victim empathy are implicated, however the synthesis of these ideas into a coherent theory with the explanatory power to account for why a sexual

offence is committed rather than a non-sexual offence, why some individuals who have been sexually abused go on to repeat the cycle, or why some juveniles commit sexual offences in adolescence alone and others go on to display chronic criminal behaviours, has yet to be developed.

Regardless of the hypothesis or view of sexual offending as a specialist typology or part of general delinquency, the fearful premise remains that today's sexually deviant and abusive youth will become tomorrow's sexual offenders, with approximately one third of adult sexual offenders committing assaults on children during their teenage years (Erooga & Masson, 2006); and between 50%-80% of the adult sex offenders acknowledging a sexual interest in children during adolescence (Abel et al. 1993; Hoghughi et al. 1997). However, in contrast to the figures above, sexual recidivism research indicates that juveniles are more likely to re-offend non-sexually than sexually, and display patterns more akin with general offending than those seen in adult sex offenders (Alexander, 1999; Reitzek & Carbonell, 2006).

Further investigation is undoubtedly needed to establish the potential (and pathway) of juveniles who display harmful sexual behaviour to develop into adult sexual offenders. This research is not only important from a prospective risk perspective but also because clearer understanding of this relationship will guide theory and inform therapeutic treatment for both adults and juveniles who display harmful sexual behaviours.

## **1.4 Therapeutic Treatments for Sexual Offenders**

### **1.4.1 Treating Sexual Deviance**

Early attempts to address deviant behaviour strived for extinction or deterrence of behaviours, rather than rehabilitation. Rehabilitation of offenders, including sexual offenders, did not become a dominant ideology until the 1970s. The first models for treating sexual offenders applied behavioural techniques, with these methods reigning supreme until the 1980s. The principles of social learning theory (Bandura, 1977) and adaptations of work by Pavlov (1927) and Skinner (1953) were used to administer both overt and covert conditioning techniques to treat sexual deviancy and offending (including homosexuality). For example, electrical aversion therapy was used by Abel et al. (1970),

Marshall (1971) and Quincy et al. (1976), pairing sexually arousing deviant stimuli with a mild electric shock (operant conditioning). Marquis (1970) employed orgasmic reconditioning, this involved masturbating whilst watching or imagining 'normal' or non-deviant' fantasies (classical conditioning).

In addition to the cultural shift in the 1980s in Western culture towards 'treatment' over punishment, rehabilitation also began to be influenced by cognitive psychology. Seminal work by Abel (1984) identified the importance of cognitive distortions in anti-social and offending behaviour, along with the recognition of social skills deficits in sexual offenders (Becker et al., 1978). As such, treatment programmes broadened beyond reconditioning and extinction to include increasing victim empathy and developing pro-social skills. The recognition of these wider issues led to a paradigm shift, resulting in the development of the first cognitive behavioural therapy (CBT) programmes for the treatment of sexual offenders (Marshall & Williams, 1975; Abel et al., 1978, Marshall & Laws, 2003a; 2003b).

#### **1.4.1 Rehabilitation, Relapse Prevention and Psychotherapy**

Therapeutic treatment and the notion of offender rehabilitation has not always been well received. This is true particularly in relation to cases that cause public outrage such as crimes of a sexual nature. In 1974 Martinson published 'What Works', a controversial paper/report which implied 'nothing works' in the rehabilitation of offenders. This paper reinforced the punishment and exclusion of offenders rather than promoting rehabilitation and social re-integration. At the time, and since Martinson, opposition to this view has been made with many arguing that offender rehabilitation 'does work' (Andrews & Dowden, 2005; Gendreau, 1981; Hanson et al., 2005; Losel & Schumacker, 2005). The wording of the opposition position is carefully chosen in that those opposing Martinson are not claiming 'success', but rather disputing the premise that 'nothing works'. This is a small but important distinction. Research into offender rehabilitation does show reductions in future incidence of criminal behaviours and that treatment 'can' work. However, effect sizes and outcomes are not as high or consistent as would be anticipated (Schmucker & Lösel, 2008; Mews, Di Bella & Purver, 2017), with re-offending rates typically placed between 10 and 15% after 15 years (Hanson & Bussiere, 1998).

The discourse on offender reforms, including sexual offenders, continues globally, publicly and persistently. One of the key contentions in this deliberation lies in the premise of rehabilitation.

Rehabilitation appears a straightforward concept, however a precise definition or operationalised construct that can transcend theories of crime and offending, and account for ‘desistance’, ‘re-entry’ and, the ‘resettlement’ of offenders remains elusive (Ward & Maruna, 2007). Varying political agendas and policing initiatives have altered their focus from punishment and ostracising practices to claims of commitment to ‘treatment’ for re-integration on release, alluding to a practice of reforming an offender from their old ways to a new pro-social persona, able to stay within social laws. How this is to be done often remains absent from policy documents and speeches, with loose references to mental health and clinical terminology discussing ‘treatment’ and ‘psychological input’, or in one of the latest policies regarding youth re-offending, ‘education’ (Ministry of Justice, 2013). What is perhaps conjured when considering rehabilitation is a medical model framework, akin to that proposed by Wade and de Jong (2000):

“Rehabilitation is a reiterative, active, educational, problem-solving process focused on a patient’s behaviour (disability), with the following components:

- Assessment – the identification of the nature and extent of the patient’s problems and the factors relevant to their resolution
- Goal setting
- Intervention, which may include either or both of (a) treatments, which affect the process of change; (b) support, which maintains the patient’s quality of life and his or her safety
- Evaluation – to check of the effects of any intervention”

(p1386)

The rehabilitation of sexual offenders would comply with the definition above, primarily focused upon the intervention stage of treatment and support (which will align with concepts of relapse prevention), with future instances of sexual offending as the primary measure of treatment and rehabilitative success. The overriding objective, therefore, is to reduce the number of future victims and prevent further harm to society. Offender

‘treatment’ as such, is designed to reduce an offender’s risk, with efficacy determined by recidivism rates.

In contrast, psychological therapy *per se* is designed to ‘treat’ clinical and behavioural presentations which result in psychological distress or impaired functioning (in a personal or social capacity). Therapeutic outcomes or objectives are concerned with identifying needs in order to improve health, safety and quality of life for the individual/s in receipt of treatment (British Psychological Society 2017).

This therefore presents a potential conflict in the management of risk and rehabilitative treatment of the sexual offender, with possible opposing priorities for treatment outcomes by therapist and offender. Challenges are also raised in methods of assessing treatment efficacy. For example, does frequency and/or severity of the behaviour count? If so, whilst reduced frequency or severity may be considered ‘improvement’ and a reduction in risk in relation to the offender, the impact on the victim may be unchanged.

It is perhaps, therefore, unsurprising that the evidence base regarding treatment for sexual offenders is incomplete and inconsistent, and continuing to identify ‘what works’. As discussed at the start of this chapter, with the abolition of early-to-mid-1900s behavioural approaches to sexual deviance in Western ideologies, cognitive behavioural therapy (CBT) has become the dominant approach in the treatment of sexual offenders.

#### **1.4.2 Cognitive Behavioural Therapy**

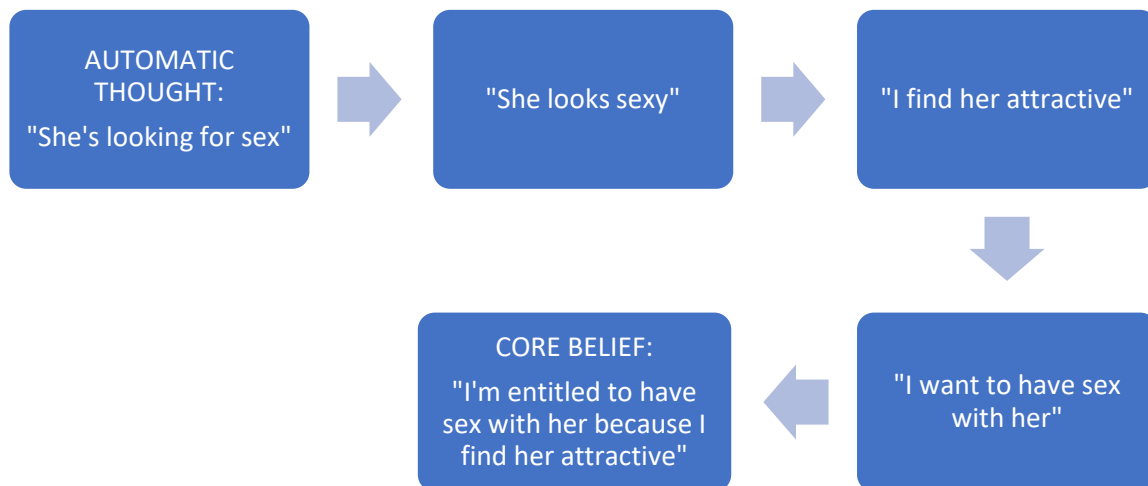
The recognition of cognitive distortions in offending behaviour was fundamental in influencing rehabilitation (e.g. Lipsey et al., 2001) and Abel and Blanchard’s (1974) work emphasised the importance of deviant fantasies and thought patterns in sexual offending, and of addressing these rather than focusing just on the reduction/elimination of overt behavioural manifestations of deviant desires alone.

The cognitive behavioural model utilises the relationship between thoughts, feelings and behaviours, seeking to identify and address automatic thoughts and core beliefs that translate into sexual offending behaviours. For example, seeing a woman in a short skirt and experiencing the automatic thought (a cognitive distortion) of “she’s looking for sex”



can translate into a core belief regarding a sense of entitlement (Figure 4) and potentially underlie an act of rape.

**Figure 4: Breakdown of automatic thoughts and core belief in response to seeing a woman in a short skirt**



Current CBT programmes stem from addiction models used to treat disorders of impulse (Laws et al., 2000). In considering sexual offending within such framework, treatment not only seeks to reform behaviours as described above, but also provides the second aspect of Wade and Jong's (2000) 'treatment' aspect of rehabilitation in providing support in the form of relapse prevention. These feature as maintenance strategies (Larimer & Marlatt, 2004), enabling an offender to (i) recognise high-risk situations (antecedents to offending, such as risky thought patterns, 'chain' behaviours on the offending cycle, or parallel behaviours), and (ii) manage high risk strategies (awareness of the determinants of relapse, use of adaptive coping strategies, seeking support and utilising protective factors identified in treatment) (Laws et al., 2000; Hanson, 2000).

As such, typical CBT treatment programmes consist of challenging cognitive distortions and attitudes consistent with offending, increasing victim empathy and developing a relapse prevention plan to aid in the self-management of risk factors (Laws et al., 2000). For sex offenders with intellectual disabilities, they also include a sex education and relationships

component as well as teaching the cognitive model (as described above) and, a (simplified) version of the offending cycle (see Figure 1: Finkelhor Model).

Seminal rehabilitation theory concepts of *Risk*, *Need* and *Responsivity* feature heavily in traditional offending treatment programmes (Andrews & Bonta, 2007, 2011). The Risk-Need-Responsivity model (RNR) incorporates an assessment of: (i) the potential harm that an individual poses to society through re-offending (*risk*), (ii) their dynamic risk factors or criminogenic needs (*need*), and (iii) their engagement or accessibility to treatment (*responsivity*). For example, an individual at a high risk of sexually reoffending would be recommended a higher intensity treatment than someone who is at a lower risk, with the treatment programme being tailored (as far as is possible owing to a number of practical, theoretical, financial and resource restraints) to the individual's learning or engagement style to address their individual criminogenic needs. Responsivity concerns not only the offender or individual at risk, but also the therapist and programme components. It can be divided into internal and external responsivity, with the former referring to the individual's internal characteristics such as personality, cognitive ability, etc. and the latter encompassing the actual techniques used in delivering the treatment and the relevant environmental factors (Serin & Kennedy, 1997).

Treatment programmes using the RNR model have historically utilised avoidance goals in treatment. These operate on the premise of inhibiting behaviour in order to refrain from committing a sexual offence. However, some research has shown poorer treatment outcomes in focusing on avoidant goals, in contrast with approach goals (aiding the individual in working towards gaining something) which show better results for engagement and investment in treatment and not returning to offending behaviours (Mann et al., 2004).

There is a great deal of empirical support for the principals within the RNR model (e.g. Bonta & Andrews, 2007; Duwe, 2015), however it is not unchallenged and a number of criticisms have been levelled at the RNR model and those advocating the recidivism-risk approach. These include a preoccupation with the offender's 'risk profile' and disregarding social or contextual factors, as well as a passive approach to therapy and the above-mentioned focus on avoidance goals (Duwe & Kim, 2018; Ward & Maruna, 2007).

Alternative approaches to the RNR model, stem from a strength-based treatment paradigm which proposes that treatment includes personal growth and social development. Such treatment models draw on theories discussed in Section 1.2 and 1.3, including Marshall and Barbaree's (1990) Integrated Model of Sexual Offending and Ward and Siegert's (2002) Pathways Models, which seek to explain sexual offending beyond deviant interests and to incorporate poor social skills, attachment problems, and interpersonal/intimacy difficulties. Strength-based approaches are predicated on the idea that by incorporating the individual's strengths and protective factors into treatment and assisting them in developing pro-social skills and alternative, adaptive methods of meeting their needs, will assist in reducing criminal behaviour (Ward & Brown, 2004; Aspinwall & Staudinger, 2003).

An example of a strengths-based programme is The Good Lives Model (GLM) (Ward & Brown 2004; Ward & Marshall, 2004) which argues that focusing on risk alone is not sufficient to reduce recidivism. The GLM proposes that in addition to risk reduction, treatment programmes should aim to improve the individual's quality of life and/or their ability to lead a more fulfilling life – 'the good life'. The GLM hypothesises that offenders attempt to attain primary 'goods' (relationships, sense of acceptance, achieving mastery, autonomy, etc.) (Ward, Mann and Gannon, 2007) through maladaptive strategies and/or have insufficient means to achieve a good life. The model seeks to address these insufficiencies and promote attainment of pro-social goals, equipping offenders with the skills and abilities to do so. The treatment strives to do this in addition to managing risk, proposing that anything which is seen as beneficial or advantageous by the individual will be more motivational and likely to result in internalised, lasting change (Ward, Mann and Gannon, 2007). Although developed separately, the GLM incorporates positive psychology (e.g. Seligman & Csikszentmihalyi, 2014; Aspinwall & Staudinger, 2003) and the criminological 'strain theory' approach discussed in Section 1.2 (Agnew, 1992), in treating sexual offending.

The GLM is a relatively new model, therefore the evidence-base and empirical support are limited. However, work by Lindsay et al. (2007) has shown promising results and the theoretical grounding has led to suggested adaptations for individuals with intellectual or developmental disabilities and children and young people (Ayland & West, 2006; Malovic et al., 2018).

Despite reported inconsistencies, recidivism rates of sexual offending are generally lower than non-sexual recidivism (Hanson & Bussière, 1998). However it should be noted, as identified in Section 1.1, that there is wide recognition of persistent under-reporting of sexual abuse/assault (Davies & Leitenburg, 1987; Furby et al., 1989), including in those with intellectual disabilities (Murphy, 2007).

The spheres of efficacy in sexual offending treatment could be widened to include measures of rehabilitation success such as personal development and reduced frequency or severity of abuse. However, issues remain regarding how severity of abuse for a victim could be measured and, indeed, whether non-criminogenic needs or behaviours are pertinent to the Criminal Justice System or fall within the realm of health and social services.

Findings regarding recidivism rates following CBT treatment for sexual offenders are inconsistent, with some studies reporting very small or no effects (see Schmucker & Lösel, 2008), however most studies show reliable and positive effects. For example, a meta-analysis of specialised psychological treatment by Gannon and colleagues (2019) reported a 32.6% reduction in sexual recidivism following sexual offending treatment, and recidivism rate of 9.5% for treated individuals compared to 14.1% in untreated individuals. The meta-analysis further identified that consistent facilitation of treatment by a qualified licensed psychologist (rather than occasionally present or not present) in a group (as opposed to individual treatment or a mixture of group and individual) was associated with decreased sexual recidivism, as was regular staff supervision. In addition, supervision effects were optimal when provided by a psychologist. Despite a large evidence-base of studies, and whilst not advocating as strong a position as Martinson, questions have been raised over the efficacy of CBT programmes for sexual offenders in reducing re-offending. For example, Cochrane reviews in 2003 and 2012 demonstrated no significant difference in CBT approaches over other forms of treatment for sexual offenders, and within the Gannon et al. meta-analysis higher reductions in sexual recidivism were noted when CBT was paired with a behavioural component (some form of arousal reconditioning), compared to CBT programmes without (or behavioural components were unknown) The 2003 Cochrane review showed a positive 'trend' in reduction in recidivism using group CBT approaches, however this was not found in the 2012 review. Furthermore, a recent evaluation of the National Offender Management sexual offending CBT treatment programmes (Core SOTP)

reported that treated sex offenders committed more re-offences than non-treated (10% compared to 8%) over an average follow-up period of 8.2 years (Mews Mews, Di Bella & Purver, 2017).

However, rather than citing this inconsistency as evidence that treatment is ineffective, it has been suggested that these discrepancies may be the result of methodological issues or difficulties in attaining 'quality' research, such as the challenges associated with conducting randomised controlled trials and identifying appropriate comparison populations, rather than the efficacy of the treatment itself (Dennis et al., 2012; Duggan and Dennis, 2014; Hanson et al., 2009; Marshall & Marshall, 2007; Mews et al., 2017; Sturgeon et al., 2018). Furthermore, Gannon et al.'s (2019) meta-analysis of sexual offending treatments included the Mews et al. paper and still reported significant reductions in sexual recidivism for treated offenders compared to non-treated (with the paper excluded<sup>10</sup> a larger effect and higher significance levels were found). Undertaking randomised control trials with control groups raises ethical issues in withholding or delaying access to treatment. Alternatively, the use of 'drop out' or 'treatment refusal' groups as a comparison has the potential to bias findings due to motivational or individual variables differing between the treatment and control group participants (Långström, 2013). Gannon et al. (2019) attempted to address this caveat in rating the quality of the studies included within the analysis, including the matching of control and treatment group participants. Their findings illustrated that recidivism reductions in violence and sexual offending in specialised treatment programmes were impacted little by study design and matching of participants (Gannon et al., 2019).

Whether coming from the RNR model or a strength-based approach, there has been recent debate over the relevance of some components within sex offender treatment programmes (e.g. victim empathy) and whether they have any impact upon the individual's decision to offend. Both RNR and strength-based programmes include addressing victim empathy, however a meta-analysis by Hanson et al. (2005) demonstrated that only deviant sexual interests and anti-social behaviour/personality was predictive of sexual recidivism (this was found in both adults and adolescents). Within this analysis, Hanson et al. also looked at

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<sup>10</sup> Random and fixed effects models were calculated to include and exclude the Mews et al. paper due to the sample size rendering the paper an outlier.

psychological distress, denial and stated motivation in addition to victim empathy levels and found no relationship between these and recidivism.

Regardless of the ongoing challenges and deficiencies identified in CBT models of sexual offending treatment, programmes are available both for individuals with intellectual and developmental disabilities and those without, in mental health and forensic settings from community and secure services, as well as in prisons and via probation services (Marshall, 1996; Lindsay et al., 1998; Rose et al., 2002). This approach remains current best-practice, with a number of empirical studies, systematic reviews and meta-analyses advocating its continued use for both non-intellectual disabilities (e.g. Marshall, Fernandez & Serran, 2003; Losel et al, 2005; Mews et al., 2017) and intellectual disabilities groups. Systematic reviews exploring the use of such treatment programmes for individuals with intellectual disabilities continue to advocate for the use of such programmes with positive treatment outcomes identified in changes of attitude, sexual knowledge and empathy (Cohen & Harvey, 2016; Jones & Chaplin, 2017; Marotta, 2017). However similarly to neurotypical reviews, these reviews highlight the low quality of study methodologies, short follow up periods and need for more stringent investigation with adequate control-comparison groups before being able to draw conclusions regarding reductions in recidivism following treatment.

### **1.4.3 Alternative Treatment Approaches to CBT**

#### Psychopharmacology

Drug treatments, or the 'chemical castration' of sexual offenders, have been used since the 1940s. These methods essentially perform the same function as surgical castration but with less permanent or 'mutilating' effects. They are designed to treat on a physical level, impacting on an individual's sexual drive or urge. Pharmacological treatments are considered by some to be complementary to psychological approaches that address thoughts and attitudes which are hypothesised to increase the risk of sexual recidivism.

Early pharmacological interventions involved large doses of oestrogen which did show evidence of lessening sexual drive and the continued use of hormonal treatments have illustrate positive outcomes which are comparable, if not superior, to other psychological treatments, including CBT (Hall, 1995; Glasser, 2003). However, such drugs have significant

side effects on an offender's health and studies demonstrate similar methodological biases as CBT treatment research (Grubin, 2008; Glasser, 2003).

Drug treatments today include the continued use of testosterone-lowering drugs, including anti-androgens cyproterone acetate (CPA), medroxyprogesterone (MPA) and gonadotropin-releasing hormones (GnRH) agonist, as well as selective-serotonin-reuptake-inhibitors (SSRIs) and anti-psychotics, although use of the latter is rare without co-morbid psychiatric diagnosis (Sajith et al., 2008). Anti-androgens continue to raise ethical concerns over side effects, with risk of liver damage, ischemic heart rhythm and feminization, and GnRH antagonist shows less severe side effects but can result in reduced bone density (Rosler & Witztum, 1998; Grasswick et al., 2003).

The reduction of deviant fantasies and pre-occupational sexual thoughts is widely reported in the literature on pharmacological interventions (Meyer et al., 1992; Hill et al., 2003). For example, Turner et al. (2013) reported reductions in both frequency and intensity of sexual thoughts for those on testosterone-lowering medication (CPA and GnRH). However, many of the studies rely on the use of self-reports (Rosler & Witztum, 1998). A meta-analysis by Losel & Schumacker (2005) showed lower recidivism rates in drug therapies compared to CBT however they recognised that analysis of efficacy in reducing recidivism is limited by a lack of randomised controlled trials and methodological flaws, again including a lack of control groups and the ethical complexities of withholding treatment for comparison groups. Drug treatments are rarely given alone and many of the studies reporting lower recidivism rates also included simultaneous psychotherapeutic treatment (Turner et al., 2013; McConaghy et al., 1988; Meyer et al., 1992).

Use of drug therapy in individuals with intellectual or intellectual disabilities is rarely reported but there is a limited literature available. A review by Sajith et al. (2008) found three studies investigating the use of anti-androgens with men with intellectual disabilities. These studies only included three individuals with intellectual disabilities, however all three showed improvement in inappropriate sexual behaviour and relapse once treatment (MPA) was withdrawn (Ross et al., 1987; Cooper et al., 1990; Myers, 1991). Similarly, for GnRH, a small number of cases are reported regarding men with intellectual disabilities in which reductions in inappropriate sexual behaviour were shown, with behaviours re-appearing in

two cases once treatment stopped (Thibaut et al., 1996; Realmuto & Rubble, 1999; Kreger & Kaplan, 2001).

Sajith et al., (2008) emphasised that additional caution should be taken in considering prescribing drug therapy for sexual offenders with intellectual or developmental disabilities due to the risk that they may be used to repress sexuality in individuals with intellectual disabilities. As discussed in Sections 1.1 and 1.2 there is suggestions of denial or minimisation/repression of sexuality by society for individuals with intellectual disabilities (Tudiver & Griffin, 1992). There are also further ethical considerations to be taken into account regarding informed consent and capacity to agree to treatment. Communication difficulties or level of understanding may also impact on being able to express or monitor potential side effects.

Drug treatment may be applicable to treating to sexual offenders, particularly if, as Hanson et al. (2005) suggest, deviant fantasies are a predictor of recidivism. However the debate remains as to whether the evidence base for drug therapy for the treatment of sexual offenders, with or without intellectual disability, justifies its use (Sajith et al., 2008).

#### Psychodynamic and psychoanalytic approaches:

Psychodynamic or psychoanalytical approaches target an imbalance between inner psychological constructs that Freud identified as the Id, Ego and Superego (Freud, 1905). These approaches were popular prior to the dominance of CBT and focused upon strengthening the moral superego hereby reducing the influence of the sexual and impulsive Id (sexual offending being seen as a 'failure to mature') (Cordess, 1996; Glasser 1988). Such approaches can also be used in conjunction with drug therapy (Turner et al., 2013). Evidence for psychodynamic or psychoanalytical treatment is sparse with few papers reporting significant positive effects on recidivism (Kreigman, 2006), and some reporting negative treatment outcomes (Romero & Williams, 1983, 1985).

Due to the significant number of sexual offenders with their own history of sexual abuse, trauma focused work draws on attachment theory and can include the use of dialectic behavioural therapy (Sakdalan & Gupta, 2014). The treatment is designed to address the way in which the sexual offending (maladaptive behaviours) have developed when viewed



through a 'trauma-focused lens' (Levenson, 2014). These approaches could be complementary to drug therapy or may be concurrent with a CBT programme. Trauma approaches are utilised more with children and young people displaying harmful sexual behaviour, due to the high percentage presenting with symptoms of post-traumatic stress disorder (PTSD) (McMackin et al., 2002), however little research has yet been produced providing an evidence-base for its impact on sexual recidivism.

#### **1.4.4 Treatment for intellectually disabled adult sexual offenders**

Despite some inconsistency of findings and alternative therapeutic approaches, CBT group programmes remain the accepted practice for treating offenders who commit crimes of a sexual nature in adult and adolescent neurotypical populations, and for those with an intellectual or developmental disability (National Institute for Health and Care Excellence, NG-55; Grimshaw et al., 2008).

There is conflicting evidence as to whether sexual recidivism rates are higher amongst intellectual disabilities populations compared to non-ID, with many researchers claiming higher rates in the former. However, this may be a consequence of increased rates of supervision, either from previous offending or for other health and/or social care needs, plus a potentially higher propensity to be apprehended due to victim selection or modus operandi (i.e. they may be more likely to be impulsive/opportunistic rather than engaging in elaborate and complex in planning) (Craig et al, 2010).

In two small studies evaluating a community-based treatment programme for sexual offenders with intellectual disabilities (n=6 and n=14), Craig et al. (2006, 2012) reported a 0% reconviction rate at twelve months follow up. There was a short follow-up time in these studies, however results contrast with other studies showing recidivism rates in intellectual disabilities populations of 30.8% (Klimecki et al., 1994), where 84% of offences occurred within 12 months of release. Lindsay et al., (1998) also reported a 0% reconviction rate at least four years following treatment, however one individual (9%) had displayed further sexually abusive behaviours. Recidivism rates for the SOTSEC-ID programme show a similar low rates of conviction. No convictions for sexual offences were recorded during the six month follow up, although four men (8.69%) engaged in further sexually abusive behaviours (SOTSEC-ID, 2010). At a mean follow-up of 44 months (SD=28.7, range=15-106 months), 32%

of offenders (n=11) displayed further sexually abusive behaviours, with only two men (2.9%) receiving convictions (Heaton & Murphy, 2013).

Adaptations of sexual offender treatment programmes for individuals with intellectual or developmental disabilities only emerged in the late 1990s. For example, the prison programme for offenders with intellectual disabilities, the adapted SOTP (ASOTP), was not approved in prisons until 1997 (Williams et. al., 2007).

CBT programmes were previously not considered appropriate for individuals with intellectual or developmental disabilities. Concerns regarding the level of cognitive functioning required to understand the link between thoughts, feelings and actions led to reliance on behavioural therapies (Beail, 2017; Kroese, Dagnan & Loumidis., 1997; Vereenoghe and Langdon, 2013). However, work by Kroese et al. (1997) has suggested otherwise, and adapted programmes have successfully used CBT with individuals with mild to moderate intellectual disabilities. For example, Taylor (2002) and Taylor et al. (2016) explored the use of an adapted CBT model to address anger and violence in individuals with an intellectual disability. Additionally, the EQUIP programme (Gibbs et al., 1995), a youth CBT programme designed to address moral reasoning, distorted cognitions and social skills, has been adapted for adults with intellectual disabilities and produced positive outcomes in moral reasoning ability, problem solving and reductions in cognitive distortions (however no significant effects were found in relation to anger) (Langdon et al., 2013). There is preliminary evidence for a CBT model for fire-setters with an intellectual disability (Clare et al., 1992), along with studies using CBT to treat depression in individuals with intellectual disabilities (e.g. Lindsay, 1993; Jahoda et al., 2006), and Sofronoff et al. (2005) used an adapted CBT approach to treat anxiety in individuals with ASD.

Adapted sex offender treatment programmes are designed for those with a mild to moderate impairment in cognitive functioning but can also include the borderline intellectual disability IQ range (>70 <85), with these programmes typically considered appropriate for those with an IQ ranging between 55 and 65 to 80 (Williams & Mann, 2010; SOTSEC-ID, 2010). The adapted programmes differ from neurotypical treatment in that they have a larger emphasis on sex education and relationships, legal and illegal behaviours, and have a more simplified cognitive model. They still incorporate components addressing

victim empathy, cognitive distortions and a relapse prevention plan. The material is adapted for the level of cognitive functioning of the group and there is more repetition of materials (e.g. more detailed recapping of previous week's work) and higher use of visual aids. Supporting evidence for the success of these adaptations has been shown in multiple studies (Heaton & Murphy, 2013; Lambrick & Glaser, 2004; Lindsay et al., 1998; SOTSEC-ID, 2010).

However, as these adaptations are new to the field of sexual offending treatment there are as yet, no randomised control trials of the CBT with 'no treatment' or 'waiting list' control groups. Therefore, many of the criticisms and uncertainties levelled towards programmes used with neurotypical populations also apply to adapted CBT sex offender treatment programmes for intellectual or developmental disability populations.

#### **1.4.5 Treatment for young sexual offenders with and without intellectual disabilities**

Adaptations of programmes based on RNR or strength-based models have been developed for adults with intellectual or developmental disabilities and for children and young people (e.g. the Adapted Sex Offender Treatment Programme (ASOTP), SOTSEC-ID, GMAP). There are also a very small number of programmes developed, or being adapted or developed, for children and young people with intellectual or developmental disabilities (Malovic et al., 2018; Ayland & West 2006).

As said in previous sections, juveniles were once viewed as mini-adult sex offenders with adult treatment models applied to young offenders (Lane & Lobanov-Rostovsky, 1997). These took a typically risk based focus, coinciding with a punitive approach to young offenders at that time. Later developments in research on juvenile sexual offending have identified patterns of recidivism indicating that a juvenile who commits a sexual offence is more likely to reoffend by committing a non-sexual offence and such adolescents are more akin to other juvenile offenders than adult sexual offenders (Hackett, 2014; Przybylski 2014). This has led to treatment programmes which incorporate developmental and systemic approaches, designed specifically for children and young people who display harmful sexual behaviour (McCrary, 2011; Malovic et al., 2018; Ayland & West 2006).

Modern youth programmes are typically more holistic and strength-based than adult programmes. In addition to addressing risk, needs and deviancy they also utilise a goal orientated approach and encompass non-criminogenic needs, address psychosocial skills, incorporate family involvement and introduce 'the sexual abuse cycle' (Lane 1997; Ryan et al., 2010; Rich, 2006).

The recognition of an offender's own history of sexual abuse is not traditionally addressed in adult CBT treatment programmes. There are a number of potential reasons as to why it is included for children in treatment including that the abuse may be more immediate due to the lack of time passed, that they may not have the cognitive maturity to comprehend the impact of what has happened to them, and a belief that using the abuse cycle can help them to understand the link between thoughts and feelings about what has happened to them and their subsequent behaviour (Ryan et al., 2010).

In youth programmes, there is less emphasis on deviant sexual interests (with the exception of those with specific paraphilias – Hunter & Becker, 1994). One suggestion for why this is, is that children and adolescents are earlier in the cycle of developing habituated patterns of deviant arousal. As discussed in Sections 1.2 and 1.3, Marshall and Barbaree (1990) propose that deviance stems from masturbatory conditioning, with orgasm as a positive reinforcer for deviant fantasies and sex being used as a coping mechanism for negative emotions. In adults such patterns of coping and arousal are 'stronger' and therefore require more intensive treatment. Some research argues that this is not the case in youth offending (e.g. Prentky et al., 1989).

Many of the theories discussed thus far have considered the role of the family and impact of pro-criminal attitudes, therefore child offending programmes also incorporate family involvement which is not typical in adult treatment. This involvement can be in the form of multi-systemic therapy. Research by Henggeler et al. (1996) has shown multi-systemic therapy to be successful in general delinquency and a pilot on sexually abusive youth demonstrated promising results (e.g. Borduin et al., 1990). Alternatively, CBT programmes can include parents or carers of the child in a mixture of joint and individual sessions. These can centre on supervision and development of safety plans or may involve family therapy and addressing dynamics and relationships.

Treatment programmes considered appropriate for adolescents with intellectual disabilities who display harmful sexual behaviours stem from two models. One follows the format of programmes designed for adults with intellectual disabilities (i.e. incorporating more time, visual aids and material adapted to the level of cognitive functioning), whilst the other utilises programmes developed for young children (<12 years old) *without* intellectual disabilities who display harmful sexual behaviours (Ryan et al., 2010).

Despite figures indicating a significant portion of children and young people who sexually offend possessing an intellectual or developmental disability (as discussed in Section 1.1), it has only been in the last decade that programmes have been developed for this population (Malovic et al., 2018; Vettor & Griffin, 2012), and as such the evidence-base is scarce with figures on efficacy and recidivism lacking.

## 2 CHAPTER TWO: AUTISM SPECTRUM DISORDERS

### 2.1 Prevalence and Symptomatology

Originally identified in 1943, ASD has become widely recognised in today's society. It is a pervasive developmental disorder historically thought to be determined as a single disorder (Kanner, 1943) but more recently characterised as a triad of impairments which lie along a spectrum (Wing & Gould, 1979). The triad reflects difficulties in communication, social interaction and inflexible thinking styles. Kanner (1943) described autism as an "inability to relate" (p242), and the combination of clinical features associated with the diagnosis can result in social and communication difficulties, a lack of ability to generalise information, resistance to change, impairments in understanding social rules, social isolation or withdrawal, stereotypies and ritualistic behaviours, and obsessions or special interests (Attwood, 2006, 2005; Baron-Cohen, 1989; Winter-Messiers, Herr et al., 2007).

Although currently classified as a 'condition' or 'disorder' the symptoms of ASD occur on a spectrum and not all may impair functioning or quality of life. For example, the ability to focus upon the minutiae of detail or a proclivity for systemization of data can result in employability advantages in certain fields e.g. the high percentage of individuals with ASD working in Silicon Valley (Baron-Cohen, 2012). Additionally, although extremely rare, savant-like skills may be present and afford an individual a level of expertise not necessarily attainable by experience or practice (Howlin et al., 2004).

Changes in understanding and perceptions of ASD have led to it being considered a feature of neurodiversity, proposed as a *difference* rather than a disorder or disability (Silberman, 2017). The neurodiversity movement places itself within a social model of disability (e.g. Shakespeare, 2006; Shakespeare & Watson, 1997) and argues that ASD is the result of natural variation in neurological development and should be accepted and accommodated within society rather than medicalised or seen as 'needing to be cured' (Baker, 2011; Kapp et al., 2013; Jaarsma & Welin, 2012).

In contrast, the cognitive and behavioural profile associated with ASD provides the framework of diagnostic criteria within the medical model. The World Health Organisation (WHO) currently diagnoses ASD in the International Classification of Diseases, Tenth Edition (ICD-10) using criteria incorporating the triad of impairments, with psychopathology manifesting in “reciprocal social interaction, communication, and restricted, stereotyped, repetitive behaviours” (F84.0, WHO, 1992). The Diagnostic and Statistical Manual, Fourth Edition (DSM-IV) (American Psychiatric Association (APA), 1994) also split the diagnostic criteria across three domains with abnormalities, deficits or impairments being present in social interaction, communication and repetitive or restrictive behaviours for a diagnosis. The Fifth Edition of the Diagnostic and Statistical Manual (DSM-V) (APA, 2013) has reduced the triad of impairments to two diagnostic criteria (covering the three areas): (i) social interaction and communication difficulties, (ii) repetitive and restrictive patterns of behaviour. The DSM-V has also added sensory sensitivities to the clinical profile of ASD, with the ICD-11 expected to follow suit, due to the recognised prevalence of sensory abnormalities (hyper- and hypo-) within ASD populations (e.g. Bogdashina, 2003; Leekam et al., 2007).

The sensory sensitivities associated with ASD are suggested to be the result of differences in the processing of sensory information, with the outcome of these differences often resulting in ‘overload’. ‘Overload’ has the potential to increase anxieties and manifest in challenging behaviour. For example, food sensitivities in ASD can be linked to taste, texture or appearance and may result in disordered eating (Zickgraf & Mayes, 2019; Matson & Fodstad, 2009). Hypersensitivity to noise or light may lead to sensory overload and result in increased anxiety manifesting as aggression (Ashburner et al., 2008; Baker et al., 2008).

Reported prevalence rates of ASD have altered throughout the history. Rutter (2005) cited Votter’s prevalence rate of 4 in 10,000 in the 1970s, which is considerably less than the 1% estimated today (Baird, 2006). This increase has raised debate over an ASD ‘epidemic’ (Wazana et al., 2007). Investigations into the possible explanations of an increase in prevalence include higher awareness and better recognition and shift from a categorical to spectrum classification (Hertz-Picciott & Delwiche, 2009, Baron-Cohen et al., 2009; Wing & Gould, 1979), to actual increase in occurrence through life style/environmental factors or specific antagonists such as medical disorders or inoculations (Chen et al., 2004). Bruga et

al. (2012) gave a weighted prevalence rate of ASD in adults of 9.8 per 1000. Brugha et al. argue that this rate is concordant with rates seen in children suggesting that cases of ASD are not increasing in the population. This finding has been corroborated by others supporting the view that prevalence of ASD has remained stable (Fombonne, 2003; Wing & Potter, 2002).

ASD can occur with and without a comorbid intellectual disability, and comorbidity rates vary across samples and populations. For the general population, a Western Australian cohort study found 5.1/1000 children with an ASD, and 3.8/1000 with intellectual disability and an ASD (Bourke, Klerk, Smith, & Leonard, 2016). An eleven-site study of 8 year olds in America found a higher prevalence of ASD, with 16.8/1000 (one in 59), and ranging between 13.1/1000 and 29.3/1000 across the sites (Centre for Disease Control, 2018). The same study had intellectual disability data from nine sites which reported 31% of 8-year olds with ASD had an IQ score in the intellectual disability range (<70), and 25% in the borderline range (70–85). Co-variation in ASD and intellectual disabilities is high, LaMalfa et al. (2004) reported 40% of individuals with ASD also have ID, and 70% of individuals with ID also have an ASD, while Bryson et al (2008) reported figures of 28% of individuals with intellectual disability displaying ASD.

In addition to intellectual disability, ASD can co-occur with other developmental and psychiatric conditions including epilepsy, ADHD, obsessive compulsive disorder, catatonia, depression, and anxiety disorders (Baron-Cohen, 2008; Ghaziuddin et al., 1998; Ghaziuddin, Ghaziuddin & Greden, 2002; Dhossche, 1998). The variation in impairments in cognitive abilities and social and adaptive functioning in ASD produces a wide range of clinical presentations, and individuals with ASD who require social or health care support can be found within intellectual and/or developmental disability populations as well as in offending and mental health populations. Reported prevalence rates of ASD within these populations can be much higher than in the community. For example, within forensic or psychiatric populations in health services (not prisons), estimates of ASD, including those with an intellectual disability, range between 1.5% and 30% (Alexander et al., 2011; Anckarsater, Nilsson, Saury, Rastam, & Gillberg, 2008; Hare, Gould, Mills, & Wing, 1999; Scragg & Shah, 1994).



ASD was originally conceived as more prevalent in males than females, particularly in cases of Asperger's Syndrome, with only three of Kanner's original eleven cases being female, and none reported in Asperger's sample. A male:female ratio of approximately 4:1 has persisted for some time (Newschaffer et al., 2007; Baio et al. 2018), though recent developments in research have led to increased recognition and identification of the number of girls on the spectrum indicating that prevalence rates between males and females are perhaps not so different (Constantino & Charman, 2012; Dworzynski et al., 2012). This may be the case even in Asperger's Syndrome where more extreme gender differences were previously reported e.g. Fombonne (2005) suggested a 5.5:1 ratio of males to females in those with an ASD diagnosis and at least average intelligence, compared to 1.95:1 where there is a co-morbid intellectual disability. Furthermore, a report by the Centre for Disease Control (2018) identified a significantly higher percentage of 8-year-old males with an ASD diagnosis and no intellectual disability (including borderline i.e. IQ score 70-85) than 8-year-old females (45% vs. 40%).

It has been suggested that gender differences are the result of a different clinical presentation in females and the symptomatology of ASD in girls is not captured by the current diagnostic criteria, which is arguably designed for the male presentation of ASD (Kopp & Gilberg, 2011; Schuck et al., 2019).

As noted, changes in the DSM-V now classify ASD using only two criteria: social interaction and communication impairments, and repetitive and restrictive patterns of behaviour. Other changes involved the removal of ASD subtypes, including Asperger's Syndrome (previously distinguished from classic autism by a lack of language delay and an IQ score within, at least, the average range), now relabelled as '*high functioning autism*' (APA, 2013; Lord & Bishop, 2015). This change is expected to be included within the ICD-11 (WHO, 2020) and the removal of the subtypes, particularly Asperger's Syndrome, has led to concern over the new criteria excluding individuals from a diagnosis who would have previously received one under the DSM-IV criteria. For example, a systematic review by Smith et al. (2015) utilised DSM-IV and DSM-V diagnostic criteria and found 50-75% of individuals within the studies (n=25 studies) would retain their diagnosis of ASD. However, those with IQ scores higher than seventy were at greater risk of not retaining an ASD diagnosis. This finding is consistent with other research on the changed criteria indicating

individuals with higher cognitive functioning, or Asperger's syndrome, are likely to be affected most by the revisions in the DSM-V (Mazurek et al., 2017; McPartland et al., 2012).

Nevertheless, it is generally considered that as a spectrum, ASD includes classic autism (as described by Kanner), regressive autism (apparently typical development then loss of previously acquired language or skills between 15-30 months), atypical autism (which does not meet criteria for all of triad or core symptoms but sufficiently to impact on functioning), pathological demand avoidance and pervasive developmental disorder not otherwise specified (PDD-NOS) (DSM-IV-TR, APA, 1994; DSM-V, APA, 2013; ICD-10, 1992). In addition to conditions with the ASD classification, autistic-style behaviours can be seen in those not on the spectrum. For example, some forms of brain trauma and extreme neglect may also result in a clinical presentation resembling ASD, however these are not typically diagnosed as 'autism' due to the differing aetiologies but rather referred to as 'autistic behavioural syndrome/typology' (Rutter, 1999).

The assessment and diagnosis of ASD is difficult. In the UK, for adults and children, it has been considered by the National Institute for Clinical Excellence (NICE) (NICE Clinical Guidance 142 and 128). Guidance includes the requirement to use standardised ASD assessments incorporating a developmental history and behavioural observations. For example, the Autism Diagnostic Observation Schedule. Second Edition (ADOS-2) (Lord & Rutter, 2012) is a standardised structured assessment which is one of two tools considered 'the gold standard' in the assessment of ASD (Kamp-Beck et al., 2013). The ADOS-2 provides the opportunity for an individual to display the social and communication behaviours associated with a diagnosis of ASD and can be coupled with another assessment tool such as the Autism Diagnostic Interview-Revised (ADI-R) (Lord et al., 2003) or Diagnostic Interview for Social and Communication Disorders (DISCO) (Wing & Gould, 2006), to provide the developmental history.

Missed or mis-diagnoses of ASD is common and impacts upon estimates of prevalence. Individuals with ASD have frequently been diagnosed with conditions of similar clinical presentations and overlap in symptoms, particularly those relating to idiosyncratic or atypical communication styles/language use, and abnormalities or impairments in interaction, emotion and/or relational style. Such conditions include schizophrenia, schizoid

personality disorder, psychopathy, reactive attachment disorder and Rett's Syndrome (Aggarwal & Angus, 2015; Fitzgerald, 2012; Mayes et al., 2017; Young et al., 2008).

## **2.2 Theories of Autism Spectrum Disorders**

Theories of ASD have progressed significantly since Kanner and Asperger's original work. In his 1943 paper, Kanner first drew attention to the potential role of the parents in the child's presentation. This was further developed by Bettelheim (1964) and led to the proposal of 'cold mother syndrome'. This approach suggested that the child's condition was the result of suboptimal parenting and family environment. Whilst extreme neglect may result in autism-like behaviour, research has shown some recovery from ASD-type symptoms in an improved environment following neglect (Rutter, 1999), which is not typically seen in individuals with ASD. Purely environmental or psychogenic aetiologies of ASD have been disputed (e.g. Folstein & Rutter, 1977) and Bettelheim's theory discredited, partly due to genetic and neurological evidence.

As with many other medical conditions, developments in science and technology have facilitated investigation on a biological and neurological level. Structures associated with the social brain and frontal systems have been implicated in ASD, including the orbito-frontal cortex and anterior-cingulate cortex (Baron-Cohen, Ring, et al, 2000; Stone, Baron-Cohen & Knight, 1998; Bauman & Kemper, 1985; Kemper & Bauman, 1993), along with dysfunctions in neurotransmitters such as GABA (Dhossche et al., 2002; Blatt, 2012). Structural and functioning differences in GABA (which plays an excitatory/inhibitory role in neuronal circuits), have been suggested with research using benzodiazepines indicating fewer target binding sites for GABA receptors in ASD (Guptill, Booker, Gibbs et al., 2007; Oblak, Gibbs & Blatt, 2009). Others have shown a reduced density of GABA receptors in the anterior and posterior cingulate cortex and fusiform gyrus area in the adult autistic brain compared to controls (Oblak, Rosene, Kemper *et al*, 2011; Oblak, Gibbs & Blatt, 2009, 2010). Cerebellum abnormalities have also been implicated in ASD and GABA functioning, with Purkinje cell deficits and decreased GABAergic Purkinje cells being found (compared to controls), although it is important to consider the history of seizures within these studies (Whitney, Kemper, Bauman & et. al, 2008, Blatt, 2012).

Geneticists have investigated ASD, identifying chromosomal abnormalities and heritability for some cases of ASD (Bolton et al., 1994). Familial patterns of ASD are referred to as the 'broader autism phenotype', (BAP) with parents and siblings of those diagnosed with ASD often displaying autistic traits but not meeting the cut off criteria for a full spectrum condition (Bolton et al., 1994; Rubenstein et al., 2018; Wolff et al., 1988). A meta-analysis by Tick et al. (2016) identified heritability estimates between 64 and 91%, with correlations between monozygotic twins at .98 (95% CI=.96-.99), and dizygotic twins at .53 (95% CI=.44-.60) and .67 (95% CI=.61-.72), depending on whether the ASD prevalence rate is set at 5% (in line with BAP prevalence estimates) or 1% (ASD population estimates).

Psychological theories seek to explain clinical features of ASD i.e. it's cognitive and associated behavioural profile. For example, the repetitive patterns or perseveration (in thought or behaviour i.e. special interests/obsessions or physical stereotypies), resistance to change and impairments in planning seen in ASD have been suggested to be the consequence of executive dysfunction (Damasio & Muarner, 1978; Hughes et al., 1994; Pellicano, 2012). Executive function refers to a set of cognitive abilities that allow an individual to be flexible and adaptive, to switch or refocus attention and to undertake multiple tasks at once. These abilities apply to movement, attention and thoughts. Executive function difficulties may compound the development and maintenance of special interests or obsessions as individuals may find it more challenging to shift focus or switch attention from something which is enjoyable. Impairments in executive functioning therefore may result in the difficulties in switching tasks, planning and organising, and disengaging or shifting attention which are frequently present in ASD (Ozonoff et al., 1994; Hughes et al., 1994; Hughes & Russell, 1993).

Another theory concerning attention and information processing is that of weak central coherence (Frith, 1989). This theory explores the specific attention to detail or narrow focus seen in individuals with ASD. It explains sensory information as being organised in a 'piecemeal' fashion (a gestalt method of perception) rather than seeing a 'whole picture' (Shah & Frith, 1983). This does not simply apply to perceptual information but also an inability to synthesize and integrate details, generalising experience or knowledge from one context to another (Happé, 1996), including social information.

Monotropism proposes an alternative position regarding attentional patterns in ASD. In 2005, Murrey et al. suggested that a singular or narrow field of focus (attention) with intense arousal levels resides at the centre of the autistic profile. Poor integration of information and reduced awareness, including social seeking and responsivity, are said to be due to attentional resources being channelled into a (narrow) 'tunnel of attention'. Such attentional 'tunnels' occur for a reduced number of phenomena with intense levels of arousal, as opposed to attention being dispersed over numerous phenomena (polytropism) with lower levels of arousal, characteristic of those without ASD.

Other psychological theories have centred upon the emotional and social deficits seen in ASD. Those on the spectrum display difficulties in understanding the mental states in others (e.g. Baron-Cohen et al., 1985). As noted previously, Kanner referred to autism as a difficulty 'to relate', these problems in relating have frequently been framed as impairments in empathy, with empathy referring to an ability to emotionally identify and/or understand another person's situation and mental state and respond in a prosocial manner. Atypical or absent displays of empathy in ASD may be influenced by alexithymia, a condition characterised by difficulties in identifying and expressing emotion (internally and physically), rather than an inability to feel it (Nemiah et al., 1976; Salminen et al., 1999). Alexithymia can present co-morbidly with ASD (Bird et al., 2010; Hill et al. 2004; Silani et al., 2008), in addition to poor (non-clinical) levels of emotion recognition for self and others often noted in ASD populations (Howlin, 2005). Either of these aetiologies of reduced or impaired emotional recognition and/or expression may impact upon presentations of empathy. Alexithymia, empathy and ASD are discussed further in Section 2.4 and Chapters 6, 7 and 8.

Smith (2009) proposed an imbalance in empathy that is responsible for the social impairments displayed in ASD, however, this theory alone is unable to account for the other cognitive and social features of ASD.

The atypical presence or absence of empathy in ASD has continued to be explored, and theories of Mindblindness and Theory of Mind (Baron-Cohen et al., 1985; Happé & Frith, 1996) address difficulty in mentalising the thoughts and feelings of others and subsequently using them to inform social behaviour. The Empathizing-Systemizing theory (developed from Mindblindness theory and extended to Male-Brain Theory, Baron-Cohen, 2002; Baron-

Cohen et al, 2005, Baron-Cohen, 2010) seeks to account for the social and relational difficulties seen in ASD and attempts to incorporate the social and cognitive profile of the disorder. This theory recognises that individuals with ASD can display superior skills in analysing or organising information into systems yet display deficits in empathy. It suggests that the discrepancy in ability between these two factors (empathizing and systemizing) can account for the features seen in ASD (Baron-Cohen, 2009). For example, high systemizing abilities can explain the repetitive or narrow interests often displayed (or vice versa), and low empathizing skills can result in poor theory of mind (or vice versa).

There remains much work to be done on the origins and explanations of ASD and the dominant theories discussed above typically focus on one feature or aspect of ASD. It is important to bear in mind a point made by Courchesne et al. (2007) that a single pathogen may not be responsible for the neurobehavioural phenotype seen in ASD, therefore, one theory alone may not be able to explain *all* features of ASD. The theories referred to above are not wholly discrete or necessarily mutually exclusive. Pellicano, (2012) amongst others, have proposed that executive dysfunction may impact upon theory of mind abilities and could result in the deficits displayed (Happé, 1994; Ozonoff et al., 1994). Furthermore, the Empathising-Systemizing theory incorporates the concept of theory of mind i.e. to empathise with another you need to be able to recognise and understand their mental state (Baron-Cohen, 2009). These developments continue to evolve as theories of ASD attempt to account for its presence and clinical manifestations. As yet, there is no integrated, unified theory accounting for all features associated with ASD, nor has one been proposed that successfully links the genetic or biological foundations of ASD to its psychological profile.

### **2.3 Differential Diagnosis in the Cognitive Profile of ASD**

Further complications in theories of ASD come from the similarity in clinical presentation to other conditions and disorders, including those mentioned previously such as schizophrenia and Rett's Syndrome, along with reactive attachment disorder, foetal alcohol syndrome, psychopathy, personality disorder, language impairment disorders and other development disorders including ADHD and childhood disintegrative disorder (or Heller's disorder) (Sandiq, Slator, Skuse et al., 2012; Blair, 2005; Tatum, 2000; Sugihara et al., 2008; Reisinger et al., 2011; Taurines et al., 2012; Bishop et al., 2007; Moran, 2010).

Features of ASD are present in children with Reactive Attachment Disorder (RAD), however attachment disorders are typically the consequence of severe problems or disruptions in early childhood (i.e. abuse, trauma, neglect, loss, inadequate care, repeated relocations to foster placements or institutional care, etc.) rather than biology or genetics. Attachment disorders are characterised by persistent abnormalities in a child's pattern of social relationship and emotional attachments to others (ICD-10, WHO, 2010). However, they can present with a similar level of social interaction and communication difficulties found in ASD (Sadiq et al., 2012). Whilst RAD is a childhood diagnosis, this style of insecure attachment can persist in adulthood with continued difficulties in social relationships, intimacy and developing emotional attachments, all of which may mimic behaviours seen in ASD. Individuals with attachment disorders however can display improvement in symptoms when moved to a more optimal parenting environment. For example, observations by Rutter (1999) on neglected Romanian orphans who displayed extreme autistic behaviours demonstrated improvement once relocated to more positive environments. This suggests that some features of attachment disorders may not be static, thus potentially distinguishing it from ASD as optimal parenting styles for individuals with ASD may result in diminished anxieties or reductions in behaviours that challenge, but changes in core features of ASD are less likely (Murphy et al, 2005; Beadle-Brown et al., 2002; Lord et al., 2005). Moran (2010) developed the Coventry Grid (2015) to assist in differentiating between ASD and attachment disorders. The full grid is including in Appendix 1 with a sample illustrated below (Figure 5).

**Figure 5: Coventry Grid Sample – Overlap in Symptoms and Presentation in ASD and Attachment disorders (Moran, 2015)**

Flexible Thinking and Behaviour		
<b>Preference for predictability/ routines</b>	<b>ASD</b> Repetitive questions relate to own interests. Becomes anxious if a routine is removed and may seek to impose usual routine.	<b>Attachment disorders</b> Copes better with predictability in daily routines but usually enjoys change and celebrations.
Social Interaction		
<b>Own needs drive interactions.</b>	<b>ASD</b> Interaction is usually one-sided and egocentric with little regard for the response of the audience.	<b>Attachment disorders</b> Seeks an emotionally expressive audience for interactions (e.g. seeks to provoke strong reactions in audience such as anger, sympathy, approval or support).
Mind-Reading		
<b>Lacks appreciation of how others may see them</b>	<b>ASD</b> Lacks awareness of other's views of self, including lack of awareness of 'visibility' of own difficulties (e.g. may volunteer to perform gym sequence even though very poor at gym).	<b>Attachment disorders</b> Inclined to blame others for own mistakes. May try to shape others' views of self by biased/exaggerated reporting.
Emotion Regulation		
<b>Difficulties managing own emotions and appreciating how other people manage theirs</b>	<b>ASD</b> Difficulties showing empathy even for significant others in life. Poor recognition of emotions. Cognitive empathy is poor.	<b>Attachment disorders</b> Difficulties showing empathy in general but can show empathy to a significant others. Highly tuned to non-verbal aspects of emotions.

Another group of conditions which share a similar clinical profile with ASD are those on the schizophrenia spectrum. These include schizotypal personality<sup>11</sup> and schizo-affective disorder, in addition to schizophrenia *per se* (Ford & Crewther, 2014; Sugihara et al., 2008; Mayes et al., 2017). Diagnostic features on this spectrum include interpersonal and cognitive dysfunction and disorganisation, posing much overlap with ASD. For example, Barneveld et al., (2011) found that 40% of adolescents with ASD also met the criteria for schizotypal personality disorder, whereas this figure was 0% for a control group of neurotypical adolescents. Additionally, Hurst et al. (2007) found a positive correlation

<sup>11</sup> Encompasses schizoid Personality Disorder but this has now been removed as a distinct personality disorder from the DSM-V



between the result of questionnaires of college students with Asperger's Syndrome and college students with Schizotypal disorders.

A diagnosis of Schizotypal Personality Disorder was considered mutually exclusive to a diagnosis of ASD (DSM-IV, APA, 2013), and different aetiologies for the clinical presentation in the schizophrenic and autistic spectrums have been proposed (e.g. Esterberg et al., 2008). However, in addition to similarities in some of the core features of each spectrum (e.g. socio-and cognitive impairments), the picture can be further complicated by co-morbid psychosis in ASD (Volkmar, 1991; Hofvander et al. 2009; Schalkwyk et al., 2017). Despite overreaching similarities between the two conditions attempts have been made to discern differences between them. For example, a factor analysis by Ford and Crewther (2014) investigating behavioural phenotypes of autistic and schizophrenic spectrum disorders highlighted three factors: a shared *social disorganizational* factor, and two differentiating factors of *perceptual oddities* and *social rigidity*, potentially helping to distinguish between the two spectrums.

The similarities between psychopathy and ASD are clearly evident and often publicly referred to in high profile media cases such as Gary McKinnon and Adam Lanza, in addition to posthumous diagnoses of serial killers such as Jeffery Dahmar (Fitzgerald, 2011; Silva et al., 2000). Asperger originally referred to his syndrome as 'autistic psychopathy' (1944) and the apparent emotional deficits and impairments in empathy seen in ASD continue to be likened to the callous-unemotional traits seen in psychopathy (Haskins & Silva, 2006; Silva et al., 2000), in addition to the 'aloofness' or egocentricity often seen in ASD mistaken for the grandiosity associated with psychopathic disorder. Both psychopathy and ASD are characterised by disorders of empathy and the two conditions are not mutually exclusive, with some on the spectrum also scoring high on scales of psychopathy e.g. the Psychopathy-Checklist Revised (PCL-R) (Hare, 1990). Rogers et al. (2006) found evidence of a potential 'double hit' for some individuals with co-morbid diagnoses of ASD and psychopathy. The authors were by no means advocating that this is typical of individuals with ASD but argued that such individuals, with psychopathy and ASD, experience two different types of impairments leading to disordered empathy (Rogers et al., 2006). Using the framework suggested by de Vignemont and Singer (2006), research investigating the underlying psychological mechanisms of empathy disorders has emphasised differences between the

affective components of empathy (feeling or 'resonating' with another person's emotions), and cognitive aspects of empathy or 'perspective taking' (being able to understand another person's position or point of view but not 'resonating' with them emotionally). Studies have shown deficits in the former by those with psychopathic traits, whereas those with ASD show difficulties in the latter (Blair et al., 1996; Baron-Cohen, 2008; Richell et al., 2005; Rogers et al., 2006). A study on empathy in adolescent boys (Jones et al., 2010) echoed these findings and showed differences in the cognitive and affective processing of information between boys with psychopathic tendencies and boys with ASD. The study utilised a series of tasks measuring how the boys affectively empathised with another (i.e. 'resonated' with their feelings) and how they cognitively empathised with someone (took another person's perspective but did not 'resonate' with their feelings). The results indicated that boys with psychopathic tendencies showed little difficulty in cognitive perspective taking but did not 'resonate', they showed lower affective empathy than the boys diagnosed with ASD. The boys with ASD, however, similarly to research on adults, showed affective empathy (on a comparable level to the control group without ASD) but displayed deficits in cognitive perspective taking. This could imply that the apparent 'lack' of empathy in ASD may originate from not knowing they need to show an emotional response or empathy (and thus appearing callous or unemotional) rather than knowing they need to and choosing not to, which is what appeared to be the case for the boys with psychopathic tendencies (Jones et al., 2010).

There have been calls for broader categorisations of social disorders (e.g. Hrdlicka & Dudova, 2013), however despite similarities to other conditions, it is important to remember that ASD is a *pervasive* developmental disorder. This means that the clinical features must have been present across the lifespan and impact upon multiple areas of functioning for a diagnosis to be appropriate. Behaviour should not be isolated to a particular aspect of functioning or the result of a specific stressor because, despite similarities in presentation, the different aetiologies and manifestation of symptoms will have a significant impact on responsiveness to, and appropriateness of, treatment.

## 2.4 Autism Spectrum Conditions and Offending

Greater identification of individuals with ASD in psychiatric and forensic health services, and a number of high-profile single cases have brought debates about ASD and anti-social behaviour into the public domain. These debates have led to suggestions of a possible association between ASD and offending, as was also the case for intellectual disabilities in the past (Barry-Walsh & Mullen, 2003; Howlin, 2004; Silva, Leong & Ferrari, 2004).

Early research focused on a small number of individuals or a collection of case reviews which indicated a possible proclivity for arson, aggression and sexual offending (Allen et al., 2008; Kohn, Fahum, Ratzoni & Apter, 1998; Siponmaa, Kristiansson, Jonson, Nyden & Gillberg, 2001), with the core features of ASD being implicated in, or a component of, the offending behaviour. For example, social naivety, reduced victim empathy, theory of mind deficits, and special interests/obsessions (Dein & Woodbury-Smith, 2010; Geluk et al., 2012; Howlin, 2004; Wing 1981a) have all been identified, along with weak central coherence, which has been suggested to impact upon an individual's ability to be able to foresee and understand the consequences of their actions (e.g. Woodbury-Smith & Dein, 2014; Murphy, 2010a, 2010b). A number of these factors are congruent with existing theories of offending, such as General Strain Theory (Agnew, 1992, 2013), and more specifically, models of victim empathy deficits and cognitive distortions for sexual offending behaviours (e.g. Marshall, Hudson, Jones & Fernandez, 1995; Ward, et al., 2000).

Later research has shown that a proportion of juveniles who sexually offend display autistic traits or have been diagnosed with ASD (Hart-Kerkhoffs, Vermeiren & Hartman, 2009; Sutton et al., 2013). Geluk et al. (2012) additionally reported a significant number of childhood arrestees displayed autistic symptoms which were correlated with future delinquent behaviour. Even when controlling for co-occurring externalising disorders, this study found autistic symptoms to predict delinquent behaviours. However, some symptoms of ASD are common to other disorders (e.g. empathy deficits occur in psychopathy), so that this cannot be said to show ASD is more common in delinquents.

A trial of an adapted sex offender treatment programme for men with intellectual and developmental disabilities found ASD to be associated with increased likelihood of

recidivism (Murphy et al., 2007; SOTSEC-ID, 2010; Heaton & Murphy, 2013). It should be noted that the authors of these studies advise caution in interpreting this finding due to the small sample sizes and because the participants with ASD were more likely to commit non-contact offences. Some evidence has shown higher recidivism rates for non-contact offences compared to contact offences (e.g. Mair & Stephens, 1994). However, a number of clinical case studies of sexual offenders have also suggested poor treatment outcomes for those with ASD, and have illustrated resistance to therapy (Griffin-Shelley, 2010), as well as continued displays of sexual offending behaviours following treatment (Ray, Marks & Bray-Garretson, 2004; Kohn et al., 1998) and challenges in delivering traditional group CBT programmes (Milton et al., 2002).

Despite the picture this paints, the vast majority of individuals with ASD do not commit offences (Tatum, 2000; Woodbury-Smith et al., 2006). Indeed, some have argued that the profile of ASD, with its adherence to rules, could result in individuals with ASD being less likely to break the law (Frith, 1991; King & Murphy, 2014). Upon closer examination many of the findings listed above perhaps pose a more tenuous link between ASD and offending rather than a causal certainty. For example, both the Geluk et al. (2012) and Hart-Kerkhoff et al. (2012) study looked at autistic 'symptoms' or 'traits' rather than a diagnosis. Following what has been discussed in the preceding section regarding the similarities in presentation between ASD and psychopathy, and ASD and attachment disorders and the high prevalence of antisocial and offending behaviour in adults within these populations it is unsurprising that these traits are associated with juvenile delinquents and offenders.

Additionally, biasing in sample selection or availability may have distorted or augmented any association between ASD and criminality. Within forensic or psychiatric populations estimates of ASD have been put at between 1.5% and 27% (Scragg & Shah, 1994; Allen, 2007; Hare, 1999; Myers, 2004; Siponmaa, 2001), with the higher end of this scale being much higher than that of community population (identified previously at approximately 1% e.g. Baird et al., 2006). Rather than these figures reflecting an actual propensity towards offending, it has been suggested that there is an over-representation of ASD in psychiatric and forensic settings and, as with individuals with an intellectual disability (ID), this could be the result of more visibility, less supervision and less complexity or planning in criminal

activities (thus being more likely to result in arrest or police attention), together with an increased tendency to divert them from custody into health services

A systematic review of individuals with ASD and the Criminal Justice System by King and Murphy (2014) suggested small sample sizes and biased sampling contributes to this view of over-representation. The review suggests that stricter diagnostic classification be applied, and that more rigorous research design and methodology (including sample selection) are needed before being able to draw firm conclusions about the prevalence rates of offending behaviour in individuals with ASD. King and Murphy (2014) did not find evidence supporting the specific criminal typologies suggested in earlier research when studies using sufficient samples and good methodology were considered. Furthermore, an update from Asperger's original cohort showed no difference in offending rates between his group and the general population (Hippler et al., 2010), and a study by Mourisden (2008) also reported conviction rates of individuals with ASD similar to, or lower than, those without ASD. These examples argue against higher rates of criminal behaviour in ASD compared to neurotypical populations.

Much of the research on ASD and offending has focused on Asperger's Syndrome (e.g. Dein and Woodberry-Smith, 2012; Barry-Walsh and Mullen, 2004; Murrie et al., 2002), including specific theories linking Asperger's Syndrome<sup>12</sup> to criminality, including serial murder (Silvia et al., 2002, 2004; Maras et al., 2015; Alley et al. 2014). However, rather than reflect a criminal disposition, the absence of intellectual disability and higher verbal abilities may result in involvement with legal and forensic systems rather than diversions out of the justice system.

It may be more helpful to talk of vulnerability factors to offending rather than a diagnosis of ASD being instrumental in criminal activities. Some of these vulnerabilities are also applicable to individuals with an intellectual disability, as referred to in Chapter One (Sexual Offending), such as poor impulse control and high psychiatric co-morbidity. However as identified at the beginning of this section others may be more specific to ASD e.g. empathy difficulties and social naivety as well as special interests or obsessions that are illegal or

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<sup>12</sup> Also recognised/classified as high functioning autism

related to criminal activities (Faccini, 2014; Milton et al., 2002; Radley & Shaherbano, 2011). As with individuals with an intellectual disability, those with ASD, including Asperger's Syndrome are susceptible to suggestibility, a likeliness to acquiesce and a lack of knowledge regarding their rights or the law (Frith, 2004; Maras & Bowler, 2012). All of the aforementioned may contribute towards the putative over-representation of ASD in forensic and psychiatric settings and the view that ASD is linked to offending.

ASD was included in the Diagnostic and Statistical Manual in the 1980s, and as such the evidence-base for understanding a possible link between the clinical features of ASD and offending behaviours is in the early stages. The next section will therefore look at how ASD symptomatology may fit within existing theories of crime, and more specifically, theories of sexual offending.

### **2.3.1 Theories of Offending Applied to ASD**

Applications or adaptations of theories of offending can be applied to individuals diagnosed with ASD in a similar manner to those diagnosed with an ID, however there are some features specific to ASD that may differentiate it from offending by individuals without an ASD. For example, Godfredson and Hirschi's (1990) Control Theory argues that poor impulse control and an inability to delay gratification are composite in offending. Difficulties in impulse control are seen in individuals on the spectrum, however the proclivity or propensity for offending behaviour that is the counterpart to Gotfredson and Hirschi's model may not be applicable to individuals with ASD due to their possible penchant for rule adherence (as referred to in the above section e.g. Frith, 1991).

Strain theory (Merton, 1938) to recall, proposed that individuals commit crimes in order to attain 'socially desirable' goals or aspirations. This approach could be adapted to apply to individuals with ASD who display behaviours that challenge such as aggression or violence in attempting to meet their needs. These needs may be socially desirable and acceptable, such as acquiring certain materials goods or being included in social events but sought through socially unacceptable or illegal means e.g. theft or violence. Similarly, sexual assault or abuse may occur as attempts to attain intimacy and sexual or romantic relationships.

Agnew's General Strain Theory (GST) (1992, 2007, 2013) focused on criminogenic strain associated with being unable to escape negative events and conditions rather than strain from attempting to attain the socially desirable goals featured in earlier Strain theories (e.g. Merton, 1938). GST argued that maladaptive coping skills, used to manage these aversive events or negative emotions, are what result in crime. In a commentary to an article on criminal behaviour in individuals with ASD, Murphy (2010) refers to the "dysfunctional and restricted coping strategies" (p44) utilised by individuals with ASD. In relation to interpersonal violence, he discusses the maladaptive coping strategies used to manage "emotional regulation or interpersonal anxiety" such as might result from the pressure to conform socially, and describes a "hypersensitivity" to criticism or "intense feelings of being wronged" (ibid. p45). These may be comparable to Agnew's propositions of presentation of negative stimuli (or loss of positive stimuli) and potentially support the GST explanation of offending in relation to individuals with ASD.

### **2.3.2 Theories of Sexual Offending Applied to ASD**

Sexual offending appeared to be prominent in early research on perpetrators diagnosed with an ASD (Allen et al., 2008; Siponmaa, 2001). Evidence for a proclivity for sexual offending is yet to be consistently established, however there is suggestion of sexual problems for individuals and adolescents with ASD (Anckarsater, 2008; Sutton et al., 2012; Realmuto & Rubble, 1999; Hellems et al., 2007) which, if not addressed, could potentially progress to offending behaviours.

A number of single factor theories discussed in Chapter One (Sexual Offending) appear clearly relevant in attempting to explain sexual offending behaviours in individuals diagnosed with ASD. For example, the presence of empathy deficits or impairments in theory of mind may have been questionable in neurotypical populations (Marshall et al., 1995; Ward et al., 2000), however for those with ASD, where low empathy and disturbances in theory of mind are considered prominent features (Wing, 1981; Happé & Frith, 1995), Marshall's four stage model of empathy (1995) could certainly be applied to explain sexual offending behaviours in this population. Wing (1981), Happé and Frith (1995) and Baron-Cohen et al.'s (2005) Empathizing-Systemizing principles could align with Marshall's theory

potentially providing a possible aetiology for the low empathy (and deficits in theory of mind) seen to account for sexual offending in this model.

Cognitive distortions (Abel et al., 1984) theory could also be applied to explain sexual offending in individuals with ASD. These distortions, or 'faulty think styles', may be further compounded by the cognitive inflexibility or rigid thinking style characteristic of ASD and by additional difficulties in generalisability. Added complexities may arise if the distortions involve a special interest, particularly if it is deviant in nature (Murrie et al., 2002; Anckarsäter et al., 2008).

Multi-factor theories of sexual offending such as Ward & Siegert, Pathways Model (2002) and Marshall and Barbaree's Integrated Model (1990) can be applied specifically to those with ASD in that individuals on the spectrum may experience deficits in socio-affective functioning due to the social and communication difficulties e.g. reduced emotional recognition or regulation, possible co-morbid alexithymia, and difficulties in understanding social cues and situations or interpreting social language and humour. These factors potentially may result in a vulnerability to developing poor socio-affective functioning skills and a reduced ability to fulfil emotional and sexual needs through typical or socially acceptable and legal means.

The masturbatory or sexualised coping strategies described by Marshall and Barbaree (1990) could become further complicated if paired with a deviant interest which becomes a special interest/obsession or the individual shows extreme cognitive rigidity. For example, offenders with a deviant sexual interest have been shown to display cognitive rigidity (Keenan & Ward, 2000). This rigidity could be described as similar to the inflexibility seen in ASD. Paedophilia, a deviant sexual interest, is currently treated in same way as other forms of sexual offending (CBT group programmes) however, sexual deviancy and anti-social orientation remain the highest risk factors for sexual recidivism (Hanson & Morton-Bourgan, 2005).

As noted in Chapter One (Sexual Offending) Ward and Siegert's (2002) Pathways multi-factorial model has received partial support in application to individuals with intellectual disabilities (Langdon et al., 2007). It could be further extended to ASD specifically. For



instance, it may be that the clinical features of ASD predispose individuals to the dysfunctional psychological processes that can result in the vulnerability factors this model argues underlie sexual offending. These dysfunctional psychological processes include emotional dysregulation, intimacy and social skills deficits, cognitive distortions and distorted sexual scripts (Ward & Siegert, 2002), and are closely aligned with ASD symptomatology e.g. difficulties in emotion recognition and regulation, inflexible thinking styles and social communication and interaction difficulties. Additionally, the distorted sexual scripts referred to in this model may stem from multiple vulnerabilities such as a deviant special interests/obsessions or social ineptitude, but could also be due cognitive immaturity and emotional congruence with children as a result of the delay in neurodevelopment definitive of ASD (Alleley, 2019; Wilson, 1999).

Similar to individuals with intellectual disabilities, those diagnosed with ASD display heightened vulnerability to psychiatric co-morbidity, and a raised risk of their own history of sexual abuse (Ohlsson Gotby et al., 2018; Sevliver et al., 2013), making them possible risk factors to sexual offending.

### 3 CHAPTER THREE: SYSTEMATIC REVIEW EXPLORING TREATMENT FOR OFFENDERS WITH AUTISM<sup>13</sup>

The positive changes that have come with increased recognition of ASD in UK social policy have led to the development of ASD specific service provision, predicated on the hypothesis that this group presents with challenges which are separate from intellectual disabilities alone. However, specialised or adapted treatment programmes for individuals with ASD remain sparse, despite the distinct profile and recognition that some with ASD may experience difficulties with traditional offender treatment thus resulting in an ostensible gap between policy and evidence-based practice.

The aim of this review therefore was to conduct a comprehensive search of the literature to (a) identify and synthesise studies that attempted to examine the effectiveness of treatment for offending behaviour amongst individuals with ASD, and (b) explore the relationship between the symptoms of ASD and treatment outcome

#### 3.3.1 Search Protocol

To identify existing literature on ASD and offender treatment, a search string using the terms “(autis\* or Asperger\* or ASD or ASD or pdd or pervasive developmental dis\*) AND (offen\* or crim\* behav\*) AND (treat\* or interven\* or therap\* or program\*)” was entered into a number of databases including EBSCO, Web of Science, Scopus and PubMed. Curated databases were initially searched, however this was then expanded to include grey literature (OpenGrey, Social Sciences Research Network and Social Care Online). The databases were originally searched on 9/11/2015 and then updated on 11/1/2016 and 1/11/16. Slight variations in the search string were made for the grey literature searches to accommodate the database parameters. The full search strategy and databases can found in Appendix 2.

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<sup>13</sup> A version of this chapter has been published within a peer reviewed journal under the title “*Treatment effectiveness for offenders with autism spectrum conditions: a systematic review*” (Melvin et al., 2017). This chapter contains only minor alterations to wording in order to fit it into the PhD.

The ancestry method was also applied and a hand search of the latest issues of the top two journals for articles in the review<sup>14</sup> was undertaken to ensure the search was as comprehensive as was possible.

The search results from the screening and review data are depicted in the PRISMA model flow chart (Figure 1), along with the exclusion criteria.

### 3.3.2 Eligibility Criteria

Eligible studies were published in English, and (1) included original empirical data, (2) related to an ASD specific sample or distinguished participants with ASD from intellectual disability alone/non-ASD participants, and (3) referred to a psychological or pharmacological treatment outcome or have designed/applied a particular treatment for offending or criminal behaviour. No date limiters were applied however, book chapters, conference abstracts, theses and articles such as narrative and other reviews, policy documents, theoretical papers, editorials and commentaries, etc. were excluded.

Offending/criminal behaviour was selected for this review rather than 'challenging behaviour' because challenging behaviour refers to a more global notion of inappropriate, maladaptive, dysfunctional or anti-social, behaviour that places an individual at risk of harm or of exclusion from community involvement (McCarthy, Hemmings, Kravariti et al., 2010). Challenging behaviour includes pica, self-harm, stereotypies and other such manifestations that would not typically constitute offending, as well as aggression and sexually inappropriate or harmful behaviours (Emerson & Bromley, 1995). Typically, those with challenging behaviour have a more severe or profound intellectual disability, with or without ASD, whereas those who are involved in the Criminal Justice System tend to have milder disabilities or no disabilities (partly due to the *mens rea* requirement in many jurisdictions). There is an established body of research into challenging behaviour in individuals with ASD, including studies on intervention and investigation into use of

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<sup>14</sup> *Journal of Applied Research in Intellectual Disabilities and Sexual Addiction and Compulsivity*

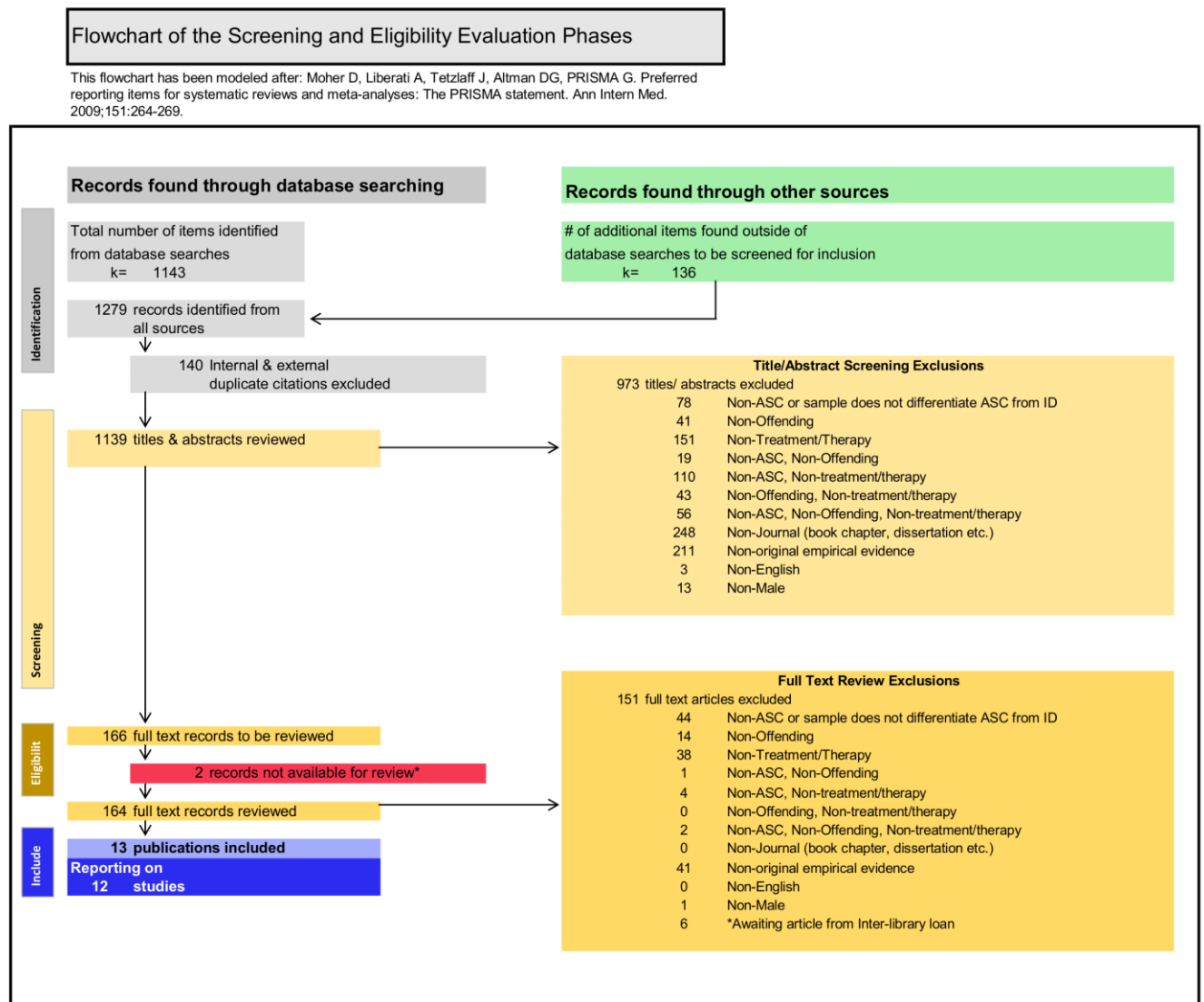
medication for behaviour that challenges (Matson & Rivet, 2008; Sawyer, Lake, Lunsby, Liu & Desarkar 2014).

For those with more severe intellectual disabilities or younger individuals (perhaps below the age of criminal responsibility) some behaviours such as fetish or hypersexualised displays may manifest as acts that constitute offending but are not labelled as such due to the age and/or cognitive functioning of the individual (e.g. Deepmala & Agrawal, 2014; Coskun & Mukaddes, 2008). In these cases, behavioural therapy or medication may be utilised rather than approaches typically employed for adult or juvenile offenders such as cognitive behavioural therapy or psychotherapy, and they were therefore not included in the review. Additionally, offending or criminal behaviour was distinguished from challenging behaviour as treatment and practice guidance, such as NICE guidelines, require interventions for challenging behaviour to focus treatment outcomes on improving quality of life (NICE, 2015) whereas offending treatments tend to be focused on reductions in future behaviours and public protection (Andrews & Botna, 2010; Ward & Maruna, 2007). Whilst offending programmes can strive to improve quality of life for the offender, it is not typically the primary treatment objective (Doyle, 2004; Ward & Maruna, 2007), and that is what was being investigated in this review.

A total of 1,311 hits resulted from the search. Following removal of duplicates, 1164 titles and abstracts were screened using the inclusion and exclusion criteria, as depicted in Figure 1. 166 full text records were reviewed the majority of which were excluded because they: (i) did not differentiate between intellectual disability and ASD in the sample (44), (ii) did not include original, empirical data into the effectiveness of treatment (41), or (iii) were concerned with ASD in general and not focused on offending or treatment/therapy (39).

Following the full text review 13 publications met the inclusion criteria and were included in the review (Figure 6).

**Figure 6: PRISMA Model of Systematic Review Search Results**



### 3.3.3 Quality Appraisal

No design specifications were set to be included in the review. This was due to the anticipated low number of studies in this area (guided by previous experience from non-systematic literature searches). No randomised or non-randomised controlled trials (RCTs) were found within the results. The dataset consisted of nine case reports and four case series. None of the studies contained within this review would meet the criteria for inclusion using the GRADE methodology (Guyatt et al. 2008) thus reflecting the quality of data found. The GRADE approach, developed by the Grading of Recommendations, Assessment, Development and Evaluations (GRADE) Working Group, ‘upgrades’ RCTs over

other study designs and is used in Cochrane reviews and has been adopted by NICE (Dennis et al., 2012; Dijkers, 2013) in assessing evidence quality for clinical practice recommendations. It was felt that GRADE would not be an appropriate tool for this review due to the distinct lack of RCTs and it would be too conservative to yield any helpful results. There is debate over the hierarchy of evidence (e.g. Tucker & Roth, 2006) and the biases inherent in relatively uncontrolled methodologies such as reversal and single case designs, however, as the purpose of this review was to identify and evaluate *existing* data, the inclusion of less rigorous designs was necessary.

Study quality was rated by the author and doctoral supervisor Peter Langdon using the Mixed Methods Appraisal Tool (MMAT) (Pluye, Robert, Cargo et al., 2011). The MMAT allowed for different study designs to be appraised concomitantly by one tool (Inter-rater reliability: 92%). As a result of the low numbers of studies available, all articles were included in the final review (MMAT appraisal tables of the studies within this review can be obtained from the author).

Using the MMAT criteria, the quantitative data (case series) scored 4\* (out of 4). These studies employed pre- and post- measures designs and included information regarding recruitment sources/methods, had low dropout rates and accounted for any missing or repeated data. All four studies were classed as quantitative descriptive rather than non-randomised controlled trials as none included a control group. These design limitations unfortunately are not accounted for within the MMAT (as reflected by a score of 4\*).

It is important to note that three of the quantitative studies refer to the same treatment programme (Heaton & Murphy, 2013; Murphy et al., 2007; SOTSEC-ID, 2010) and two are discussing partly the same sample at different time periods (Heaton & Murphy, 2013; SOTSEC-ID, 2010). Therefore, the thirteen articles included in the review essentially refer to twelve studies. There are arguments against including these individually within the review, however again due to the lack of evidence and research completed in this area, it was felt important to include as much as possible of available data.

The qualitative data overall scored considerably lower (as shown in Tables 1 and 2). A number of the case studies did not describe their research objective i.e. did not explicitly

state their aims in the case study. Additionally, identification of data sources and methods of analyses were frequently unclear, as well as the authors' role (for example, it was not apparent how much information came from direct contact with the individual in the study and how much came from previous records/data).

Additionally, the case study authors did not typically acknowledge their role in delivering the treatment or provide alternative suggestions to the treatment considered or offered at their facility. The only exception was Griffin-Shelley (2010) who suggested that perhaps an addiction recovery approach would be better suited rather than an offender model for treatment of an individual with Asperger's Syndrome and sexual addiction.

### **3.3.4 Results**

Due to the limited availability of data and the mixed methodologies used, a meta-analysis of the data was not possible. The results are therefore presented as narrative synthesis.

**Table 1: Quantitative Studies included in Systematic Review**

Study No.	Author	Study Population	Description & Methodology	Findings	Quality Appraisal (MMAT)	
					Study Classification	MMAT Rating
1	Murphy, Powell, Guzman & Hayes (2007) <i>Cognitive behavioural treatment for men with ID and sexually abusive behaviour: a pilot study.</i>	<ul style="list-style-type: none"> <li>• N=8 (4 = ASD diagnosis)</li> <li>• Men with intellectual disabilities who display sexually abusive behaviour recruited from two London boroughs community ID teams.</li> </ul>	<p><b>Quantitative Studies:</b></p> <ul style="list-style-type: none"> <li>• Pilot study of adapted CBT programme for men with ID who are at risk of displaying harmful sexual behaviour.</li> <li>• Describes intervention provided and results regarding changes in the process measures and recidivism rates for Pre-and Post-group.</li> <li>• Completion of four process measures looking at sexual attitudes and knowledge, empathy and cognitive distortions.</li> <li>• Wilcoxon Z tests use to analyses process measures.</li> </ul>	<ul style="list-style-type: none"> <li>• Significant positive changes shown in sexual knowledge and victim empathy.</li> <li>• Cognitive distortions showed significant change on QACSO but not SOSAS.</li> <li>• Some recidivism occurred (n=3). All recidivists had a previous diagnosis of ASD.</li> </ul>	<ul style="list-style-type: none"> <li>• Quantitative</li> <li>• Descriptive – Case Series</li> </ul>	<ul style="list-style-type: none"> <li>• 4*</li> </ul>
2	SOTSEC-ID (2010) <i>Effectiveness of Group cognitive behavioural treatment for men with ID at risk of sexual offending.</i>	<ul style="list-style-type: none"> <li>• N= 46 (4=ASD, 6=ASD/ADHD. 57% required by law to complete treatment).</li> <li>• National study of men with</li> </ul>	<ul style="list-style-type: none"> <li>• National trial of adapted CBT sex offender treatment programme for men with ID (including a number with ASD).</li> <li>• Completion of four process measures pre- and post- treatment looking at sexual attitudes and knowledge, empathy and cognitive distortions.</li> <li>• Parametric analysis used to look at victim empathy and cognitive distortions.</li> </ul>	<ul style="list-style-type: none"> <li>• Significant increases shown in sexual knowledge and victim empathy.</li> <li>• Significant reductions shown in cognitive distortions.</li> <li>• Changes still significant at 6 months follow-up.</li> </ul>	<ul style="list-style-type: none"> <li>• Quantitative</li> <li>• Descriptive – Case Series</li> </ul>	<ul style="list-style-type: none"> <li>• 4*</li> </ul>



Study No.	Author	Study Population	Description & Methodology	Findings	Quality Appraisal (MMAT)	
					Study Classification	MMAT Rating
			<b>Quantitative Studies:</b>			
		intellectual disabilities who display sexually abusive behaviour	<ul style="list-style-type: none"> <li>• Non-parametric analysis used to look at Sexual attitudes and knowledge (non-normal distribution of data).</li> </ul>	<ul style="list-style-type: none"> <li>• Few men showed further sexually abusive behaviour in follow up period since treatment completion (n=4)</li> <li>• Increased risk of recidivism was associated with diagnosis of ASD (although interpreted with caution due to low n).</li> </ul>		
3	Heaton & Murphy (2013) <i>Men with ID who have attend SOTSEC-ID Groups: A follow up.</i>	<ul style="list-style-type: none"> <li>• N=34 (from seven treatment sites. Average length of follow up = 44months, SD 28.7, range 15-106 months)</li> <li>• Adult men with intellectual disabilities who display sexually abusive behaviour who have completed an adapted SOTP.</li> </ul>	<ul style="list-style-type: none"> <li>• Follow up of 34 of the original 46 men from the SOTSEC-ID programme.</li> <li>• Reported on changes in process measures and recidivism rates.</li> <li>• Completion of four process measures looking at sexual attitudes and knowledge, empathy and cognitive distortions.</li> <li>• Friedman tests used to compare pre/post/follow-up process measures</li> <li>• Wilcoxon ranks tests use to analyses significant findings.</li> <li>• Discussed longer-term implications and effectiveness of adapted sex offender treatment programmes for men with LD, including those with ASC.</li> </ul>	<ul style="list-style-type: none"> <li>• Significant increases shown in sexual attitudes and knowledge across pre/post and follow up periods.</li> <li>• Significant changes found for victim empathy between pre- and post- group and between pre- and follow up.</li> <li>• Changes between post group and follow up were non-significant.</li> <li>• One measure of cognitive distortions showed no significant changes (SOSAS), however the second measure (QACSO) showed significant improvements across time.</li> <li>• No non-sexual offences occurred during the follow up, however 11 of the 34</li> </ul>	<ul style="list-style-type: none"> <li>• Quantitative Descriptive – Case Series</li> </ul>	<ul style="list-style-type: none"> <li>• 4*</li> </ul>

Study No.	Author	Study Population	Description & Methodology	Findings	Quality Appraisal (MMAT)	
					Study Classification	MMAT Rating
			Quantitative Studies:	(32%) men engaged in further harmful sexual behaviour. • ASD was found to be a variable associated with further sexually abusive behaviour.		
4	Langdon, Murphy, Clare <i>et al.</i> (2013) <i>An Evaluation of the EQUIP treatment programme with men who have ID or other developmental disabilities.</i>	• N=7 (3 = ID; 4 = AS). • Adult males with intellectual or developmental disabilities in a medium-secure forensic unit.	• Pilot of an adapted version of the Equipping Youth to Help One Another (EQUIP) programme with men with intellectual or developmental disabilities in a medium secure forensic unit. • Treatment programme designed to enhance moral development and address cognitive distortions. • Delivered over 12 weeks, with x4 1hour sessions per week.	• Results suggest treatment was successful in increasing moral reasoning ability, reducing cognitive distortions and improving ability in choosing effective solutions to problems. • Treatment did not show any significant impact upon anger. • The author reports that 3 of the men with AS, who were likely to have difficulties with social perspective taking appeared to benefit from this intervention.	• Quantitative Descriptive – Case Series	• 4*

**Table 2: Qualitative Studies included in Systematic Review**

Study No.	Author	Study Population	Description & Methodology	Findings	Quality Appraisal (MMAT)	
					Study Classification	MMAT Score
<b>Qualitative Studies:</b>						
5	<b>Griffin-Shelley (2010) <i>An Asperger's Adolescent Sex Addict, Sex Offender: A Case Study.</i></b>	<ul style="list-style-type: none"> <li>• N=1</li> <li>• Adolescent Male with AS and diagnosed with sex addiction.</li> </ul>	<ul style="list-style-type: none"> <li>• Case report of an adolescent with AS who displays sexual addiction and sexual offending</li> <li>• Narrative case study covering psychological testing/assessment, initial treatment, residential treatment, aftercare and ongoing issues for individual.</li> <li>• Treatment approach – Group therapy, psycho-education and relapse prevention.</li> </ul>	<ul style="list-style-type: none"> <li>• Recidivism behaviours displayed, although possible reductions in frequency and severity.</li> <li>• Author presents clinical opinion on treatment outcomes, influencing factors on offending and wider implications.</li> <li>• Suggested alternative use of addiction rather than offender model for treatment of individual with AS and sexual addiction.</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative - Case Study</li> </ul>	3*
6	<b>Kohn, Fahum, Ratzoni &amp; Apter (1998) <i>Aggression and Sexual offence in Asperger's Syndrome.</i></b>	<ul style="list-style-type: none"> <li>• N=1</li> <li>• 16 year old male diagnosed with Asperger syndrome referred to psychiatric services following a series of violent</li> </ul>	<ul style="list-style-type: none"> <li>• Literature review and narrative case report of an individual with Asperger syndrome highlighting an atypical case of aggression and sexual offence in an individual with AS.</li> <li>• Data includes background, history of behaviours and offending, treatment and outcomes.</li> <li>• Discussion of wider implications for ASD and offending.</li> <li>• Treatments utilised include: psychotherapy, family therapy, drug treatment and social skills programmes.</li> </ul>	<ul style="list-style-type: none"> <li>• Author presents clinical opinions on impact of Asperger's syndrome in offending and the role of theory of mind deficits.</li> <li>• Recidivism reported and with few positive effects of therapy identified.</li> <li>• Author discusses low prevalence rates reported in literature and</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative - Case Study</li> </ul>	2*

Study No.	Author	Study Population	Description & Methodology	Findings	Quality Appraisal (MMAT)	
					Study Classification	MMAT Score
		and sexual assaults.	<b>Qualitative Studies:</b>	highlights needs for more research.		
7	<b>Milton et al. (2002) <i>Case history of co-morbid Asperger's syndrome and paraphilic behaviour.</i></b>	<ul style="list-style-type: none"> <li>• N=1</li> <li>• Adult male with Asperger's Syndrome who displayed paraphilic behaviour and has convictions for sexual offences detained under the Mental Health Act (1983).</li> </ul>	<ul style="list-style-type: none"> <li>• Case study of individual with AS who displays paraphilic behaviours and has convictions for sexual offending.</li> <li>• Background and history of offending is presented, along with outcomes of clinical evaluation and management.</li> <li>• Individual placed in residential rehabilitation programme for individuals with personality disorder. Reports on assessment of service use and issues of late diagnosis, treatment and risk.</li> <li>• Behaviours rated using the Behavioural Status Index (BSI; Reed <i>et al.</i>, 1996)</li> <li>• Discussion of wider implications for ASD and offending and the impact of diagnosis on treatment outcomes resulting in potential lengthy periods in institutional care.</li> </ul>	<ul style="list-style-type: none"> <li>• Authors discuss treatment offered to individual at facility for those with personality disorder.</li> <li>• Described use of pharmacological treatments with little impact on sexual behaviours and negative side effects e.g. facial tics.</li> <li>• Authors refer to some of the difficulties the individual experienced with aspects of the treatment programme, including group therapy.</li> <li>• Authors recommend alternative treatment centre (ASD specialist,</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative - Case Study</li> </ul>	2*

Study No.	Author	Study Population	Description & Methodology	Findings	Quality Appraisal (MMAT)	
					Study Classification	MMAT Score
			<p><b>Qualitative Studies:</b></p> <ul style="list-style-type: none"> <li>Wider applications of issues discussed/raised in case for offenders with ASD or problem behaviours are covered in discussion.</li> </ul>	<p>not PD) and discuss implications for individuals with ASD in inappropriate treatment units, including length of stay.</p>		
8	Murphy, D. (2010)	<ul style="list-style-type: none"> <li>N=1</li> <li>Adult male with Asperger's syndrome convicted of manslaughter detained in high-security psychiatric care.</li> </ul>	<ul style="list-style-type: none"> <li>Case report detailing psychological assessment, offence formulation and psychological treatments offered including adapted CBT, skills development (emotion recognition and problem solving) and psycho-education.</li> <li>Additionally, author also refers to work directed at improving difficulties in recognising and understanding consequences, victim empathy and managing interpersonal conflict.</li> <li>Also discusses mental capacity, risk assessments and future management, plus the role of high-secure psychiatric care for offenders with ASD who commit serious offences.</li> </ul>	<ul style="list-style-type: none"> <li>Reference to changes in assessment measures e.g. reductions in 'State' anger on STAXI-II<sup>15</sup> (Speilberger, 1999) following individual therapy but no changes in expression of anger.</li> <li>Acknowledges difficulty in quantifying any change and refers to the rigidity of the individual, and their views regarding the offence, justification etc. remain fixed despite over 70 hours of individual contact.</li> </ul>	<ul style="list-style-type: none"> <li>Qualitative - Case Study</li> </ul>	2*

<sup>15</sup> Author acknowledges no data norms for use of STAXI-II with ASD population.

Study No.	Author	Study Population	Description & Methodology	Findings	Quality Appraisal (MMAT)	
					Study Classification	MMAT Score
9	<b>Radley &amp; Shaherbano (2011) <i>Asperger syndrome and arson.</i></b>	<ul style="list-style-type: none"> <li>• N=1</li> <li>• Young male (age = 24yrs) with Asperger's syndrome convicted of committing arson detained under Mental Health Act (1983) with co-morbid mental health problems and substance misuse.</li> </ul>	<p><b>Qualitative Studies:</b></p> <ul style="list-style-type: none"> <li>• Narrative case study covering case history, offence, progress in hospital, assessment and diagnosis of ASC, treatment programme, outcomes and progression.</li> <li>• Treatments included anti-psychotic medication, psychoeducation, Speech and Language Therapy and Substance Misuse Treatment Programme.</li> <li>• Also received individual therapy addressing substance misuse and fire-setting.</li> <li>• Discussion of the role of ASD in the offence and the potential impact of late diagnosis.</li> </ul>	<ul style="list-style-type: none"> <li>• Following early increase in psychotic symptoms, paranoia and aggression after admission, author reports on: <ul style="list-style-type: none"> <li>- understanding of offence cycle and need for relapse prevention,</li> <li>- reduction in aggressive behaviour,</li> <li>- acceptance of medication and ASD diagnosis,</li> <li>- reduction in psychotic symptoms,</li> <li>- recommendations for care pathway including discharge to less secure service, followed by community reintegration.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative - Case Study</li> </ul>	1*

Study No.	Author	Study Population	Description & Methodology	Findings	Quality Appraisal (MMAT)	
					Study Classification	MMAT Score
10	Kelbrick & Radley (2013) <i>Forensic Rehabilitation in Asperger's Syndrome: a case report.</i>	<ul style="list-style-type: none"> <li>• N=1</li> <li>• 26 year old male with Asperger's Syndrome admitted to hospital following multiple counts of assault, including actual bodily harm.</li> </ul>	<p><b>Qualitative Studies:</b></p> <ul style="list-style-type: none"> <li>• Case report of individual with Asperger's Syndrome and co-morbid psychosis who displays offending behaviour.</li> <li>• Authors review literature relating to AS and offending and co-morbidity.</li> <li>• Describe background and index offence, and rehabilitation process for both mental health problems and offending behaviours.</li> <li>• Treatment referred to includes: Medication (for MH issues), social skills training, CBT group work and relationship focused work, individual cognitive analytical therapy and relapse prevention work.</li> <li>• Also included occupational therapy programme and community leave.</li> <li>• Report includes data from the patient's perspective of having AS and of the rehabilitation process.</li> </ul>	<ul style="list-style-type: none"> <li>• Following stabilisation of mental health issues, engagement displayed in the therapeutic programme and other activities.</li> <li>• Transferred to a step-down locked rehabilitation unit.</li> <li>• Collaborated with fellow patient and re-offended assaulting a female staff member.</li> <li>• Transferred back to low-secure unit.</li> <li>• No further risk related behaviours displayed since returning to low-secure and planned transfer to a specialist ASD residential home.</li> <li>• Reported to have "<i>developed a good understanding of his diagnosis, reasons for his offending and has engaged well in relapse prevention work</i>" (p62). Also utilises CAT maps.</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative - Case Study</li> </ul>	1*

Study No.	Author	Study Population	Description & Methodology	Findings	Quality Appraisal (MMAT)	
					Study Classification	MMAT Score
11	<b>Ray, Marks &amp; Bray-Garreston (2004)</b> <i>Challenges to treating adolescents with Asperger's Syndrome who are sexually abusive.</i>	<ul style="list-style-type: none"> <li>• N=4</li> <li>• Adolescent males (age 14-17years) with Asperger's Syndrome and Pervasive Developmental Disorder seen at the authors' practice for a range of sexual, anti-social and paraphilic behaviours.</li> </ul>	<p><b>Qualitative Studies:</b></p> <ul style="list-style-type: none"> <li>• Discusses challenges to treating adolescents with AS and PDD who are sexually abusive and uses four case examples to illustrate.</li> <li>• Describes background and behaviours of four cases and gives detail on treatment approaches for two cases involving an individual who exhibited sexually coercive behaviour towards young children, and another who displays sexually inappropriate behaviours including sexualized and/or violent states and gestures.</li> <li>• For one case treatment focused on <i>"expanding awareness of and make room for new experiences"</i> (p272).</li> <li>• The second case describing treatment refers to helping the individual to <i>"develop a language for describing the internal compulsions that drive his inappropriate behaviours"</i> (p275).</li> </ul>	<ul style="list-style-type: none"> <li>• Some positive outcomes reported although recidivism is displayed in the two cases describing treatment.</li> <li>• Report improvements in: <ul style="list-style-type: none"> <li>- awareness of need for management strategies</li> <li>- flexibility and willingness to try new things</li> <li>- Stabilisation of behaviour</li> <li>- Emotion regulation</li> </ul> </li> <li>• Authors make recommendations and suggestions for treating adolescents with AS and PDD who are sexually abusive.</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative - Case Study</li> </ul>	0*
12	<b>Chan and Saluja (2011)</b> <i>Sexual offending and improvement in autistic characteristics after acquired brain injury</i>	<ul style="list-style-type: none"> <li>• N=1</li> <li>• 24 year old male with autistic spectrum disorder convicted of</li> </ul>	<ul style="list-style-type: none"> <li>• Case report of young man with ASD who displays sexually abusive behaviours and who also exhibited improvements in core symptomatology following a traumatic brain injury.</li> <li>• Data includes background, history of behaviours and offending (including mention of attending a sex offender</li> </ul>	<ul style="list-style-type: none"> <li>• Improvements reported in autistic characteristics following brain injury, specifically social interaction, <i>"he became chatty and sociable, more spontaneous to converse and more verbose"</i> (p902)</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative - Case Study</li> </ul>	0*



Study No.	Author	Study Population	Description & Methodology	Findings	Quality Appraisal (MMAT)	
					Study Classification	MMAT Score
		sexual offending.	programme for psychological treatment), and details surrounding the traumatic brain injury and after effects.	<ul style="list-style-type: none"> <li>No impact on sexual offending behaviours (presented before TBI) report with recidivism continuing following treatment as well as the TBI.</li> </ul>		
13	<b>Faccini (2014)</b> <i>Reconstructive Therapy of a Serial Threatener with Autism</i>	<ul style="list-style-type: none"> <li>N=1</li> <li>Man in his 30s with autism who has a life long history of impersonal threats and arson.</li> </ul>	<ul style="list-style-type: none"> <li>Continued case study of a male with autism who has a long history of hoax calling (bomb threats/assassination attempts) and arson.</li> <li>Treatment for autism, psychopathology and Eriksonian deficits.</li> <li>Utilised reconstructive therapy and identity work from an offending treatment programme to address deficits and create new identity.</li> <li>Also included trauma therapy and work on social skills.</li> </ul>	<ul style="list-style-type: none"> <li>Author determined treatment programme was effective in remediating Eriksonian deficits and creating a new identity.</li> <li>Also proposed that resolution of the deficits may “<i>decrease static risk and function as a dynamic protective factor</i>” (p31).</li> <li>No reference to recidivism.</li> </ul>	<ul style="list-style-type: none"> <li>Qualitative - Case Study</li> </ul>	1*

### **Aim 1: identify and synthesise studies that attempted to examine the effectiveness of treatment for offending behaviour amongst individuals with ASD**

Effectiveness was examined in terms of further incidents of offending behaviour within studies. Quantitative studies were addressed first, followed by the qualitative case reports. A number of themes emerged from analysis of the qualitative data and are presented in Table 3.

A total of seventy-five participants displaying offending behaviour were included in the studies in this review. ASD diagnoses were identified for thirty individuals across the studies and were reported as: Asperger's syndrome (40%), autism spectrum conditions or ASD (50%), Autism (7%) and Pervasive Developmental Disorder (3%). Of the offending information available regarding the individuals diagnosed with an ASD<sup>16</sup>, 15 displayed sexual offending behaviours (57.8%), 3 were convicted of manslaughter (11.5%), 4 had committed arson (15.4%), 5 showed violent or aggressive behaviours (19.2%), 2 had committed theft (7.7%), 1 had made impersonal threatening behaviours (3.9%), and 1 had convictions related to firearms<sup>17</sup> (3.9%).

#### **3.3.5 Quantitative studies**

As reported in the results, no randomised controlled trials were found nor were any experimental studies with control or comparison groups part of the results. The few clinical case series that were included had no comparison or control group or were pilot studies with low n. The studies however do provide empirical data explicitly in relation to treatment effectiveness in offenders with ASD.

*Effectiveness of treatment:* The Langdon et al. (2012) pilot study of the EQUIP programme for offenders with intellectual disabilities did not find overall improvement in problem solving abilities, including in those participants with ASD, however the authors identified that the participants with ASD did appear to benefit from the treatment despite their potential difficulties in social-perspective taking (p.178).

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<sup>16</sup> Individual data unavailable from Murphy et al. (2007) and SOTSEC-ID (2010).

<sup>17</sup> Percentages add up to more than 100% due to multiple behaviours displayed by participants.

The treatment programme addressing harmful sexual behaviour that was evaluated in Murphy et al. (2007), SOTSEC-ID (2010) and Heaton and Murphy (2013) suggested lower treatment efficacy for offenders with ASD compared to those with intellectual disabilities alone. A diagnosis of ASD was associated with higher rates of recidivism than for the intellectual disabilities group, and ASD was identified as an associated risk factor for future recidivism in the initial pilot study and subsequent follow up studies. However, caution was exercised in generalising these results and Murphy and colleagues also commented on how those with ASD were more likely to commit non-contact sexual offences than contact sexual offences (Heaton & Murphy, 2013; SOTSEC-ID, 2010), for which there is some evidence from non-disabled samples suggesting higher recidivism rates (e.g. Mair & Stephens, 1994). Therefore, this may have impacted upon the apparent increased recidivism rate associated with ASD in this group.

*Potential influence of ASD on offending:* The potential role of ASD in the offending behaviour was briefly discussed in both the Langdon et al. (2012) and Murphy et al. (2007) pilots, with each referring to the possible difficulties individuals with ASD may experience in understanding another's perspective and/or feelings. However, the potential influence of the clinical features of ASD on the offending behaviour was not discussed in the SOTSEC-ID (2010) paper or subsequent follow up (Heaton & Murphy, 2013).

It is important to note that the four quantitative studies were from very specific settings (secure units and/or Community Intellectual disability Teams), targeting a particular group of individuals within this offending population thus limiting the generalisability of any conclusions.

*Possible impact of ASD features on treatment:* None of the case series directly addressed the appropriateness of treatment for individuals with ASD. For example, victim empathy and addressing cognitive distortions are key components in treatment addressing sexual offending, including programmes adapted for offenders with intellectual and developmental disabilities. Additionally, the EQUIP programme also targets cognitive distortions. The cognitive profile of individuals with ASD includes inflexibility of thought and results from the SOTSEC-ID (2010) study showed significantly poorer pre-, post- and follow-up treatment

score for one of the measures of cognitive distortions<sup>18</sup> for men with ASD compared to men with intellectual disability alone.

### 3.3.6 Qualitative studies

*Effectiveness of treatment:* The case reports identified in the search varied in their quality and detail regarding the implementation and effectiveness of treatment of offenders with ASD. For some, effectiveness was directly referenced to reductions in offending behaviours (in frequency or severity) e.g. Griffin-Shelley (2010), Kelbrick & Radley (2013) and Kohn et al. (1998). Reductions were linked to clinical judgement and observations of improvement, with specific details rarely given i.e. measurement/logging of behaviours pre- and post-treatment such as in Milton et al., (2002). Some of the studies also referred to 'implicit' improvements outside the offending behaviour e.g. social skills development, improved emotion regulation/recognition and increased understanding of mental health diagnoses (e.g. Faccini, 2014; Kelbrick & Radley, 2013; Radley & Shaherbano, 2011).

Six of the eleven case studies reported a reduction in further instances of offending behaviour implying effectiveness of treatment. Two of the case reports refer to medication being used for offending behaviours (as opposed to for mental health issues e.g. psychosis or anxiety), in order to supplement behavioural or psychological treatments or as a last resort when other interventions have shown no effect e.g. Milton et al. (2002), Kohn et al., (1998). The results were variable in terms of medication impact on offending behaviours, with one study demonstrating a reduction (Kohn et al., 1998) and the other not (Milton et al., 2002).

The effectiveness of medication across these studies cannot be directly compared as one was for sexual behaviours and the other for aggression, also they were administered in conjunction with other psychotherapeutic treatments. They have been included in this review to demonstrate their use in treatment for individuals with ASD who display offending behaviour and the mixed results found within these studies reflect the ongoing debate

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<sup>18</sup> the Questionnaire on Attitudes Consistent with Sexual Offending (QACSO) (Lindsay et al, 2006).

regarding use of medication in offending and behaviour that challenges (McPheeters et al., 2011; Sawyer et al., 2014).

A variety of psychological interventions were referred to across the case studies. Some were specific, referring to a particular approach i.e. Cognitive Behavioural Therapy (CBT), Cognitive Analytical Therapy, Reconstructive Therapy, etc. (Faccini, 2014; Kelbrick & Radley, 2013; Murphy, 2010a); whereas others gave little detail about the intervention. For example, Radley & Shaherbano (2011) referred to the individual seeing a psychologist and undertaking "*individual work, addressing his substance misuse and his fire-setting*" (p34), and Chan & Saluja (2011) simply stated that the individual "*was put on the sex offender's programme to undergo psychological treatment*" (p903).

Radley and Shaherbano (2011), Kelbrick and Radley (2013) and Faccini (2014) reported treatment effectiveness and a reduction in offending behaviours. Additionally, despite the ongoing problems with interpersonal and sexual conduct, the post-treatment behaviours referred to in the Griffin-Shelley (2010) study could be referred to as less severe i.e. ordering adult movies and accessing pornography compared to contact offences and less frequent (self-reported reduction) in masturbation. Those studies reporting positive treatment effects included Cognitive Analytical Therapy, Cognitive Behavioural Therapy, Group Therapy, Reconstructive Therapy and Relapse Prevention approaches.

As well as specific offender treatment, Radley and Shaherbano (2011) and Kelbrick and Radley (2013) also had a wider treatment programme available including psycho-education, occupational therapy and social skills training. Supplementary therapies were mentioned in a number of the case reports which did not appear to reduce offending behaviour (Milton et al., 2002; Murphy, 2010a). Most case studies, regardless of the effectiveness of offender treatment, referred to the need for adaptations or removal from group programmes for the individuals with ASD (Milton et al, 2002; Murphy, 2010a; Radley & Shaherbano, 2011).

The remaining five case studies reported little or no change in offending behaviours following treatment. Of these, Murphy (2010a) explicitly refers to CBT, whilst others refer to 'group therapy' within a personality disorder programme (Milton et al., 2002), or a general description of 'sex offender treatment programme' (Chan & Saluja, 2011).

**Table 3: Qualitative themes from case studies included in review**

Study No.	Authors	Diagnosis	Co-morbid Mental Illness	Offending Behaviour	Early onset/ previous offending behaviours	Substance use	Medication for Offending Behaviour	Themes					
								Implied/Discusses role of ASD on Offending	Offending Treatment Approach	Impact of ASD on Treatment	Treatment Deemed 'Effective'	Evidence of Further behaviours	'Implicit' Improvements
5	Griffin-Shelley (2010)	AS	Y	Sexual	Y	-	-	Y – special interest, empathy difficulties, social difficulties, empathy	Psycho-education, individual and group psychotherapy, Family Therapy and Relapse Prevention	Y – difficulties empathy and perspective taking, social difficulties	N Although evidence of reduction in some behaviours	Y	Y
6	Kohn, Fahum, Ratzoni & Apter (1998)	AS	N	Sexual Aggression Theft	Y	-	Y	Y – impaired theory of mind and social relatedness	Varied including family therapy, psychotherapy and social skills training	-	N	Y	-
7	Milton et al. (2002)	AS	N - but displays 'obsessional traits'	Sexual	Y	-	Y	Y – special interest	Adapted PD treatment programme	Y – group work omitted due to difficulties	N	Y	N
8	Murphy (2010)	AS	Y	Manslaughter	Y	N	N	Y – communication difficulties and processing of information problems, difficulties with perspective taking, empathy and predicted/understanding consequences of actions.	Adapted CBT	Y – cognitive rigidity, empathy, ability to generalise information/ adapt to context, difficulties with group work	N	N (but difficult to assess in unit)	N
9	Radley & Shaherbano (2011)	ASC	Y	Arson	Y	Y	-Unclear if medication for psychotic symptoms or aggressive behaviours	Y – special interests, impaired social skills	Not specified	Y – individual work as result of difficulties with group work	Y	N	Y

Study No.	Authors	Diagnosis	Co-morbid Mental Illness	Offending Behaviour	Early onset/ previous offending behaviours	Substance use	Medication for Offending Behaviour	Themes					
								Implied/Discusses role of ASD on Offending	Offending Treatment Approach	Impact of ASD on Treatment	Treatment Deemed 'Effective'	Evidence of Further behaviours	'Implicit' Improvements
10	Kelbrick and Radley (2013)	AS	Y	Aggression Sexual	Y	N	N	Y – impaired social skills and difficulties with social perspective taking	CBT, CAT, Individual and Group work	-		N	Y
11	Ray, Marks & Bray-Garreston (2004)	AS (3), PDD (1)	Y	Aggression Sexual	Y	-	-	Y – special interests, inflexible thinking style, empathy difficulties, poor emotion recognition/regulation	Varied	-	Y some example of improvement	Y	Y
12	Chan and Saluja (2011)	Autism	-	Sexual	Y	-	-	Y – special interest	Not specified	-	-	Y	-
13	Faccini (2014)	Autism	Y	Impersonal Threats Arson	Y	-	-	Y – special interests, social difficulties	Reconstructive Therapy	(mentioned in Faccini, 2010)	Y	-	Y

Psychotherapy and family therapy were used in Kohn et al. (1998) and a variety of methods were reported by Ray et al. (2004) with a specific approach unclear.

It is important to note that the data collected from this search was small and as said, variable in quality, therefore there was no way of determining if a particular treatment approach or intervention was more effective for offenders with ASD than others from the results.

*Potential influence of ASD on offending:* There is a large amount of detail within the case studies regarding the potential role of ASD in committing of the offence. Special interests are referred to in six of the nine studies, for example, Radley & Shaherbano (2011) discuss their service user's 'special interests' in fire and witchcraft and the potential role these played in the individual committing an arson offence. Other studies on sexual offending behaviours discussed pre-occupations and 'special interests' (e.g. Chan & Saluja, 2011, and Milton et al., 2002).

Social and communication difficulties were also a common theme across the case studies (Faccini, 2014; Griffin-Shelley, 2010; Kelbrick & Radley, 2013; Kohn et al., 1998; Murphy, 2010a; Radley & Shaherbano, 2011). These difficulties were identified particularly in relation to theory of mind and social perspective taking and appeared to be a key factor in the offending, supporting suggestions made in existing literature regarding the potential influence of ASD characteristics in offending (Dein & Woodbury-Smith, 2010; Howlin, 2004).

Another point of emphasis throughout the data was the difficulty participants experienced in being able to anticipate consequences or implications of behaviour. For example, Murphy (2010a) gives a detailed account of the schema and thought processes involved in the lead up to the offence and the author identifies that despite considerable therapy (over 70 hours) the individual remained cognitively inflexible in his view of the offence (i.e. believed that it was justified). This is again in line with suggestions regarding the possible impact of ASD on offending and goes towards providing empirical evidence for cognitive inflexibility and the potential influence of weak central coherence and inability to anticipate the consequences of offending behaviour



All case studies referred to the role of ASD in the actual offence, however again, this appears to be based on clinical judgement as opposed to standardised measurement or formal assessment. The case studies provided variable amounts of detail regarding background information, behaviour and offences, however as identified by the MMAT, few of the authors identified the source of their data and as a result it is undetermined how much of the clinical judgement is based on interactions with the offender and how much is from a case history, observations or document review (the exception being Kohn et al. 2002).

## **Aim 2: Explore the relationship between the symptoms of ASD and treatment outcome**

*Possible impact of ASD features on treatment:* None of the case reports attempted to directly assess the impact of the clinical features of ASD on treatment outcomes.

References were made with regards to a 'special interest' (e.g. Milton, 2002) or 'empathy barrier' (e.g. Griffin-Shelley, 2010), however formal or standardised assessment of these constructs were not reported and data appeared to come from comments or observations made by the author or clinical team rather than specific measures of ASD symptom severity.

Significance levels of treatment outcomes, clinical or otherwise, were not reported in any of the case studies.

As discussed under Aim 1, the quantitative studies reported changes in outcome measures (significant or otherwise) and recidivism or continued behaviours following the EQUIP or SOTSEC-ID programmes. However, similar to the case reports no measures of ASD symptoms (severity or presence) were reported or explored in relation to treatment outcomes.

*Availability and appropriateness of offender treatment programmes for individuals with ASD:* All papers within this review referred to the lack of suitable treatment for individuals with ASD who offend. Some did demonstrate change following treatment e.g. SOTSEC-ID, 2010; Heaton & Murphy, 2013) but others alluded to the lack of change in behaviours following hospitalisation and/or treatment. For example, Kohn et al., (1998) make reference to their service user being "*discharged after eight months with no real change in his behaviour*" (p296), and Milton et al., (2002) also refer to their service user's previous

extensive engagement with psychology and use of anti-libidinal medication showing no effect.

Many of the cases studies within this review discussed the inappropriateness of treatment programmes available, with one of the studies recommending removal of their service user from the current facility and treatment programme to a more appropriate service (Milton et al, 2002), which would be in line with the Mental Health Act (MHA) (1983) Codes of Practice (2016). The Codes of Practice stipulate that where an individual with an ASD needs to be detained for treatment under the Act, they should be *“treated in a setting that can accommodate their social and communication needs as well as their mental disorder”* (MHA, 2016, 20.27, p210). Additionally, the recent revision of the Codes of Practice (2016) identifies that *“compulsory treatment in a hospital setting is rarely likely to be helpful for a person with autism”* (ibid, p210), and less restrictive alternatives, in a familiar surrounding should be sought where possible.

Another case study highlighted the multiple failures in placements and repeated attempts at finding an appropriate treatment placement (Kohn et al., 1998). The majority of case reports aimed to highlight or emphasise the difficulties encountered by professionals in treating individuals with ASD who offend, not only in terms of available treatment but also service provision. However, the more recent papers (e.g. Kelbrick & Radley, 2013) do make reference to specialist ASD units, potentially as a result of the changes in social policy and recognition of specific needs for individuals with ASD (including offenders) and subsequent service provision.

All case studies referred to the individual programmes and adaptations made, where possible, in addressing the offending i.e. removal from group programmes and adapting CBT (e.g. Kohn et al., 1998; Murphy, 2010a). The case reports also spoke of the need for tailoring programmes to meet the offenders’ additional needs including psychoeducation and social skills work, as well as the need for other programmes such as education and occupational therapy (e.g. Radley & Shaherbano, 2011). As such additional programmes are unlikely to be specific to individuals with ASD and will also apply to individuals with intellectual and other neurodevelopmental disabilities, it is possible that individuals with ASD require specific adaptations.

### 3.4 Discussion

The studies included in this review consist of a small amount of quantitative data from case series and a collection of case reports that explored the treatment of offending behaviour amongst individuals with ASD. Despite a much larger ASD and offending literature identified by the search string, very few of the search results included original, empirical data examining treatment effectiveness for those with criminal behaviour. A synthesis of the study findings highlighted the variability in treatment approach and impact. Effectiveness, primarily defined by reduction in further offending behaviours, was inconsistent across the data. The potential relationship between the features of ASD and treatment outcome was explored in the literature, and all case reports identified the need for adaptations to treatment programmes, necessitated by the symptoms of ASD e.g. removal from group programmes, social skills development and psycho-education.

*Generalisability/application of findings to wider population:* The quantitative and qualitative studies within this review are limited in the level of generalisability to the wider population of individuals diagnosed with ASD who display offending behaviours. None of the case series studies and pilot research designs had control groups (who received no treatment or treatment as usual) and all were drawn from specific offender populations, thereby limiting the possibility of applying any conclusions regarding the effectiveness of the interventions to those outside these settings.

The qualitative case studies showed similarities across a number of features (as shown in Table 3), with common clinical presentation and repeated difficulties in service provision or appropriate treatment availability. Seven of the nine case studies also reported co-morbid psychiatric conditions, all of which were treated with medication, perhaps not surprisingly given they were in secure mental health service provision. Despite these common themes, the data referred to a small number of individuals and was therefore idiosyncratic, with many potentially confounding variables that could have impacted the effectiveness of the treatment regardless of the individuals' diagnosis of ASD. For example, the difficult family relationships following discharge in Griffin-Shelley (2010) could have reduced treatment outcomes and presented challenges to a successful reintegration back into the community,

which has been argued to be a key component in promoting and sustaining rehabilitation (Göbbels, Ward & Willis., 2012; Willis & Grace, 2009).

With increased commitment to evidence-based practice and social policy striving to meet the needs of individuals with ASD, this timely review has highlighted substantial gaps in the literature regarding the evidence-base for the effective treatment of offending behaviour displayed by individuals with ASD. The lack of robust, empirical evidence results in limited information available to professionals working to support this niche client group. The inconsistencies in treatment approach, and variability in outcome highlighted in this review emphasise a sizable gap between policy and practice for the treatment of individuals with ASD who display offending behaviour.

### **3.4.1 Strengths and Limitations**

The systematic nature of this review with clear search protocols and methodology enabled the study to be reproducible, helping to ensure the findings were based on existing literature.

The limitations of this review included the quality of the data available and how it would fare in other appraisal tools such as the GRADE approach. All studies identified were included within this review despite their quality, this decision was made due to a lack of completed controlled studies available. Increasing the standard of quality may have potentially left no data to review and whilst this would clearly demonstrate a lack of evidence regarding the effectiveness of offender treatments for individuals with ASD, it would not be reflective of the fact that work, however unsatisfactory, has been undertaken. This review therefore balanced the need for examining the available evidence by using a less stringent and established appraisal tool, the MMAT, and including all studies. In considering the high number of case studies in this review it is also important to bear in mind biases in the publication of single case designs. These biases could result in gaps in published literature, leaving fewer articles for the search string to find. Clinicians or researchers may choose not to write up cases where ASD posed no challenges or barriers to offender treatment. Alternatively, if cases are written up, journals may decline to publish articles on the successful implementation of an already established treatment. Additionally,

clinicians/therapists or researchers may be reluctant to write up cases where therapy has 'failed' or been deemed 'unsuccessful' and those that do choose to submit for peer-review face the well-known publication bias for studies with positive results (Song, Parekh, Hooper et al., 2010). The grey literature searches attempted to address some of these biases however it yielded little and could not account for the gap in peer-review journals and those cases written up.

A further gap in the research could exist from individuals with ASD traditionally being included within intellectual disability and neurodevelopmental disorders (e.g. ADHD, TBI) populations. It is perhaps only with the provision of ASD specific services and a greater focus on research in this area that ASD may now be examined as a potential variable in mixed intellectual and developmental disability samples.

An additional limitation to the review is the literature potentially missed by use of the terms 'offending' and 'criminal' in the search string. The overlap in behaviours under the terms 'challenging' and 'offending/criminal' makes it likely that some studies were not returned in the search results. The focus of this review was on exploring the effectiveness of treatment for individuals with ASD who display offending behaviour and therefore the search string was designed to elicit results where the behaviour was explicitly stated as offending or criminal or framed in such a context.

The potential limitations of the search string and the quality of the data used within this review obviously impacts on the strength of conclusions drawn and what can be said about the effectiveness of offender treatments for individuals with ASD. However, until further research is completed, and more robust evidence is established, the studies included and methods used within this review were considered the best fit for what is available.

### **3.4.2 Future Research and Conclusions**

The small amount of quantitative data and the uniqueness of the case reports in this review meant that, collectively, the results regarding treatment effectiveness for offenders with ASD were not generalisable. Some of the cases did provide positive evidence of offending treatments for individuals with ASD e.g. Radley & Shaherbano (2011) although difficulties were still highlighted. For example, in the SOTSEC-ID papers those with ASD displayed

higher recidivism rates than those with intellectual disabilities, however the programme was still completed by these individuals and significant improvements were shown in some of the pre- and post- measures. Other studies referred to the lack of progress made by individuals with ASD who engaged with treatment or where treatment was removed because it was felt inappropriate (e.g. Milton et al., 2002; Murphy, 2010a). Existing articles on ASD and offending discussed the potential for the clinical features of ASD to provide barriers to effectiveness of treatment (e.g. Griffin-Shelley, 2010; Murphy, 2010b; Higgs & Carter, 2015). Unfortunately, none of the studies included within this review examined severity of autistic features and whether those further along the spectrum experienced more intractable problems. The variability of findings could therefore be reflective of the heterogeneity of offenders with ASD and individual responsivity to treatment.

The findings in this review emphasise the need for larger experimental trials of treatment that would provide further evidence of effectiveness; particularly, designs with a control or treatment-as-usual group.

Future research could also be directed towards exploring the impact of ASD features on offender treatment programmes and examining the domains of empathy, thought rigidity and social and communication difficulties, making comparisons not only between individuals with ASD who display criminal behaviours to those who do not, but also to offenders without autistic features and behaviours, something of which there was very little within the studies within this review.

A study at the Tizard Centre, University of Kent is currently undertaking some of this work, exploring the potential impact of the features of ASD on treatment outcomes (Melvin, Murphy & Langdon, 2016). Additionally, research funded by the National Institute for Health Research (Langdon, 2016; <http://www.hra.nhs.uk/news/research-summaries/the-match-study/>), has led to the development of a typology for individuals with ASD in forensic mental health settings, highlighting and the heterogeneity within this group and implications for treatment and responsivity (Alexander, Langdon, Chester et al., 2016).

This systematic review therefore joins a growing body of literature concerning offender treatments for individuals with ASD. It emphasises the need for further research,

particularly as treatment outcomes are influential in determining care pathways, parole and social re-integration.

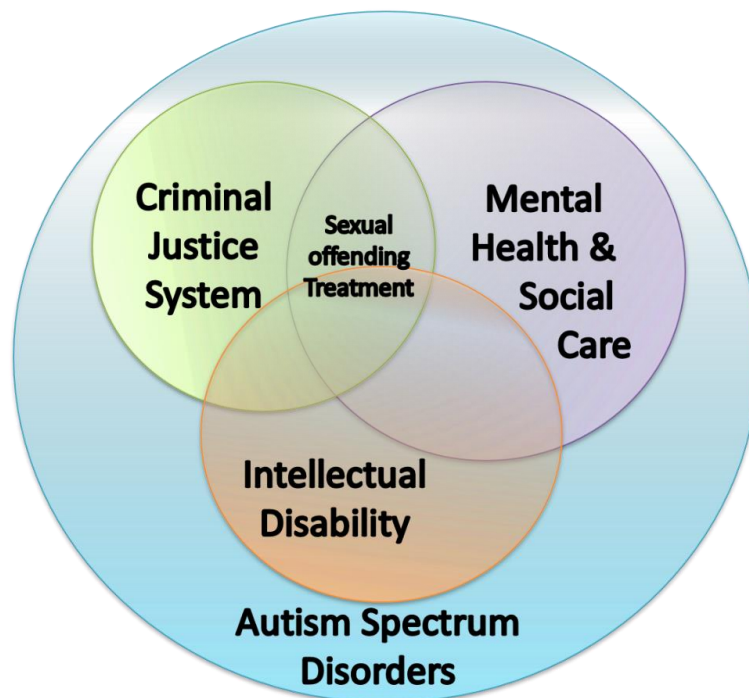
Anecdotal evidence, a number of case studies and a very small amount of quantitative research appeared to be the current evidence-base for the effectiveness of offender treatments for individuals diagnosed with ASD. The recognition and stipulation of the need for support specific to individuals with ASD in social policy is greatly to be welcomed, however the evidence base for establishing best-practice and service provision requirements is in its infancy. Changes to social policy in the UK such as *Think Autism* (Department of Health, 2014) and associated statutory guidance to implement such changes (Department of Health, 2015) mean a greater demand on local authorities and health services to identify and provide specific support and care pathways for individuals diagnosed with ASD. However, most studies in this review recognised the challenges in treating offenders with ASD due to the lack of availability of ASD-specific interventions and the inappropriateness of some current treatments.

## 4 CHAPTER FOUR: SOCIAL POLICY

Social policy exists to meet the needs of society and address any conflicts or problems within that society, including potentially criminal behaviour such as sexual offending. It is designed to inform, and be informed by, government legislation and statutory guidance in addressing a wealth of welfare, criminal, educational, health and cultural issues.

Individuals with ASD who require treatment for harmful sexual behaviour fall into a number of spheres of social policy, including the Criminal Justice System and mental health and social care services (Figure 7). Policies for individuals with intellectual disabilities can apply in addition to policies for children and young people, policies for those who display harmful sexual behaviours or commit sexual offences, and policies relating specifically to a diagnosis of ASD, with the introduction of the Autism Act in 2009. This mix can be extremely complex, with competing agendas, budgets and objectives which may conflict and reach into other domains including education, welfare and health.

**Figure 7: Sexual offending Treatment for Individuals with ASD**





#### 4.1 Autism and Social Policy: The Autism Act (2009)

In 2009 Her Majesty's government passed an Act created to ensure adequate provision to meet the needs of adults with ASD. The Autism Act (2009) required the Secretary of State to develop and implement a strategy to meet "the needs of adults in England with autistic spectrum conditions by improving the provision of relevant services to such adults by local authorities" (s1(1)). *Fulfilling and Rewarding Lives* was subsequently published in April 2010 along with statutory guidance for its implementation (Department of Health, 2010). The strategy recognised that ASD is neither an intellectual disability nor a mental health condition and as such this group of individuals have specific needs, potentially in addition to those associated with intellectual disabilities and mental health conditions. The needs of children and young people with ASD are protected under the Children Act (1983) and subsequently, the Children and Families Act (2014), however it was recognised that adults with ASD were at risk of discrimination under The Equality Act (2010) due to the difficulties in accessing services. The 2010 strategy set out clear guidance for Local Authorities to provide (i) training for their staff on ASD, (ii) a clear pathway for identification and diagnosis of ASD in adults, (iii) local planning and leadership in the provision of services, including transition services. These aims and their implementation were developed to ensure that:

*"All adults with autism are able to live fulfilling and rewarding lives within a society that accepts and understands them. They can get a diagnosis and access support if they need it, and they can depend on mainstream public services to treat them fairly as individuals, helping them make the most of their talents."*

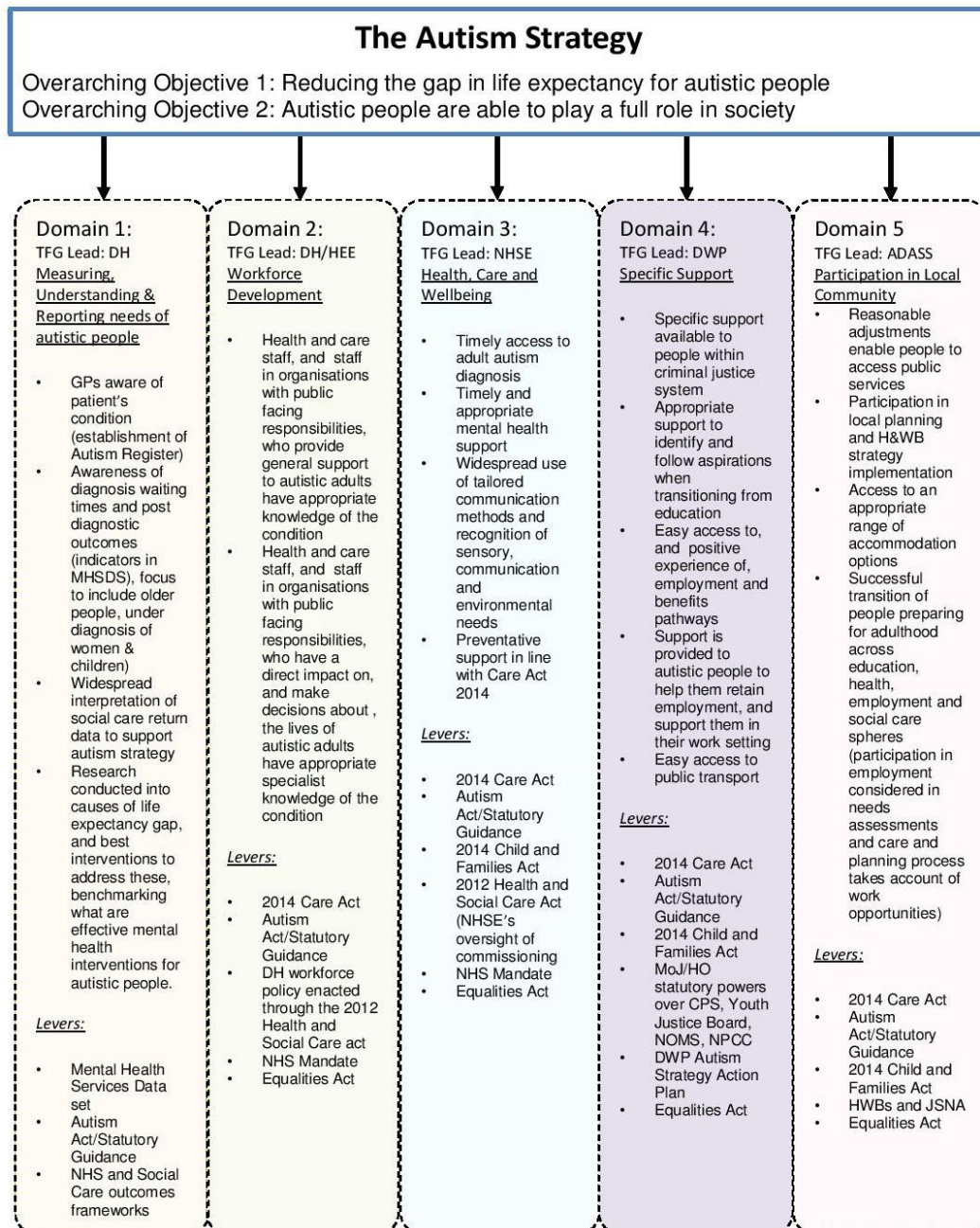
*(Department of Health, 2010)*

Since its conception in 2010 the Autism Strategy has undergone a number of reviews and updates. In 2014, *Fulfilling and Rewarding Lives*, became *Think Autism*, accompanied by revised statutory guidance (Department of Health, 2015). The revisions, and subsequent updates, relate to the implementation of the Strategy rather than its aims and have been revised due to slow progress in achieving the implementation targets (Department of Health & Social Care, 2018). Transition services in particular have come under criticism, in addition to those with complex needs being able to access appropriate services, including those with forensic histories. The 2015 update (*Think Autism*) stipulated the need for local authorities

to meet the needs of offenders with ASD and would include those who sexually offend. The latest *Think Autism* (2018) document includes a revised implementation model and places the strategies to support individuals with ASD across five domains managed by five Task and Finishing Groups (TFG). As displayed below (Figure 8), support within the Criminal Justice System falls under the Specific Support task group which is primarily concerned with education and employment and managed by the Department of Work and Pensions.

The appropriateness of placement within this domain is highly questionable in terms of how such a strategy will be able to meet the needs of offenders with ASD to be able to live fulfilling and rewarding lives. Individuals with ASD who display harmful sexual behaviours or sexually offend can reside in the community, in inpatient care and the prison system. As will be illustrated in the remaining sections of this chapter, and subsequently the PhD, such individuals can display an array of complex needs, including those relating to mental health and intellectual disability in addition to their forensic histories and sexual offending behaviours, and as such, fall within the remit of health and social care systems for support and treatment, and not simply the criminal justice domain.

Figure 8: Think Autism (2018) – The Domain Model (p5).



## 4.2 Social Policy and Sexual Offending

Sexual offending is one of the few arenas in which public opinion and politics dominate, even dictate, policy and legislation rather than evidence-base or expert opinion. Public reaction to sexual offending has been referred to in previous chapters, however examples in relation to legislation will illustrate this point further and emphasise the role of the media, the public and social policy in shaping the perception, management and treatment of individuals who commit sexual offences.

There is considerable debate over media influence in shaping public attitudes and perceptions and much has been written on 'populist penal policy', particularly in relation to sexual offending (e.g. Tonry, 2007; Jones & Newburn, 2013; McAlinden, 2012). Roberts et al. (2003) and Sandler et al. (2008) both comment on how over time, the sexual offender has been transformed from the image of an immoral person whose behaviour requires treatment and rehabilitation to one of a dangerous, deviant predator, incapable of change and requiring societal exclusion and monitoring in order for the public to remain safe.

An early Act designed specifically to consolidate law and address sexual offences was introduced in the UK in 1956. The Sexual Offences Act (1956) repealed sections regarding the rape, abduction, procurement and indecent assault of women, as well as carnal knowledge of girls under twelve (where sexual intercourse with a girl below 10 was considered a felony and a girl between 10 and 12 years old was a misdemeanour) and homosexuality within the Offences Against the Person Act (1861). It also repealed and replaced sections on prostitution and the running of brothels, including employment of those under 16 years old, in the Criminal Law Amendment Act (1867) and Children and Young Person's Act (1933). Since this time the Act has undergone numerous revisions and in its present form, it recognises the vulnerability of people with disabilities, but no longer includes homosexuality as an offence and recognises the perpetration of rape within marriage. Currently the Sexual Offences Act (2003) and the Criminal Justice Act (2003) legislation allow the prosecution and management of individuals responsible for sexual crimes. Registration bodies such as the Multi-Agency-Public-Protect-Agency (MAPPA) and

the Disclosure and Barring Service (DBS) are designed to further protect the public from risk of harm by these individuals.

The introduction of registration and continued supervision of sexual offenders following conviction or release from custody supports the premise that sexual offenders remain an ongoing threat to public safety, and in particular, to vulnerable populations such as children and vulnerable adults. Meanwhile, the Safeguarding Vulnerable Groups Act (2006) requires all individuals involved with children or vulnerable adults to undergo a 'vetting' check (which includes a consideration of their criminal convictions and/or registration on the sex offender register).

North America, Canada, Japan, Australia, New Zealand, and European countries including France, Ireland and those within the United Kingdom all have a registration and notification scheme for individuals convicted of a sexual offence, each with varying restrictions on living arrangements, social contact, employment and travel.

It is proposed that registration schemes allow for the monitoring and supervision of offenders who remain a threat to the public and act as a deterrent for re-offending, thereby reducing the risk of harm to the public (Sample & Kadleck, 2008). Vess et al. (2014) reviewed international sex offender registration laws, however found little evidence to supporting this deterrent-hypothesis. In examining effectiveness, they looked mainly at US data which compared offence rates both before and after the introduction of sex offender registry laws (e.g. Sandler, Freeman & Socia, 2008), and included research that compared re-offending rates of registered sex offenders with non-registered sex offenders (e.g. Levenson, Letourneau, Armstrong & Zgoba, 2009). This review found some research demonstrated reductions, for example three states within Vasquez, Madden and Walker (2008) time-series analysis on rape incidents showed a significant reduction following the introduction of the sex offender registration and notification law in 1995. However, the majority of studies failed to support the hypothesis that sex offender registration acts as a deterrent, e.g. six states within Vasquez et al. (2008) showed no significant difference in incidents of rape following the sex offender registration scheme. Additionally, the Sandler et al. (2008) study compared sexual offence arrest rates between 1986 and 2006 (before

and after introduction of the sexual offender registration law in 1995) and found no evidence demonstrating that registration acts as a deterrent against future sexual offending, either as re-offences or first-time offences. Levenson et al. (2009) looked at sexual recidivism rates of offenders in South Carolina and found only a 2% difference in those who had registered and those who had not with a 9% sexual recidivism rate for registered offenders compared to 11% by those who had failed to register. It is possible that other factors may impact the data and mask any deterring effects from the register, for example an increase in the number of sexual offences reported for other reasons such as historical cases as in Operation Yewtree in the UK following the Jimmy Saville exposé.

The above studies suggest that registration does not act as a deterrent, yet media coverage and public opinion continue to call for severe monitoring and registration of sexual offenders released into the community and a number of campaigns have been raised to allow public access to the sex offender register under the guise of 'public protection' (e.g. Megan's Law<sup>19</sup> (US), Justice Department, 1996, 2006; Sarah's Law (UK), Home Office 2010).

The US and South Korea allow public access to their sex offender registers, however other countries do not. A number of high-profile cases during the 1990s in the UK resulted in a media-led petition allowing for public access to the sex offender register under 'Sarah's Law', also known as the child sex offender disclosure scheme (CSOD) (Home Office, 2007, 2010). Kemshall et al. (2010) evaluated the UK pilot scheme set up to permit members of the public to request information regarding a particular individual within their community. It was estimated that at least 2,400 people across four English sites would access the service. However, results showed very low uptake with only 585 enquiries made, and 315 translating to formal applications for information, and only 21 granted (4% of enquiries or 7% of applications resulted in disclosure of information about an offender) during the pilot. Despite the low usage figures, little measurable outcome of increases in public safety and a budget of £150,000 per site, Sarah's Law was implemented nationally.

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<sup>19</sup> Amendments to sections within the Pam Lyncher Sexual Offender Tracking and Identification Act (1996) and Jacob Whetterling Crimes Against Children and Sexual Violent Offender Registration Programme (1994).

This is not to assert that registration schemes are not warranted or that supervision and monitoring following release is not important. The Vess et al. (2014) review demonstrated that registration did allow for quicker apprehension of offenders (e.g. Schram & Milroy, 1995) and continued contact can provide assistance and support, such as maintenance groups for those who have completed a sex offender treatment programme. However, the system is only useful in so far as that the information is up to date (Centre for Sex Offender Management (CSOM), 2008) and that organisations have the resources to follow up enquiries and provide supervision and support.

With sexual recidivism rates being lower than non-sexual recidivism<sup>20</sup>, and sexual offences being far more likely to be perpetrated by someone known to the victim rather than a stranger<sup>21</sup>, the depiction of registration, supervision and monitoring as the solution to preventing the public from being a victim of sexual crimes is an image perhaps manufactured by the media and popular opinion rather than founded in research or evidence-base.

The focus on continued supervision also has the underlying implication that treatment or rehabilitation is ineffective. By requiring registration following release or issuing an indeterminate sentence under the Powers of Criminal Courts (Sentencing) Act (2000), the justice system itself implies that treatment has limited effects and an individual will remain a risk to the public.

Additionally, it has been argued that treatment has become a vehicle for punishment (MacLinden, 2012), with mandatory attendance required for rehabilitation programmes and treatment often stipulated as a condition of sentence or release. The interventions and treatment programmes addressing sexual offending were discussed in Chapter One (Sexual Offending) where it was highlighted that many group cognitive-behaviour-therapy (CBT)

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<sup>20</sup> As discussed in Chapter One (Sexual Offending) e.g. a sexual offender is much more likely to re-offend non-sexually than sexually (Rosenberg et al., 2005); and recidivism rates for sexual offenders are consistently reported as under 20% (e.g. Hanson & Bussière, 1998, whereas re-arrest rates for property offences have been found to be 73.8%, and 66.7% drug offences (Langan & Levin, 2002; Langan et al., 2003; Sandler et al., 2008).

<sup>21</sup> Synder (2000) reported that for 93% of child abuse victims the perpetrator was a family member or acquaintance, and Sandler et al., (2008) found 90% of adult sexual abuse victims knew their attacker.

programmes focus on the use of avoidance goals. This requires the offender to manage their risk by *not doing something* to avoid re-offending, rather than utilising approach goals and facilitating the offender to meet their needs through pro-social activities (e.g. strength-based approaches such as the Good Lives Model (Ward & Brown, 2004). The role of ‘therapy’ for sexual offenders could be argued to have become a strategy for risk management and public protection rather than necessarily a rehabilitative process for the offender.

McAlinden (2012) identified England and Wales as having one of the most stringent sex offender governance systems in Western Europe. The emphasis on public protection and safety over offender needs and rights has raised a number of social, ethical and legislative issues, including breach of human rights (Birgden & Cuculo, 2011). However, despite these concerns, UK social policy regarding sexual offenders clearly focuses on post-release control and extending the restraints of prison to the community, prioritising public protection, or the appearance of it, above all else including rehabilitation of the offender.

#### **4.3 The Criminal Justice System and Adult Offenders with Intellectual Disabilities and/or Autism Spectrum Disorders**

Sexual offending is prosecuted under the Sexual Offences Act (2003) and the Criminal Justice Act (2003), however to be eligible for prosecution a defendant must have ‘*mens rea*’ and be ‘fit to plead’. Fitness to plead requires the defendant to be able to understand the process of the Court, specifically being “*capable of contributing to the whole process of his or her trial, starting with entering a plea*” (British Psychological Society, 2006, p68). This ability may be compromised in those with intellectual disabilities and/or ASD as ‘contributing’ refers to the ability to (i) understand the concept of a guilty or not guilty plea, (ii) following the proceedings, (iii) know they can challenge a juror if they believe them to be biased, (iv) question the evidence, and (v) instruct their counsel.

If an individual is found unfit to plead and a trial of the facts takes place (i.e. to ascertain if the alleged incident/act took place rather than guilt about wrongdoing), in finding the individual guilty of the offence the court has a number of options at its disposal. These include: a hospital order through the Mental Health Act (2007), a Supervision Order, where



the individual is placed under the supervision of a social worker or probation officer; and, Absolute or Conditional Discharge (where it is felt the process of going to court has been sufficient punishment).

A defendant with ASD, with or without an intellectual disability, can however be deemed 'fit to plead' and are then subject to Crown Prosecution Service proceedings. The difficulties experienced by those with ASD within the Criminal Justice System have been recognised on numerous levels, from arrest and charging, to court proceeding and detention. For example, Crane et al. (2016) surveyed police officers about their interactions with autistic individuals and members of the autistic community who have engaged with the police. Police officers interviewed identified their lack of, and need for, training in engaging and interviewing those with ASD, as well as the challenges in managing the needs, expectations and adaptations for those on the spectrum (as victims and suspects). Members of the autistic community in the same study reported largely negative responses to questions regarding their engagement with the police (69-74% unsatisfactory, 13-15% satisfactory, 4-13% neutral/unsure), along with feelings of victimisation and discrimination in their encounters (Crane et al., 2016).

As identified in Chapter Two (Autism Spectrum Conditions), individuals with Asperger's Syndrome are less likely than individuals with an intellectual disability to be diverted from the Criminal Justice System, however, despite higher verbal abilities and possible absence of intellectual disability, they are still vulnerable throughout the criminal process. The uneven cognitive profile often seen in individuals with ASD can result in overestimations of ability by police and others, especially in those with Asperger's Syndrome (Frith, 2004). For example, apparent verbal proficiency may lead to presumptions of a higher comprehension level, particularly in relation to social norms or etiquette. As such, the presence of Asperger's Syndrome may not have been apparent or disclosed upon arrest or caution, and therefore not acknowledged during the process. In a survey of 33 barristers and solicitors about their engagements with autistic individuals, Maras et al. (2017) reported that 13 of the sample (92%) had experience of a defendant disclosing their diagnosis of ASD at the trial. An undiagnosed or undisclosed diagnosis of ASD has the potential for reducing the opportunities to identify any need of an appropriate adult, use of particular

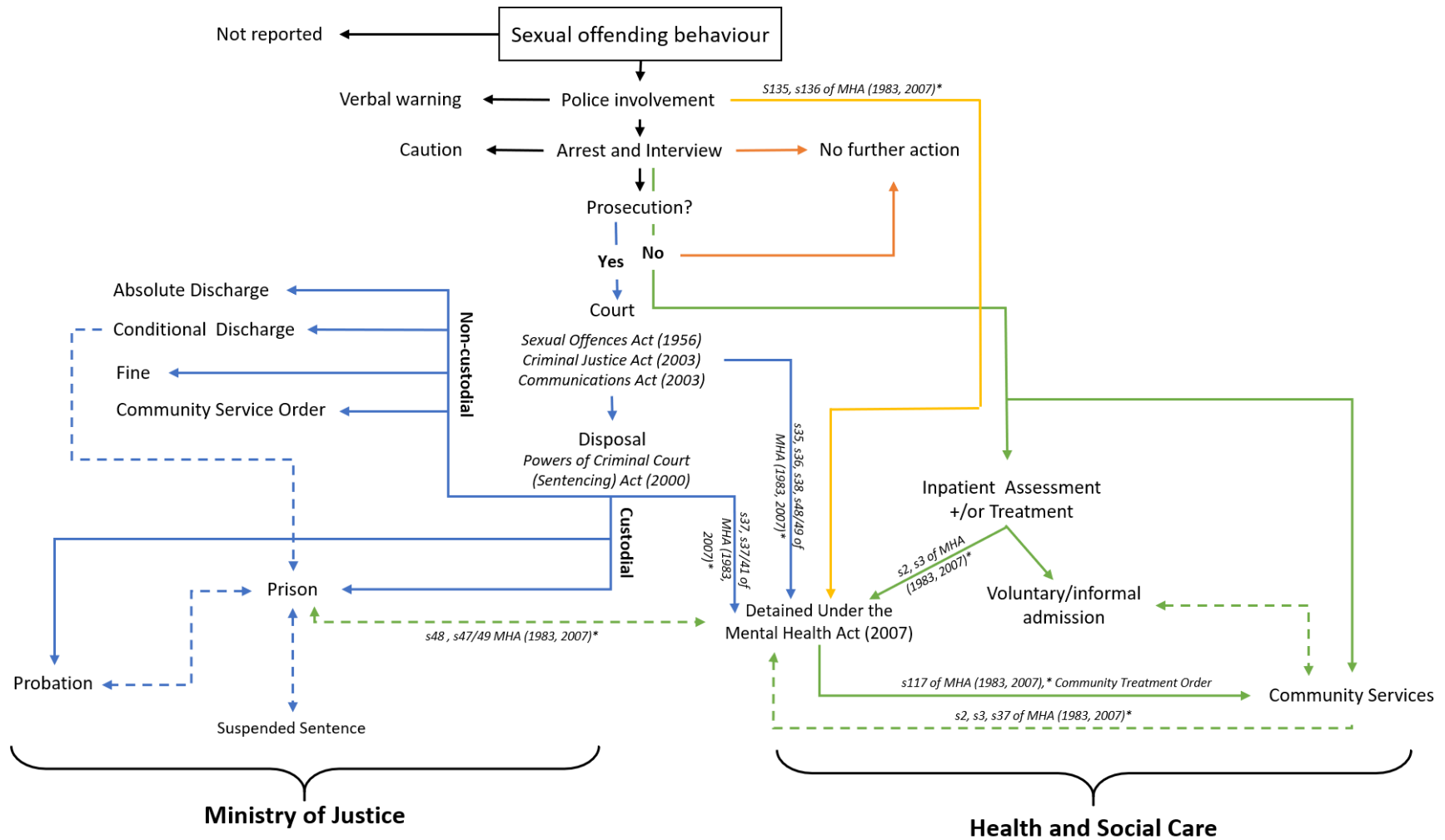
questioning/police interviewing styles and/or adjustments during court or to the environment (see below).

The National Autistic Society have produced a Guide for Criminal Justice Professionals (National Autistic Society, 2008) in collaboration with individuals on the spectrum and their families. Despite wider recognition and available guidance, some legal professionals still report feeling ill-equipped in their engagements with offenders with ASD and members of the autistic community report variability in their experiences of the Criminal Justice System. For example, in Maras et al. (2017) sixty-eight percent of those interviewed reported interacting with an autistic individual as a defendant, yet only 31% (n=7) had undergone training on ASD. In the same study, only twenty-eight individuals with ASD reported that they were offered special measures e.g. a screen around the witness box, use of video link for giving evidence or the removal of gowns/wigs, etc.

The introduction of the Autism Act (2009) and subsequent updates (2014), along with increased recognition of offenders with ASD, has led to the development of specific guidance and information regarding defendants with ASD. However, as illustrated above, these are yet to be applied consistently.

Individuals with ASD who sexually offend may follow a number of pathways through the Criminal Justice System. For example, in addition to custodial sentences, offenders may be diverted through Liaison and Diversion services, given a community sentence or detained under the Mental Health Act (2007). The potential pathways for adults with ASD who display sexual offending behaviours are well established (if not always consistent) and are illustrated in Figure 9: Pathways for offenders with intellectual and developmental disabilities).

**Figure 9: Pathways for offenders with intellectual and developmental disabilities**



\*Sections of the Mental Health Act (1983, 2007)

#### **4.4 The Criminal Justice System and Children and Young People who Sexually Offend or Display Harmful Sexual Behaviour**

For those under 18 years old who commit sexual crimes the Sexual Offences Act (2003) and Criminal Justice Act (2003) also apply. Each has principles specifying the application of the Acts to young offenders, with special consideration for: the age of the offender (chronological and emotional); the seriousness of the offence; the likelihood of future offences being committed; and the extent of harm likely to result from those future offences.

Those determining sentencing are also required to consider the mental health and capability of the young person including any intellectual disability or difficulty and any speech and language difficulty or other disorder (Sentencing Guidelines Council, 2009, paragraph 4), and such difficulties have been specifically identified in sexual offences in the revised Guidelines (Sentencing Guidelines Council, 2017). These Guidelines are not intended to supersede specifications in the Acts, however they are designed to take account of the child-status of the offender and the chronological, cognitive, emotional and developmental immaturity. Custodial sentences for young people are reduced in comparison to adult offenders with the majority of sentences ranging from a three to twenty-four months Detention and Training Order (DTO) (Youth Justice Board, 2019). Half of a DTO is spent in custody and half in the community under the supervision of the Youth Offending Team. However, for some offences under the Sexual Offences Act (2003) and Criminal Justice Act (2003) a maximum of a five year sentence can be implemented, with Section 90 and 91 of the Powers of Criminal Courts (Sentencing) Act (2000) and Sections 226 and 228 of the Criminal Justice Act (2003) allowing for extended or extended detention for public protection (Criminal Justice Act, 2003; Sexual Offences Act, 2003; Sexual Offences Definitive Guide, 2014).

The Powers of Criminal (Sentencing) Act (2000) applies specifically to youth sexual offending as Section 91 can be implemented in the case of 'grave crimes'. These are crimes where an adult would receive at least a fourteen-year custodial sentence, which includes rape.

Social policy for young offenders not only stems from the realm of criminal justice but also arises from concerns over the welfare of the child. As specified in the Sentencing Guidelines

(2009, 2017), custodial sentences are only to be issued as a last resort when considered to be in the best interests of the child or required for public protection. Other sentencing options include referral orders and youth rehabilitation orders (Sentencing Guidelines Council, 2009, 2017). These latter two, in addition to Detention and Training Orders, are the principal sentences given to young offenders however other sentences remain available including Absolute and Conditional Discharge (Section 12-15 of the Powers of Criminal Courts (Sentencing) Act, 2000) and a Hospital or Guardianship Orders (under Section 1 of the Mental Health Act, 1983) (Crown Prosecution Service, 2019).

The youth-justice secure estate includes Youth Offending Institutions and Secure Training Centres, as well as the option of referring young offenders to Secure Children's Homes, which are managed by Social Services (see Figure 10 for Potential Pathways of Children and Young People who Display HSB). Young offenders can be placed within any of these institutions by instruction of the Youth Justice Board and the Children's Commissioner Report (CRC) (2015) identified 1,004 children in youth justice custody in England and Wales in March 2015. This is a significant decline compared to previous years<sup>22</sup>, but there are still concerns that custodial sentences are not being used as a last resort (Children's Commissioner Report to UNCC 2015). General Comment 10, set out by the United Nations Committee on the Rights of the Child – Child's Right to Juvenile Justice (UNCRC) (2007), stipulates that:

*“Children in conflict with the law, including child recidivists, have the right to be treated in ways that promote their reintegration and the child's assuming a constructive role in society (art. 40 (1) of CRC). The arrest, detention or imprisonment of a child may be used only as a measure of last resort (art. 37 (b)).”*

However, the UK has been criticised by the UNCRC for failing to comply with the Convention by having high numbers of incarcerated children and young people in an overly punitive system (United Nations, 2014; Children's Rights Alliance for England, 2014).

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<sup>22</sup> Previous Children's Commissioner Reports identified 2,821 children in custody in 2001 and 2,027 in 2011.

The Crime and Disorder Act (1998) introduced a much tougher approach to youth offending than had previously been in place, with the chief objective being to prevent youth offending. Some have argued this tougher approach was influenced by the murder of two-year old Jamie Bulger by a ten and an eleven-year-old boy in 1992 (Scruton, 2007), and prevention as priority continues to be the backbone of today's policy and legislation. Over the years the Government's approach to youth crime (Ministry of Justice, 2010, 2013; Home Office, 1997) has continued to assert the primary aim of preventing offending by children and young people, with the latest version proposing to do this by preventative early intervention measures, punishment and rehabilitation (Ministry of Justice, 2013). However, 42,508 young people received a police caution or were prosecuted in court in 2018<sup>23</sup>, and youth re-offending rates of 40.9 % for all young offenders (and increasing to 64.6% if in receipt of a custodial sentences)(Youth Justice Board, 2019), highlight the current failure of social policy and services in preventing crime committed by young people.

#### **4.5 Social Welfare and Children and Young People who Sexually Offend/Display Harmful Sexual Behaviour**

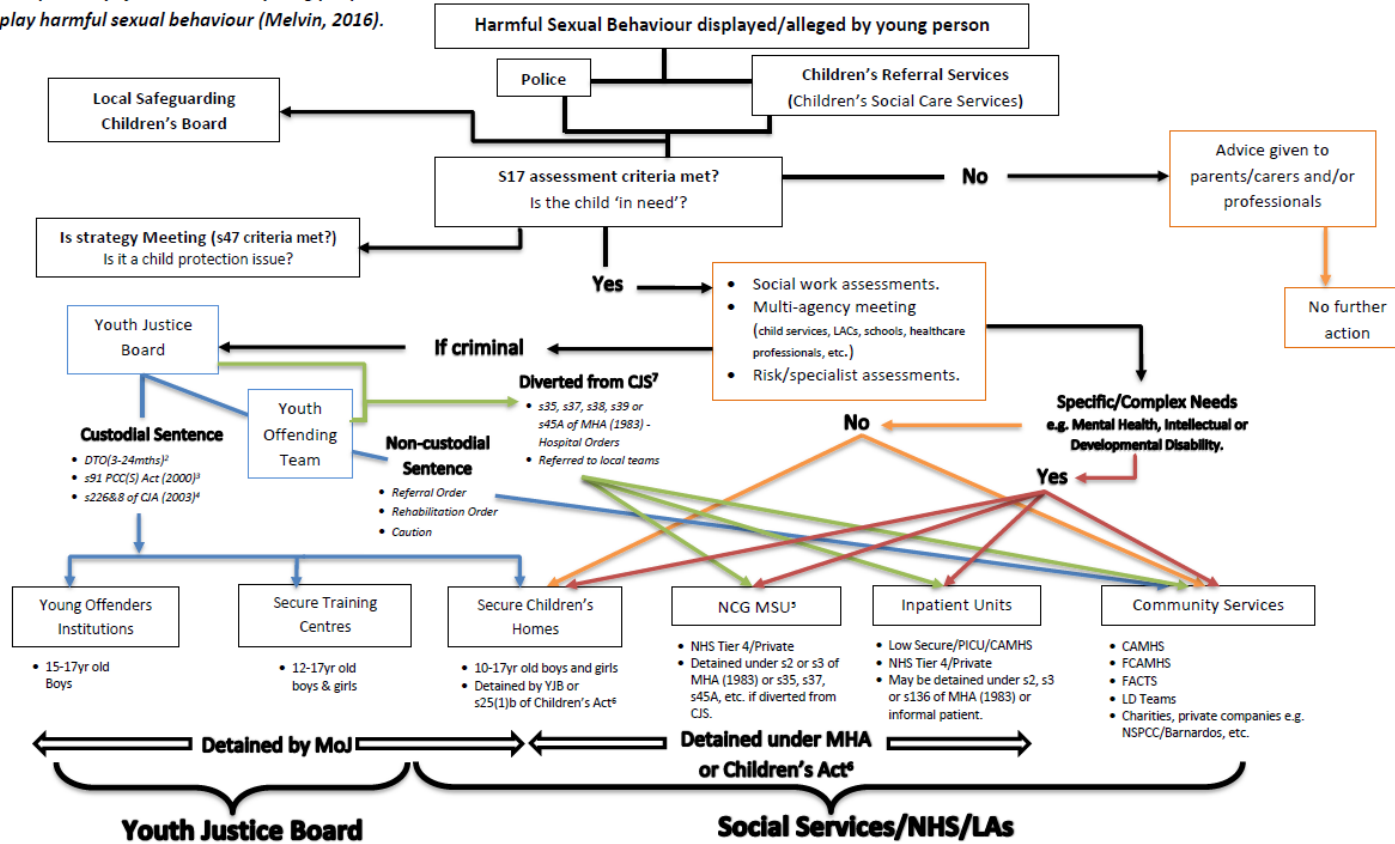
So far this chapter has discussed criminal justice policy in relation to children who offend, including sexual offending. However, as said, this is but one half of the social policy story for children and young people who display harmful sexual behaviour. Consideration of welfare is considered paramount under the UNCRC and is also emphasised in social policy and legislation for any child who comes into contact with criminal, social, health or educational services. For instance, the Children Act (1989) established the treatment of juvenile offenders as separate from adults and the Children and Young Person's Act (1933) introduced the welfare of the child as a statutory principle. Much has been written over the years on the social policy shift from concerns regarding the welfare of the child to focusing on crime control (e.g. Grimwood & Strickland, 2013), and currently it could be said that the systems reflect the welfare of child offenders falling a distant second to the punitive and correctional systems of UK youth justice.

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<sup>23</sup> The 2011 UK census reported 5,337,906 young people aged between 10 and 18 years old (Office of National Statistics, 2018)

Figure 10: Pathways of children and young people who display harmful sexual behaviours

Service pathways for children and young people who display harmful sexual behaviour (Melvin, 2016).



<sup>3</sup>Section 47 Children's Act (1989). Need for Child Protection meeting including - 3(a) whether the authority should make any application to the court, or exercise any of their other powers under this Act [or section 11 of the Crime and Disorder Act 1998 (child safety orders)], with respect to the child.

<sup>4</sup>Detention and Training Order. Range between 4 and 24months. Half time spent detained in custody and half served in community supervised by Youth Offending Teams (YOTs).

<sup>5</sup>Section 91 Powers of Criminal Court (Sentencing) Act (2000). Power to detain for specified period; applies where a person aged under 18 is convicted on indictment of— (a) an offence punishable in the case of a person aged 21 or over with imprisonment for 14 years or more, not being an offence the sentence for which is fixed by law; or (b) an offence under section 14 of the Sexual Offences Act 1956 (indecent assault on a woman); or (c) an offence under section 15 of that Act (indecent assault on a man) committed after 30th September 1997.

<sup>6</sup>Sections 226 and 228 of Criminal Justice Act (2003). s226 - Detention for life or detention for public protection for serious offences committed by those under 18 (1) This section applies where— (a) a person aged under 18 is convicted of a serious offence committed after the commencement of this section, and (b) the court is of the opinion that there is a significant risk to members of the public of serious harm occasioned by the commission by him of further specified offences. Section 228 - extended sentence for certain violent or sexual offences: persons under 18, applies where— (a) a person aged under 18 is convicted of a specified offence committed after the commencement of this section, and (b) the court considers— (i) that there is a significant risk to members of the public of serious harm occasioned by the commission by the offender of further specified offences; and (ii) where the specified offence is a serious offence, that the case is not one in which the court is required by section 226(2) to impose a sentence of detention for life under section 91 of the Sentencing Act.

<sup>7</sup>National Commissioning Group (NCG) Medium Secure Units (MSU).

<sup>8</sup>Section 25(1)b of Children's Act (1989). Stipulates that a child being looked after by the local authority may not be placed, and if placed, may not be kept in a secure accommodation unless it appears: That he/she has a history of absconding and is likely to abscond from anything other than secure accommodation; and if he/she absconds he/she is likely to suffer significant harm (Section 25(1)(a)); or if he/she is kept in anything other than secure accommodation he/she is likely to injure him/herself or other persons (Section 25 (1)(b)).

<sup>9</sup>The Youth Justice Board (YJB) and YOTs can divert individuals from the Criminal Justice System (CJS) to NCG MSUs and Inpatient Units for psychiatric treatment via hospitals and transfer orders under the MHA (1983) e.g. s35, s37, s37/41 or s47/49. Additionally, can be diverted if the individual lacks mens rea.

A recent strategic plan by the Youth Justice Board has pledged a '*child first, offender second*' approach to all youth justice services (Case & Haines, 2019). This plan indicates a shift in priority from punishment and risk to child welfare, coupled with a new set of Standards for Children in the Youth Justice System. The Standards aim to promote preventative and rehabilitation measures in the community (rather than in custody), with multi-agency liaison and consistency and continuity in delivery of education, health (including mental health) and offending services (Youth Justice Board, 2019). Despite these new plans, and other Government reforms highlighting the importance of early intervention and preventative strategies, funding and resources to the services which provide these strategies have consistently been cut or are well recognised as insufficient (The Children's Commissioner, 2017).

Legislation such as *Working Together to Safeguard Children* (Department of Health, Home Office, Department of Education and Employment, 1999) and the latest *Transforming Youth Custody* (2013) paper stipulate the need for integrative practice and communication across agencies involved with a young offender who displays harmful sexual behaviour, while the report by the Criminal Justice Joint Inspection (CJJI) into Multi-Agency Responses to Children and Young People who Sexually Offend (2013), referred to in Chapter One (Sexual Offending), illustrated little evidence of this in practice. This report highlighted a lack of national guidance (with National Institute for Clinical Excellence Guidance for Harmful sexual behaviours among children and young people, only being introduced in 2016 (NICE, 2016, NG55), and maintained that disjointed practices were characterised by "*poor communication...inadequate planning and joint assessment*" (p4). The report also drew attention to a number of 'missed opportunities' where young sexual offenders had displayed "*previous concerning sexualised behaviour*" (p8). Although the investigation found some examples of good practice, overall the report demonstrated that the "*gaps between policy, process and practice were significant*" (p8).

The youth justice system, whilst criticised for being punitive, does have clear statutory guidance and structure with dedicated pathways for young people who commit sexual offences. For those who do not fall within the Criminal Justice System, social policy is dictated by local health, education and social welfare services.



Until recently, children and young people who displayed harmful sexual behaviour, but did not enter the youth justice system, were covered under Section 17 of the Children Act (1989), however this now also includes aspects of the Children and Families Act (2014). The Children and Families Act (2014) has replaced Special Education Needs statements with Education, Health and Care Plans and cover individuals up to the age of 25<sup>24</sup> (rather than 18 years as under the Children Act). In addition, parents and young people, including those with intellectual and developmental disabilities, now have the option of a personal budget to buy specialist support when a Plan is issued.

These Acts stipulate that it is the duty of Local Authorities to safeguard and promote the welfare of children and provide appropriate services. However, the provision of 'appropriate services' varies greatly, and until the introduction of the NICE Guidelines (2016), without a national standard or remit of support and interventions for children and young people who display harmful sexual behaviours, services were determined by regional resources.

Local Children's Safeguarding Boards (LCSB) oversee the organisations and agencies who are responsible for safeguarding and promoting the welfare of children, including those children who display harmful sexual behaviours. The LCSB remit includes ensuring co-operation and communication across multi-agency working, including the Police and Probation Services, local NHS bodies, local charities and organisations, and YOIs and YOTs in order to maintain the welfare and safeguarding of children remains a priority.

If a child is alleged to have displayed harmful sexual behaviour or has come to the attention of the police, Child Referral services will establish whether a Section 47 Strategy meeting is required. Section 47 of the Children Act 1989 determines whether a child protection meeting needs to be held (for the perpetrator and/or victim). The LCSB are informed and a multi-agency meeting is held. Within this meeting social work, educational and health care services will determine the needs of the child and discuss the services available (see Figure 10 for potential pathways of children and young people who display harmful sexual behaviour).

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<sup>24</sup> With the exception of offenders – see Section 4.7, page 127

For children and young people who are not considered 'high risk' or do not have additional complex needs (e.g. mental health or developmental disabilities), community services should provide support and treatment either through tiers 1-3 NHS facilities e.g. Flexible Assertive Community Treatment (FACTs), or through referrals to specialist teams in charities and organisations offering support for young people who display harmful sexual behaviour e.g. NSPCC, Barnardos.

Those who are deemed 'high risk' (but have not gone through the Criminal Justice System) may be detained in a Secure Children's Home under Section 25 of the Children Act (1989) and offered treatment by trained staff or from in-reach programmes.

#### **4.5 Health Services and Children and Young People who Sexually Offend/Display Harmful Sexual Behaviour.**

Children and Young people who have additional needs such as mental health difficulties or an intellectual or developmental disability may require more specialist support from communities teams e.g. Child and Adolescent Mental Health Services (CAMHS), Forensic Child and Adolescent Mental Health Services (FCAMHS) and intellectual disability Child and Adolescent Mental Health Services (LD-CAMHS), or in some instances may require detention under the Mental Health Act (2007) in Medium or Low secure hospitals. However, attaining access to these services can prove complex due to eligibility criteria and this will be discussed further below in relation to children and young people who display harmful sexual behaviour with complex needs.

Generic health and mental health services do not always have the specialist knowledge to address harmful sexual behaviour displayed by children and young people and the Centre for Mental Health (2010) recently undertook a mapping of services available to high-risk young people (including those who display harmful sexual behaviour e.g. Hoare & Wilson, 2010). A recent report by the Solutions for Public Health (2013) proposed the need for Forensic-CAMHS (FCAMHS) across the UK (Dent et al., 2013). In this report existing service provision for meeting the needs of young people with mental health concerns who present a high risk of harm to others, as well as for those who are in contact with the Youth Justice Board, was described as "*heterogeneous and patchy*" (p4). The service model proposed in

the report would potentially bridge the gap between health, justice and welfare services, and pick up those who may fall between different camps of eligibility criteria. The proposal argued for the need of specialist, rather than generic, service provision for these individuals, including those who display harmful sexual behaviour, and is congruent with findings from a Criminal Justice Joint Inspection (CJJI) (2013) which identified that practitioners with specialist knowledge tended to deliver higher quality interventions to young people who displayed harmful sexual behaviour.

#### **4.6 Policy and Interventions for Children and Young People who Sexually Offend/Display Harmful Sexual Behaviour**

The CJJI (2013) report identified that interventions offered to children and young people who displayed harmful sexual behaviour were largely CBT or educational in nature, with some being delivered in a 'piecemeal' fashion. Some instances of good practice were highlighted, including the Good Lives Model and interventions delivered by Barnardos Taith Service and the NSPCC, identified in in Chapter One (Sexual Offending) (McCorry, 2011; Print, 2013). However, the Criminal Justice Joint Inspection (CJJI) (2013), and the Centre for Mental Health and Solutions for Public Health reports all illustrate that availability, accessibility and quality of interventions for children and young people who display harmful sexual behaviour varies greatly across England and Wales.

Chapter One (Sexual Offending) discussed the limited treatment options for children and young people who display harmful sexual behaviours and the reports discussed in this chapter have highlighted a lack of availability and accessibility, yet social policy, under the Children Act (1989) and new Children and Families Act (2014), dictates that local authorities are required to provide these services.

This finding echoes the '*significant gaps*' identified in the CJJI report (2013) and suggests that welfare systems for children and young people who display harmful sexual behaviours also experience a disjunction between policy (e.g. Children Act, 1989), legislation (i.e. regional agendas, NICE Guidelines), and practice (lack of treatment options and varying availability).

In Chapter One (Sexual Offending) it was highlighted that sexual offending (and harmful sexual behaviours) in itself is a behaviour, however it is frequently associated with mental illness or psychiatric conditions. As such, the classification of harmful sexual behaviours as a consequence of mental illness, or as a behavioural deviancy raises issues in the type of treatment a child or young person may need and thus impacts upon who provides this. The CJI (2013) report highlighted a general lack of understanding as to where children and young people who sexually offend 'fit' into the youth justice system (p20), particularly in relation to their needs and risk. This confusion of 'fit' and the 'disjointedness' of multi-agency working also extends to welfare services and, when coupled with overstretched budgets and limited resources, can result in those with complex needs falling between the gaps of social policy.

#### **4.7 Policy Considerations for Children and Young People with Autism Spectrum Disorders who Sexually Offend/Display Harmful Sexual Behaviour**

Children and young people diagnosed with ASD who display harmful sexual behaviours fall within the remit of those with complex needs. Their additional diagnosis of ASD can impact which local team is responsible for providing treatment. As identified in Chapter Two (Autism Spectrum Disorders) and in the previous section, ASD include a range of diagnoses, including those which feature an intellectual disability and those which do not (e.g. Asperger's Syndrome). This can create challenges in determining which team can best meet the needs of the individual displaying harmful sexual behaviours. For example, an individual with Asperger's Syndrome who displays harmful sexual behaviours may not necessarily meet the criteria for a CAMHS unless presenting with a co-morbid mental illness.

Moreover, an individual diagnosed with ASD but without an intellectual disability (Asperger's Syndrome or High-Functioning Autism) may not fall within the remit of the Community-Learning Disability (LD) team. Therefore, unless the Local Authority has a Flexible Assertive Community Treatment (FACTS) team, it is difficult to identify the agency responsible for providing treatment and support for this individual.

A child or young person with ASD who has an intellectual disability and co-morbid mental health issue may be referred to the Community-LD team as that area's CAMHS criteria may

not include intellectual disability. Nevertheless, the CJI (2013) investigation and Solutions for Public Health Report (2013) both identify that some services, including certain CAMHS, exclude those who display harmful sexual behaviours or individuals with a moderate intellectual disability, despite having significant mental health needs.

Although some areas do have LD-CAMHS, or FCAMHS who recognise the presence of intellectual and developmental disabilities among young offenders, these services are not nationwide and readily available to all communities, and thus children and young people with ASD who display harmful sexual behaviours are very much in a postcode lottery for available help (Dent et al., 2013; The Children's Commissioner, 2017).

Statutory guidance specific for ASD includes NICE Guidelines for the Management and Support of Children and Young People on the Autistic Spectrum (2013) which identify as a key priority the need to *"Ensure that all children and young people with autism have full access to health and social care services, including mental health services, regardless of their intellectual ability or any coexisting diagnosis"* (NICE, 2013, p8).

Furthermore, the British Psychological Society have produced a Call to Action regarding children and young people with neuro-disabilities in the Criminal Justice System, including those with ASD, requesting wider recognition and understanding of neuro-disabilities, and earlier neuro-disability specific, screening, assessment and intervention for children and young people (British Psychological Society, 2015).

These examples show progress in provision and attainment of appropriate services for individuals with ASD, however the challenges regarding availability and access to services remain, particularly for those requiring specialist services such as children and young people diagnosed with ASD who display harmful sexual behaviours.

Within the youth justice system, the YJB and YOTs have only recently begun to acknowledge and respond to individuals diagnosed with ASD. In 2012 the Children's Commissioner produced a report regarding the prevalence of neurodevelopmental disability in young people who offend (Hughes, 2012). By using systematic literature review and focus groups, the report identified significant percentages of the youth offending population diagnosed with neurodevelopmental disorders including intellectual disabilities, ADHD,

Communication Disorders, Traumatic Brain Injury, Foetal Alcohol Syndrome and ASD. The report identified studies which informed of a 15% prevalence rate of ASD amongst young people in custody, compared to a 06%-1.2% prevalence rate amongst the general population of young people (Hughes, 2012).

Both, the above report and the CJI investigation noted the poor identification levels of intellectual and neurodevelopmental disability in youth upon entering the youth justice system. The YJB employs assessments including the ASSETPlus<sup>25</sup> and CHAT<sup>26</sup> to assess a young offender's needs when they come into contact with the YJB or YOT (Youth Justice Board, 2008; Youth Justice Board, 2014). In 2012 the CHAT introduced a specific section for the assessment of neurodisability, including ASD, which was designed to identify those who may require specialist referrals. However, reports by the YJB (2014), the Children's Commissioner (2012), the Prison Reform Trust (2010) and the CJI (2013) have highlighted inefficient use of these tools and failings in recognising and responding to the needs of young offenders as identified by the assessments. The Children's Commissioner Report (2012) includes studies highlighting the ineffectiveness of current systems to identify neurodevelopmental disabilities, including ASD, in the early stages of involvement with the Criminal Justice System and asserts that it is often not until later that these are identified or diagnosed, most likely following sentencing (Hughes, 2012). The report highlights how this breaches UNCRC conventions and is potentially in violation of children's rights as stipulated by the UN due to the prospect of an unfair trial if the young person lacked *mens rea* or is unable to understand the charges, contribute to the proceedings or instruct their solicitor, due to their disability.

As with adults, youth with ASD are frequently included within intellectual disability populations and not identified as a separate group despite their distinct clinical diagnosis. Therefore, as a result of these factors and due to potentially inefficient assessment protocols (as discussed above), plus limited access to young people in custody, there is

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<sup>25</sup> Asset a tool used within the YJB to look at the young person's offence and identify the factors that contributed to the behaviour. Due to notable failings in application of the Asset, the AssetPlus was released in 2016 for use within the YJB.

<sup>26</sup> Comprehensive Health Assessment Tool (CHAT). A screening framework covering health, mental health, substance misuse and neurodisability. Coinciding with implementation of the Asset Plus, the CHAT will be the only health assessment recommended by the YJB.

currently very little data on the number of young people who ASD within the Criminal Justice System and even less on those who display harmful sexual behaviours.

The majority of reports referred to within this chapter all highlight that despite numerous stipulations by social policy, there is a lack of provision and appropriateness of services provided to individuals with ASD who display harmful sexual behaviour or commit sexual offences. This echoes the findings from the systematic review in Chapter Three investigating the effectiveness of treatment programmes for offenders diagnosed with ASD. One additional caveat of social policy that applies specifically to young offenders diagnosed with ASD, including those who sexually offend, relates to the new Special Education Needs and Disability (SEND) reforms under the Children and Families Act (2014). These state that young offender's Education, Health and Care Plans (replacing an SEN statement) (where in place) will only be held until the child is 18 years old (Council for Disabled Children, 2014). For those detained in YOIs aged 18-21 years the Act does not apply (as opposed to those in the community where the Act applies until 25 years), and thus potentially further limits the support, service provision and treatment available to this vulnerable population.

Social Policy including the UNCRC, the Children Act (1989), the Children's and Families Act (2014), the Autism Act (2009) and Social Families Act (2014) dictate the requirement to provide 'appropriate services' in relation to child welfare. However, what this chapter has shown is a current lack of statutory guidance to inform or develop these services and an extremely complex array of agencies responsible for such services (see Figure 10). What has also been demonstrated is the absence of prevalence data regarding children and young people diagnosed with ASD who display harmful sexual behaviour, and an insufficient evidence-base for the appropriateness and effectiveness of programmes that are available.

## **PART TWO: EMPIRICAL STUDIES**

The literature review identified a number of gaps in the evidence-base on the treatment of sexual offending in ASD. The empirical studies of this PhD addressed these gaps across three areas: prevalence, current provision and treatment responsiveness. The studies included adults and adolescents with ASD from forensic, clinical and community populations. A large comparative study utilising a forensic sample of sexual offenders with ASD was considered, in order to explore the use of adapted sex offender treatment programmes for individuals with ASD. However during the development of the PhD it became apparent that this was unfeasible due to time, resource and access constraints, particularly in relation to adolescents. Furthermore, whilst individuals with ASD who display concerning sexual behaviours are a niche population, they are heterogeneous and can be found in a variety of social spheres and service types. Therefore to capture current practice and placement of autistic adults and adolescents with such needs it was felt the research should explore beyond a single service/service type and treatment programme.

The trajectory, or trajectories, of sexual offending in those with ASD are yet to be mapped. The literature review highlighted the importance of early intervention but also the poor recognition of children and young people with ASD who display harmful sexual behaviours and an apparent lack of services to their meet needs. The preceding chapters, including the sexual offending case studies within the systematic review, reported numerous examples of harmful sexual behaviours within adolescent populations of individuals with ASD, in addition to examples of adult autistic sexual offenders with long histories of displaying concerning or harmful sexual behaviours. Therefore, the first study within the PhD was designed to identify children and young people with ASD, including those with a co-morbid intellectual disability and those without, who display harmful sexual behaviours to investigate where such individuals are to be found and what services they receive (Chapter Five). Information regarding prevalence of harmful sexual behaviours in children and young people is complicated by the multiple agencies and organisations that can be involved. As such, the procedure included cross-agency distribution of a questionnaire, seeking information from health, social care and youth justice sectors, and information about any presence of harmful sexual behaviours, rather than simply index offence or reason for referral. Individuals with



ASD have historically been included with intellectual and neurodisability populations, or potentially within neurotypical populations (if no intellectual disability is present), therefore although information regarding co-morbidity of intellectual disability was requested, the study sought to identify individuals with ASD as a clinical population within their own right. Descriptive statistics were used to explore the responses from the survey and to examine current provision of services for children and young people with ASD who display harmful sexual behaviours.

As identified in the literature review, treatment programmes for harmful sexual behaviours in children and young people with intellectual and developmental disabilities, including ASD, are sparse. As such, it was felt that exploration of adult adapted sexual offending treatment programmes would be the most appropriate method for tackling the issue of use with autistic offenders due to their established evidence-base for sexual offenders without ASD. It was felt this would allow for the investigation of their use specifically for the ASD clinical profile, and exploration of any outcomes in comparison to non-ASD offenders. Therefore, the second study in the PhD addressed the use of current sexual offending treatment programmes for adults with ASD (Chapter Six). The literature review highlighted many questions regarding the effectiveness of such programmes for individuals with ASD, particularly in relation to the potential impact of ASD symptomatology on positive treatment outcomes e.g. cognitive rigidity and poor theory of mind, etc. There is however very little evidence base to support or refute these propositions. The second study was therefore developed to begin addressing this gap in the knowledge base, by seeking the views of service users with ASD who had completed an adapted sex offender treatment programme, and the views and experiences of clinicians who had facilitated such treatment groups for offenders with ASD. Semi-structured interviews were used with both service users and clinicians to identify particular challenges or advantages of adapted sex offender treatment groups, and to gather an overall view of treatment. Grounded Theory was used to develop a model for each set of interviews, exploring how sexual risk was constructed and perceptions of responsivity to treatment.

Following the findings from the Interview Study (Chapter Six) and the emergence of a dominant theme of empathy, particularly in relation to judgements of responsivity to treatment, empathy in ASD was explored further in the third and final study of the PhD

(Chapter Seven). A number of approaches to final study were considered including investigating empathy in a forensic sample of adolescents with ASD who display harmful sexual behaviours and addressing empathy in an adult sample of autistic sex offenders. Youth offending populations, both in the community via Youth Offending Teams and those in Custody, were inaccessible due to unclear localised ethical procedures (in comparison to the standardised approach of the NHS) and low response to calls regarding interest in the study. Additionally, for those services that did express an interest the location of the young people (i.e. not enough in one service to run a group) or the logistics of getting participants from different areas to one place, made it apparent early on that research with this population was not a viable option for the PhD. In exploring options for trialling an empathy programme for autistic adult offenders it was felt that this approach would not reflect or address the need for early intervention. Additionally, as identified in the literature and interview study many of the target population have been in receipt of, or undertaken multiple psychological therapies, thus risking the potential of a minimised response to therapy due to historical treatment effects. As such, the third study of the PhD sought to investigate empathy profiles in a non-forensic sample of young people with intellectual disabilities and/or ASD (Chapter Seven).

A feasibility trial of a six-week cognitive behavioural therapy empathy intervention was completed, using a pre-, pre- and post-intervention design (AAB). The empathy intervention was taken from an adapted youth treatment programme for harmful sexual behaviours, designed for children and young people with intellectual and developmental disabilities. In addition to trialling the empathy intervention as a standalone module from the treatment programme, the study was used to explore any potential increases in empathy following the intervention and collect a small sample of data on empathy profiles in those with ASD and those with intellectual disabilities alone. The measures used to assess empathy explored a number of empathy constructs identified in the literature review including cognitive and affective empathy, and victim empathy. Non-parametric tests were used to explore any trends in the data, comparing students with ASD to students without ASD.

## **5 CHAPTER FIVE: PREVALANCE SURVEY**

### **5.1 Introduction**

In examining the need for treatment interventions for young people with ASD who display harmful or abusive sexual behaviours, it is necessary to ascertain prevalence in order to establish requirements for service provision. For the reasons identified in the literature review, understanding the scope of abusive, harmful and/or sexual offending behaviours in children and young people with ASD is problematic on many levels. Lack of willingness to identify sexuality in children and young people, particularly those with intellectual or developmental disabilities hides earlier or warning behaviours (Tudiver & Griffin, 1992; Erooga & Masson, 2006). Moreover, the inclusion of ASD with intellectual disability populations means those with ASD are not identified as a population within their own right with potentially different treatment needs, and sexually concerning behaviours may not be identified as the primary reason for referral or treatment if the harmful sexual behaviours are part of a larger repertoire of challenging/offending behaviours (Hackett, 2014). As such, data regarding the prevalence of children and young people with ASD requiring support and treatment for harmful sexual behaviours remains scarce.

The challenges for services, professionals and the families of those with ASD who display harmful sexual behaviours were illustrated in Chapter Four (Social Policy), including the difficulties of accessing help for those with ASD through intellectual disability or mental health services due to their diagnosis. Challenges also arise in accessing help for sexual behaviours due to its classification as a behaviour and not a mental health condition (as discussed in Chapters One, Two and Four). Services are challenged by limited finance and provisions and often a lack of knowledge, resources and/or training in supporting individuals with such complex needs (Prison Reform Trust, 2010). As identified, clear treatment guidance and intervention is in the early stages of evidence-base development for children with intellectual and developmental disabilities who display abusive sexual behaviours and Figure 10 (Pathways of children and young people who display harmful sexual behaviours, page 112) illustrates the myriad of pathways a child with ASD (or intellectual disability) can follow subsequent to displaying of harmful sexual behaviours (e.g. pathways through health

vs. youth justice). These factors contribute to the difficulties in identifying and supporting this niche population.

## **5.2 Aims of Study**

A number of investigations and reports into the presence of intellectual and/or developmental disabilities in children and young people in secure services, young offending and mental health services have been undertaken (Children's Commissioner, 2019; the Criminal Justice Joint Inspection, 2013; Prison Reform Trust, 2010), however as discussed in Chapter Four (Social Policy), the reports are undertaken within health, charity or Youth Justice Board services (rather than collectively), and ASD and intellectual disability not identified separately. This study was therefore designed to identify children and young people with intellectual disability and/or ASD who display harmful sexual behaviours across services and sectors, asking independently about those with intellectual disabilities (ID), ASD and those with a comorbid diagnosis (ASD+ID).

## **5.3 Design**

The study was designed in collaboration with a fellow PhD student and run as a Masters project on the Intellectual and Developmental Disabilities postgraduate degree at the Tizard Centre. The survey was developed to operate as a shared data collection tool to reduce the need for placing repeated demands on services providing support to children and young people who display harmful sexual behaviours.

The survey was designed for the study to request not only information regarding numbers and types of harmful sexual behaviours displayed by those young people with ID, ASD and ASD-ID, but also enquired after the use of assessments and interventions for children and young people who display harmful sexual behaviours, particularly regarding adaptations or availability of services for those with ID, ASD and ASD-ID. Information regarding own history of abuse, Looked-After status and victim profile was also sought. The full survey can be found in Appendix 3.

The fellow PhD student utilised data from the survey relating to assessments and harmful sexual behaviour, including standardised risk assessments such as Juvenile Sex Offender

Assessment Protocol-II (J-SOAP-II) (Prentky & Righthand, 2003) and The Estimate of Risk of Adolescent Sexual Offense Recidivism (ERASOR) (Worling & Curwen, 2001) as well as measures of emotional loneliness and resilience, in addition to profiles of harmful sexual behaviours including victimology. This PhD has analysed the data regarding assessment of intellectual disabilities and ASD and available treatment/interventions.

The survey was designed to be as brief as possible due to knowledge regarding the demands on staff working in this field and their limited time resources.

#### **5.4 Participants**

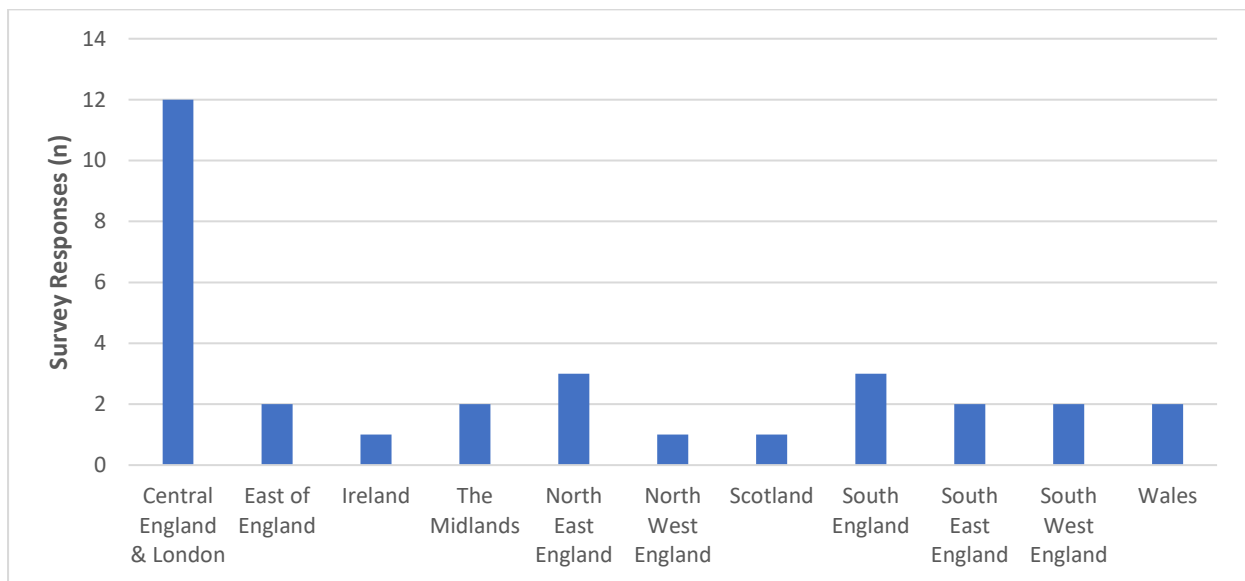
The survey was open to all professionals providing services for children and young people who display, or are at risk of displaying, harmful sexual behaviours across the UK. Specialist services contacted were those working with children and adolescents between the ages of 10 and 18 years old regardless of gender and ethnicity. Identified services (see Procedure, page 131) were not required to be ASD or intellectual disability specific/specialist but included services who had within their population those with intellectual disabilities and/or ASD. The initial contact was directed to the service lead, clinical consultant, medical director or psychologist/therapist, however the survey itself was brief enough and required the level of information that an Assistant Psychologist or professional in another such role could complete it.

As can be viewed in Figure 11 responses were collected from across the UK, with the majority from services in Central England including London (38.7%) and a minority from Ireland, Scotland and Wales (3.2-6.5%). Respondents came from public or statutory services, such as the NHS or Youth Offending Teams, with a smaller number from charities or volunteer organisations and one response from an independent/private service (Table 5).

**Table 4: Survey Responses by UK Location**

Location of Service	N (%)
Central England & London	12 (38.7)
East of England	2 (6.5)
Ireland	1 (3.2)
The Midlands	2 (6.5)
North East England	3 (9.7)
North West England	1 (3.2)
Scotland	1 (3.2)
South England	3 (9.7)
South East England	2 (6.5)
South West England	2 (6.5)
Wales	2 (6.5)
Total	31

**Figure 11: Survey Responses by UK Location**



**Table 5: Sector and Service Type of Survey Responses**

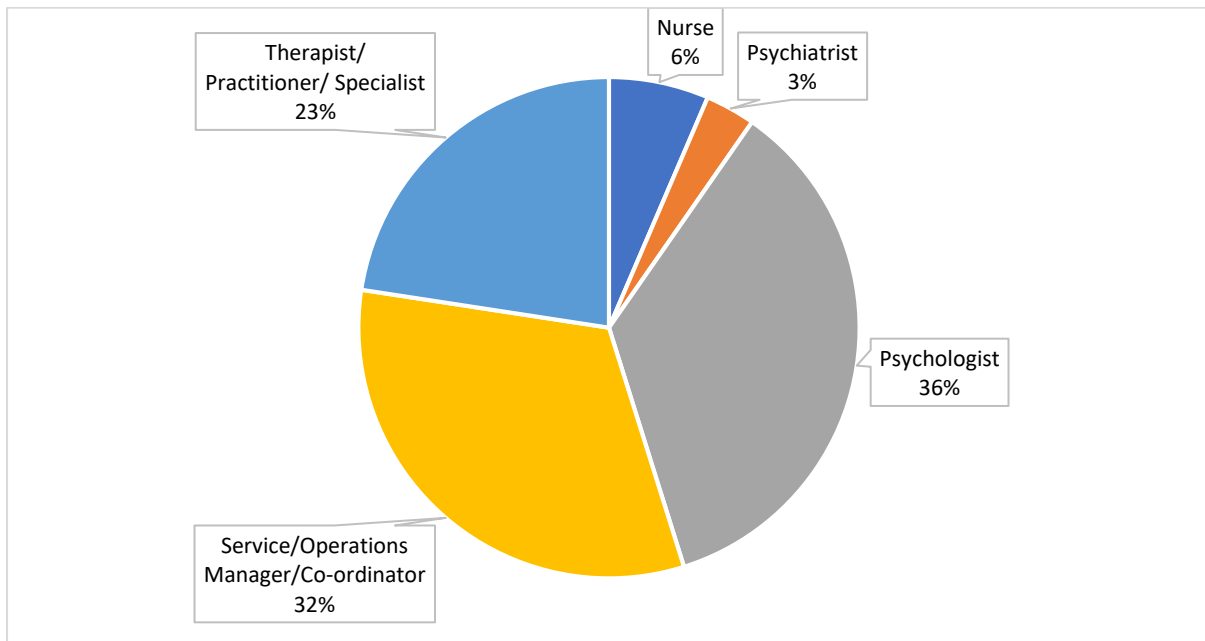
Sector	Community- Based Service	Residential Service	Secure Service	Specialist Residential (education)	Youth Offending Institute	Youth Offending Team	Total N (%)
Public/Statutory Services	10	0	2	0	1	8	21 (67.8)
Private/Independent Services	1	2	1	0	0	0	4 (12.9)
Volunteer/Charity Services	4	0	1	1	0	0	6 (19.4)
Total N (%)	15 (22.6)	2 (6.5)	4 (12.9)	1 (3.2)	1 (3.2)	8 (25.8)	31

Services responding to the survey included community-based services (including small outreach and day services as well as health community teams) (n=15), community residential services (n=2), secure inpatient services (n=4), a specialist education residential service, youth offending teams (n=8) and a youth offending institution (n=1), with a range of professionals completing the survey (Table 6 and Figure 12).

**Table 6: Survey Responses by Profession and Service Type**

	Community- Based Service N	Residential Service N	Secure Service N	Specialist Residential (education) N	Youth Offending Institute N	Youth Offending Team N	Total N (%)
Nurse	1	0	1	0	0	0	2 (6.5)
Psychiatrist	1	0	0	0	0	0	1 (3.2)
Psychologist	6	0	3	1	1	0	11 (35.5)
Service or Operations Manager	4	0	0	0	0	6	10 (32.3)
Therapist, Practitioner or Specialist	3	2	0	0	0	2	7 (22.6)
Total N (%)	15 (22.6)	2 (6.5)	4 (12.9)	1 (3.2)	1 (3.2)	8 (25.8)	31

**Figure 12: Survey Responses by Profession**



Most of the services represented in the survey responses worked with male and female clients, (Table 7 and Figure 13) ranging from under-10 to over-18 years old. A single female-only youth offending team participated, in addition to four male-only services: two community-based services, one residential service and one youth offending institution. One residential service provided support for younger children only i.e. those under 10 and up to the age of 12 years. Nearly half the responses (n=16) represented service users from 10-years-and-under to 18-and-over (with some ranging from 11-18 years), while four services covered the traditional adolescent range of 13 to 18 years old. The remainder of responses (n=10), worked with those who were 18 years or older. The inclusion of those aged 18 and over in services for children and adolescents is likely to be a reflection of the introduction of the Children and Families Act (2014), and the stipulation that Education, Health and Care Plans cover an individual's needs until the age of 26 years old (Children and Families Act, 2014 and see Chapter Four (Social Policy). The size of services varied across the responses and ranged from those representing <10 clients (with and without intellectual or developmental disabilities<sup>27</sup>), which were two community-based services and a secure unit

<sup>27</sup> Responses regarding intellectual and developmental disability service users are discussed in the Results.



(n=3), to other community-based services and youth offending teams catering for over 100 children and young people (n=5) (Table 8 and Figure 14).

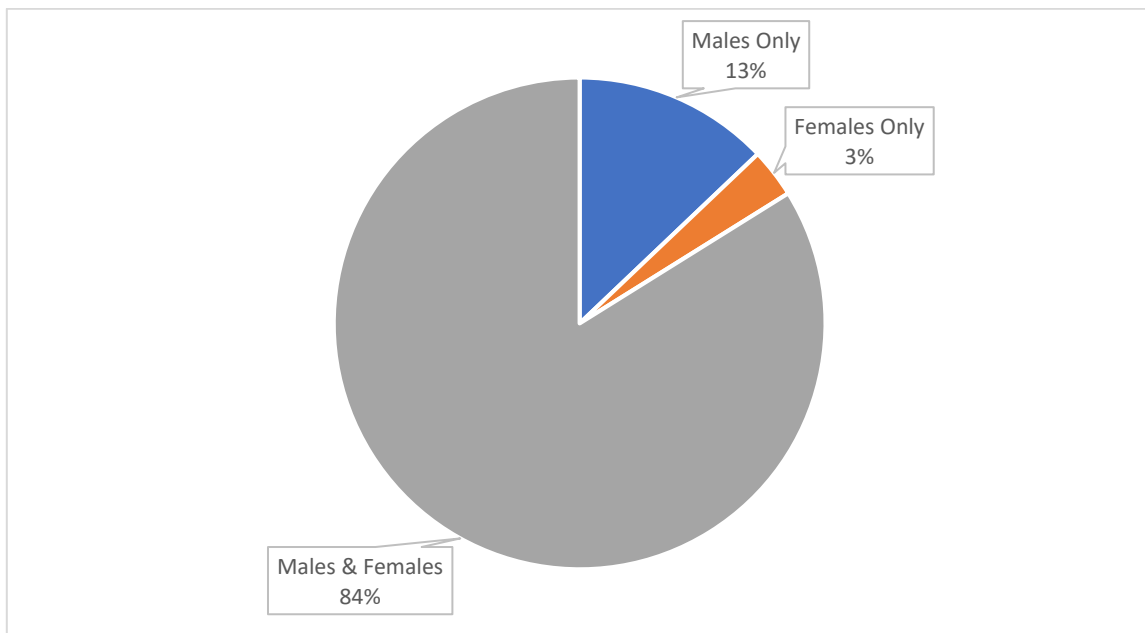
**Table 7: Gender of Services Users in Survey Responses**

	N (%)
Males Only	4 (12.9)
Females Only	1 (3.2)
Males & Females	26 (83.9)
<b>Total N</b>	<b>31</b>

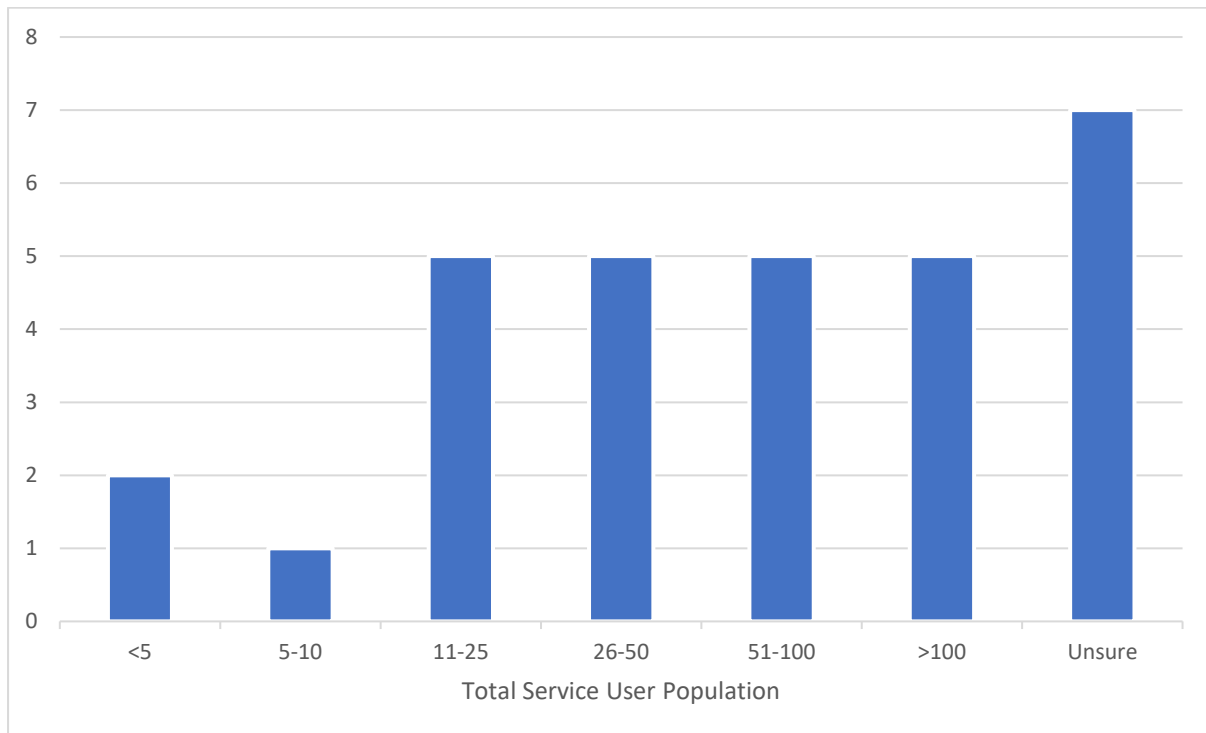
**Table 8: Service User Population Size in Survey Responses**

Total Service Users in Service	N (%)
<5	2 (6.7)
5-10	1 (3.3)
11-25	5 (16.7)
26-50	5 (16.7)
51-100	5 (16.7)
>100	5 (16.7)
<i>Unsure</i>	7 (23.3)
<b>Total N</b>	<b>30</b>

**Figure 13: Gender of Services Users in Survey Responses**



**Figure 14: Service User Population Size in Survey Responses**



## 5.5 Procedure

The preliminary work for the study took an extended period of time due to the anticipated complexity in accessing those who provide such services to children and young people. A series of calls for interest and requests for contact details of those who would be interested/eligible to take part were completed in an effort to ensure the email was received by an interested party and not diverted to a junk folder or lost in a generic email box.

Attempts were also made to access information about the number of children in NHS Trusts via Freedom of Information Act Requests, however it became apparent early on that these requests would not be able to provide the quality of data needed. For example, reason for referral could not be provided, nor how many children within the service displayed harmful sexual behaviours. Therefore, this method was abandoned as part of the study.

Ethical approval was granted by the Tizard Centre, University of Kent Ethics Committee (see Appendix 3). The study was designed to collect anonymised data and therefore NHS ethical

approval was not required. This was ascertained using the Health Research Authority (HRA) online system Research Tool (see Appendix 3).

Although not research, as classified by the HRA tool, it was identified by the Tizard Centre, University of Kent Ethics Committee that NHS Trusts may classify the study as a service evaluation and as such the study would need to be registered with the Local NHS Research and Development Offices. Where requested, this was undertaken (n=11). A systematic search of NHS Trusts was completed, not only to identify eligible services but also to identify any previous service evaluations, audits, research or Freedom of Information Act requests had been made regarding children and young people with intellectual or developmental disabilities and harmful sexual behaviours to ensure that the project was not replicating work. None were found.

Following the preliminary work, a database was constructed from the names of individuals attained, NHS Services, private sector or independent health care services, youth offending teams and institutions along with professional mailing lists, and any services identified in previous reports not already included (see Design).

Survey data was collected between April and August 2018 via the online software Qualtrics and by an MSc student. Individuals were sent an initial email with information about the study and the link to the questionnaire (see Appendix 3). This was then followed up with three further reminders to start (or complete) the survey. The survey was also distributed to professional mailing lists, such as the ID-Research-UK group and the SOTSEC-ID and ySOTSEC networks; posted repeatedly on social media accounts (individual, University and charities/organisation such as the British Institute of Learning Disabilities); and promoted at conferences e.g. National Autistic Society Conference for the Care and Treatment of Offenders with Intellectual and Developmental Disabilities 2018.

## **5.6 Results**

Thirty-one respondents completed the survey. Due to the multiple methods of promoting the data it was not possible to identify the total number of potential participants who were aware of the study, however over one hundred 'click throughs' were made to the Qualtrics website (to the information sheet and first page of the questionnaire), and thirty one were

completed to the last question (some responses may be missing but the individual went through all questions to the final page of the survey).

The services in these thirty-one responses identified that they supported services users who displayed harmful sexual behaviours, including those with ASD, ASD+ID or ID alone. These behaviours ranged from the use of sexually explicit words and threats, to voyeurism and public masturbation, as well as contact and rape/penetration offences in addition to online behaviours such as creating and distributing child sexual abuse images (including 'sexting') and accessing violent (illegal) pornography.

Where the information regarding total services users and those with ASD, ASD+ID or ID was available (n=15), prevalence figures are displayed in Table 9. It is anticipated the services where the percentage of ASD, ASD+ID or ID service users is 100% are specialist intellectual disability or intellectual and developmental disability services. As can be seen from the Table below, all survey responses reported at least one service user with ASD, ASD+ID or ID, with only one youth offending team reporting no presence of ASD amongst their population (no ASD or ASD+ID).

**Table 9: Services Users with ASD, ASD+ID or ID**

Service Type	Total Service Users	Total ASD Service Users	Total ASD+ID Service Users	Total ID Service Users	Total ASD+/ID Service Users
	N	N (%)	N (%)	N (%)	N (%)
Community-Based Service	3	0	2 (67)	1 (33)	3 (100)
Community-Based Service	4	0	1 (25)	0	1 (25)
Community-Based Service	10	1 (10)	0	2 (20)	3 (30)
Community-Based Service	23	1 (4)	6 (26)	16 (70)	22 (96)
Community-Based Service	28	0	1 (4)	5 (18)	6 (21)
Community-Based Service	30	2 (7)	0	4 (13)	6 (20)
Community-Based Service	130	0	55 (42)	75 (58)	130 (100)
Community-Based Service	140	0	100 (71)	40 (29)	140 (100)
Residential Service	18	1 (6)	4 (22)	6 (33)	10 (61)
Residential Service	24	2 (8)	3 (13)	6 (25)	9 (46)
Secure Services	5	0	3 (60)	1 (20)	4 (80)
Secure Services	33	4 (12)	2 (6)	2 (6)	4 (24)
Secure Services	100	4 (4)	0	2 (2)	6 (6)
Youth Offending Team	16	0	0	2 (13)	2 (13)
Youth Offending Team	63	14 (22)	4 (6)	3 (5)	7 (33)

The prevalence of ASD (either with a co-morbid intellectual disability or without) ranges between 4% and 76%, with higher rates being found in services believed to be specialist intellectual disability or intellectual and developmental disability services (range: 26-76%). Eight respondents (33.3%) who knew their total service user population<sup>28</sup> reported they were 'unsure' of the number with ASD, ASD+ID or ID. Just over half (53.2%) of services represented in the study assessed for intellectual disability or ASD (Table 10 and Figure 15) which may account for the lack of information regarding prevalence of ASD, ASD+ID or ID amongst services users, likely in non-intellectual disabilities or intellectual and developmental disability specific services.

**Table 10: Services assessing for intellectual disabilities or ASD in Survey Responses**

	<b>Community- Based Service N (%)</b>	<b>Residential Service N (%)</b>	<b>Secure Service N (%)</b>	<b>Specialist Residential (education) N (%)</b>	<b>Youth Offending Institute N (%)</b>	<b>Youth Offending Team N (%)</b>	<b>Total N (%)</b>
<b>Assess for ID</b>							
Yes	9 (19.4)	1 (3.2)	3 (9.7)	1 (3.2)	1 (3.2)	3 (9.7)	18 (58.1)
No	6 (29)	1 (3.2)	1 (3.2)	-	-	5 (16.1)	13 (41.9)
<b>Service Assess for ASD</b>							
Yes	8 (25.8)	0	3 (9.7)	1 (3.2)	1 (3.2)	2 (6.5)	15 (48.4)
No	7 (22.6)	2 (6.5)	1 (3.2)	-	-	6 (19.4)	16 (51.6)
<b>% of Services Type Assess for intellectual disabilities and/or ASD</b>							
	56.7	100	75	100	100	41.6	53.2

<sup>28</sup> N=24

**Figure 15: Services assessing for intellectual disabilities or ASD**

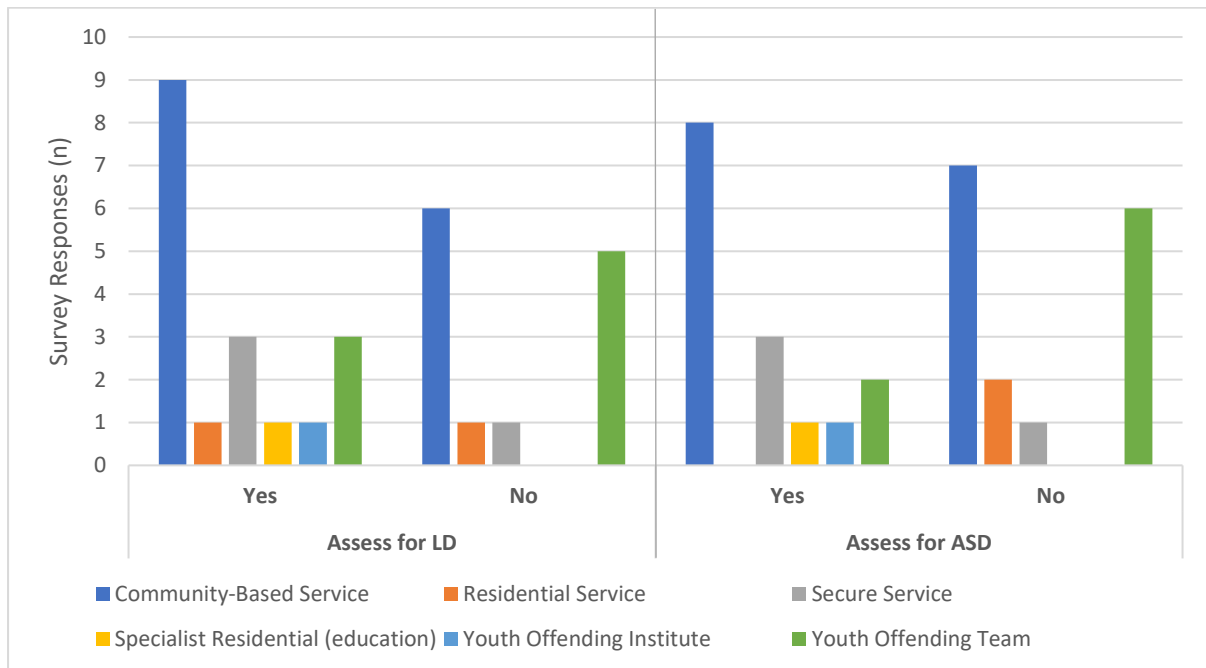
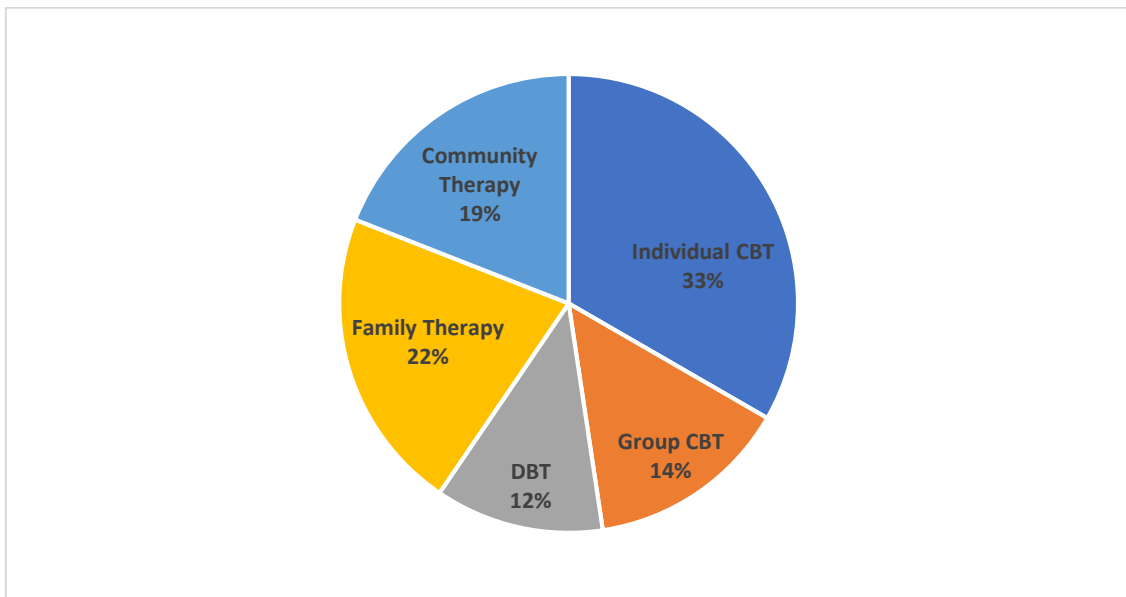


Figure 16 illustrates the reported interventions offered in the survey responses. Cognitive Behavioural Therapy (CBT) was offered in three quarters of the services that responded<sup>29</sup>, either on an individual basis or in a group (n=14), however Dialectic Behavioural Therapy was available in fewer services (n=5). Availability of Family therapy or Community therapy (including psychoeducation and counselling) was reported in around half of the responses (n=9 and 8, respectively). In addition to those above, a minority of services also offered play therapy, Positive Behavioural Support and Trauma Therapy (all n=1).

<sup>29</sup> Data available for only 20 of the 31 survey responses.

**Figure 16: Interventions Offered in Survey Responses**



No adaptations to interventions specifically for ASD were reported in the survey responses and only a handful of services (n=3) acknowledged that they provided interventions which had been adapted for service users with intellectual disabilities (or ASD+ID). These three services provided multiple treatment options, some of which were adapted. Details of adaptations were not collected as part of the survey (in order to keep it as brief as possible), therefore it is not known if the adaptations referred to manualised adapted programmes (e.g. the Keep Safe programme) or adaptations undertaken by the facilitator e.g. spreading session content across a longer time frame, reducing complexity of examples/material, using visual aids, etc.). As illustrated in Table 11 the availability of different intervention approaches appeared rich with most services (n=15) able to offer more than two therapeutic approaches, however whether these were specific to harmful sexual behaviours is unclear.

**Table 11: Interventions Offered in Survey Responses by Service Type (including adaptations)**

	Community -Based Service N	Residential Service N	Secure Service N	Specialist Residential (education) N	Youth Offending Institute N	Youth Offending Team N
<b>Individual CBT N=14<sup>30</sup> (70%)</b>						
Non-Adapted	4	1	2	1	1	4
ID Adapted	1	-	-		-	-
<i>Not Available</i>	3	-	-	1	-	2
<b>Group CBT N=6 (30%)</b>						
Non-Adapted	1	1	1	-	1	1
ID Adapted	1	-	-	-	-	-
<i>Not Available</i>	6	1	1	1	-	5
<b>DBT N=5 (25%)</b>						
Non-Adapted	-	1	1	-	-	1
ID Adapted	1	-	-	-	-	1
<i>Not Available</i>	7	1	1	1	1	4
<b>Family Therapy N=9 (45%)</b>						
Non-Adapted	2	1	-	-	1	3
ID Adapted	2	-	-	-	-	-
<i>Not Available</i>	4	1	2	1	-	3
<b>Community Therapy N=8 (40%)</b>						
Non-Adapted	1	1	1	1	-	3
ID Adapted	1	-	-	-	-	-
<i>Not Available</i>	6	1	1	-	1	3

## 5.7 Discussion

The study was designed to address gaps in the literature by collating information regarding children and young people with harmful sexual behaviours across services and sectors. The

<sup>30</sup>Of 20 survey responses.



survey was open to professionals across health, social care, youth justice and charity or volunteer organisations and independent or private services across the UK. Responses to the survey were disappointingly low despite the extensive work undertaken to identify potential candidates and eligible services. That said, the survey was successful in collating information across disciplines (nursing, psychiatry, service management, etc.), service-types (community/outreach, secure care, youth offending) and sectors (public or private etc.) within the UK (from across England and including Wales and Scotland), in addition to Ireland. The findings echo existing research, as discussed in the Literature Review chapters, regarding the variability in service provision and inconsistency in practice regarding children and young people who display harmful sexual behaviours. With the development of NICE Guidelines for harmful sexual behaviours for children and young people (NICE, 2016, NG55), it may be that some of this inconsistency is reduced, however for individuals with intellectual disabilities or ASD, any improvements may be slower due to the lacking evidence base regarding practice for this client group and difficulties in attaining a diagnosis and specialist service provision.

The second aim of the survey was to distinguish between children and young people with ASD, intellectual disabilities, and those with a comorbid diagnosis who display harmful sexual behaviours. With only half of the services assessing for intellectual disabilities or ASD, and numerous respondents to the survey 'unsure' as to the number of service users with intellectual disabilities or ASD, it is perhaps not surprising that only around half the sample were able to provide this information. The overlap in symptomatology between ASD and other disorders and conditions (as discussed in Chapter Two on Autism Spectrum Disorders) including attachment disorder, conduct disorder (including callous-emotional traits) in adolescents and schizophrenia-spectrum disorders are likely to contribute to the challenges of staff in identifying ASD (with or without a co-morbid intellectual disability), particularly when anti-social behaviours such as harmful sexual behaviours are present.

### **5.7.1 Strengths and Weaknesses**

The small sample size of the survey is a weakness in ascertaining any conclusions to be drawn from the data. The mapping exercise by the Centre for Mental Health (2010) referred to in Chapter Four (Social Policy) identified over seventy services for children and

young people who display risky behaviours, not including the youth justice sector, social care and charity/volunteer organisations. As such the data from this survey cannot be deemed representative of the variety of services providing support to children and young people who display harmful sexual behaviours (with and without intellectual or developmental disabilities). Additionally, independent/private sector services, youth offending institutions and those outside England were particularly under-represented.

In order to facilitate ease of completion the survey, questions were brief and therefore further details regarding the types of assessments used to identify ASD or intellectual disabilities were not available i.e. whether they used screening measures such as the Autism Quotient (Baron-Cohen et al., 2001) or Social Communication Questionnaire (Rutter et al., 2003), or diagnostic assessments such as the ADOS-2 (Lord & Rutter, 2012), ADI-R (Rutter et al., 2003) or WISC-V (Wechsler, 2014), nor was, as discussed, further information available regarding interventions and adaptations. Additionally, the lack of information regarding incomplete survey responses limits the conclusions that can be drawn regarding prevalence of ASD and intellectual disabilities in services as it was not possible to distinguish between participants who did not progress beyond the initial questions (profession, service type and size, gender and age of services users, etc.) to questions regarding services users with intellectual disabilities and ASD and intervention provision/adaptations, etc., as they did not work with children and young people with intellectual disabilities or ASD who display harmful sexual behaviours and those who were unable to finish the survey.

The survey was able to provide a limited snapshot of the prevalence of ASD and intellectual disability in a variety of services from different sectors across the UK, as well as Ireland, and provide some data distinguishing between services users with ASD, intellectual disabilities or a co-morbid diagnosis.

The design and procedure of the study highlights the complexity in identifying the services and staff supporting children and young people with intellectual disabilities and ASD who display harmful sexual behaviours (in accordance with Figure 10 Pathways of children and young people who display harmful sexual behaviours, page 112), as well as the difficulties in attaining accurate information due to lack of knowledge in services themselves, particularly

around identifying and assessing those with ASD, intellectual disabilities or a co-morbid diagnosis.

## **5.8 Conclusion**

The small sample of data collected from the survey is reflective of other investigations and service reports (e.g. The Children's Commissioner, 2019), indicating variability in practice and service provision across the UK. However, the responses suggested a wide range of intervention approaches are available, whether all interventions were available or utilised to address harmful sexual behaviour was unclear and very few offered adapted interventions for intellectual disabilities, with none specifically for autistic service users. This is despite a number of services indicating a moderate to high prevalence of ASD, ASD+ID ID within their populations.

## 6 CHAPTER SIX: INTERVIEW STUDY

### 6.1 Introduction

The call for evidence-based practice coupled with a drive towards social inclusion and choice in care for individuals with intellectual and developmental disabilities, including treatment, creates a conundrum for those managing and treating sexual offenders with ASD.

As discussed in Chapter One (Sexual Offending), group cognitive behavioural therapy (CBT) has been considered best practice in sexual offending treatment for some years (Marshall, Fernandez & Serran, 2003; Lösel & Schmucker, 2005). Programmes are available both for individuals with intellectual and developmental disabilities and those without, in mental health and forensic settings, from community and secure services, as well as in prisons and via probation services (Marshall, 1996; Lindsay et al., 1998; Rose et al., 2002). There is however little empirical evidence regarding sexual offenders with ASD, despite much clinical and theoretical conjecture about whether the cognitive and behavioural profile of ASD may create barriers or challenges to positive treatment outcomes. As such, questions remain over the appropriateness and effect of current CBT programmes for sex offenders with ASD.

Within the systematic review of treatment for offenders with ASD (Melvin et al., 2017; Chapter Three), nine of the fourteen papers identified made reference to sexual offences and/or behaviours. The three quantitative studies involving adapted sexual offending treatment programme (Heaton & Murphy, 2013; Murphy et al., 2007; SOTSEC-ID, 2010) reported that the men with ASD displayed recidivist behaviours at a higher rate and showed significantly poorer pre-, post and follow up treatment scores for one of the cognitive distortions measures compared to men with intellectual disabilities alone. Whilst ASD was associated with a higher risk of recidivism in comparison to intellectual disabilities alone the authors advised caution in interpreting this finding due to the nature of the offences committed by the participants with ASD (non-contact compared to contact).

Six of the nine case reports identified in the review referred to sexual offending behaviours with only one deeming treatment to be effective and reporting no further instances of harmful sexual behaviour (Kelbrick & Radley, 2013). A further paper reported reduced

severity and frequency of sexual behaviours (Griffin-Shelley, 2010) and a number referred to various treatments having 'little or no effect', including anti-libidinal medication and CBT approaches (Kohn et al., 1998; Milton et al., 2002).

Taken collectively, these findings provide preliminary support for propositions regarding the potential impact of ASD on sexual offending and treatment outcomes, which can be framed within theories of sexual offending and theories of ASD.

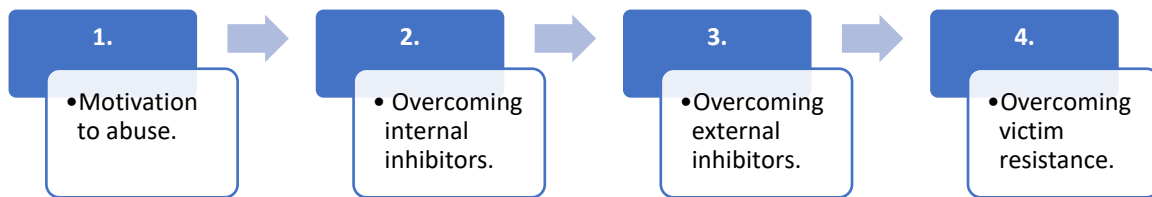
As discussed in Chapters One (Sexual Offending) and Two (Autism Spectrum Disorders), it is hypothesised that social and communication deficits may leave an individual with ASD vulnerable to sexual offending (Dein & Woodbury-Smith, 2010; Higgs & Carter, 2015). There were few references to communication difficulties identified in the current research on autistic sex offenders, although this may have been because many of the programmes were for men with intellectual and developmental disabilities and therefore already had simplified language and increased use of visual imagery. One study did specifically mention communication, Ray et al. (2004) highlighted the need to support an autistic adolescent displaying sexually abusive behaviours to "*develop a language for describing the internal compulsions that drive his inappropriate behaviours*" (Ray et al., page 275).

Social naivety has also been proposed as a potential risk factor, including misunderstanding the nuances of social and sexual scripts. Evidence from neuroscientific investigation has identified atypical development or functioning in structures of the brain associated with social interaction and self-awareness in individuals with ASD. These include the orbito-frontal cortex, the medial pre-frontal cortex (mPFC) (ventral- and dorsal-lateral), inferior fusiform gyrus (IFG), anterior insular (AI), right temporoparietal junction (rTPJ), frontal operculum (FO) anterior-cingulate cortex (aCC) and the amygdala (Baron-Cohen et al, 2000; Stone et al. 1998; Bauman & Kemper, 1985; Kemper & Bauman, 1993; Tantum, 2011; and, Baron-Cohen,2012). These areas are implicated in processing of social scripts (mPFC) (Amodio & Frith, 2006), interpretation of actions/judgements (rTPJ) (Saxe & Kanwisher, 2003) and emotion recognition (IFG) (Chakrabarti et al., 2006) (mCC) (Singer, 2006). Furthermore, research on moral decision making has identified varying neural activation patterns suggesting the involvement of different areas of the brain when making moral

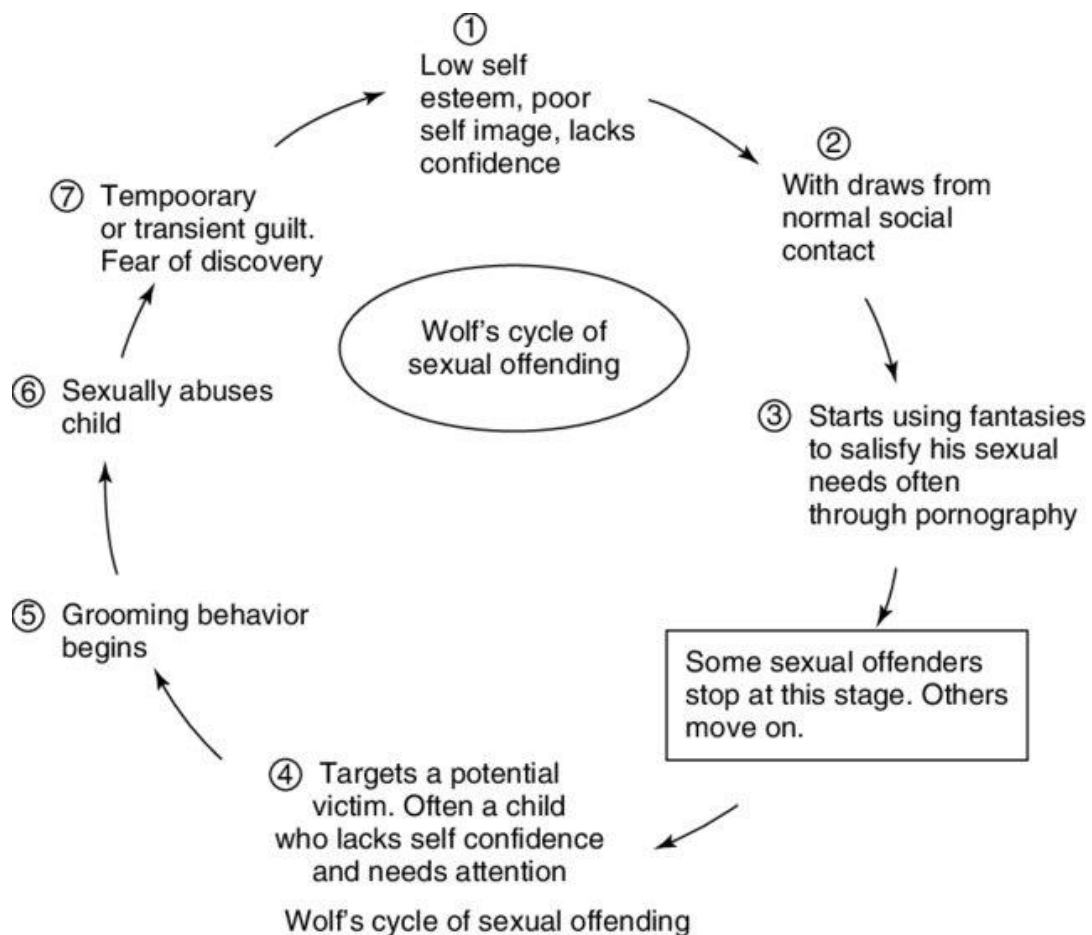
decisions for the self, compared to when making them for others or judging others' behaviour, with a number of these areas featuring in the structures mentioned above e.g. the IFG and left cingulate gyrus (part of the aCC) (Garrigan et al., 2016).

Cognitive distortions are prominent in the theory of and treatment for sexual offending, however distorted thinking patterns or styles are also found outside offending literature. Within information processing models (e.g. Ward et al., 1997) cognitions are used to refer to statements or attitudinal propositions (towards self or others) that illustrate the unconscious processing and interpretation of information, including attributional bias. In the 1970s, Beck identified chronic negative self-beliefs in patients experiencing depression, and noted how these were unwavering (Beck, 1979). Able and colleagues (1984) were considered to be the first to draw parallels between biased cognitive processes in sexual offenders and Bandura's social learning theory concept of 'faulty thinking', subsequently applying the term from a psychopathology framework to sexual offending. Cognitive distortions can be identified within offending research on ASD (e.g. Milton et al., 2002; D. Murphy, 2010), and similarly in non-autistic sex offenders, but it is not yet possible to establish the aetiology of cognitive distortions i.e. how and when they develop. Whilst cognitive distortions are recognised as playing a maintaining role within sexual offending and feature within the offending cycle (e.g. Wolf, 1984, Figure 18, and Finkelhor's Four stage model, 1984, Figure 17), the true function of cognitive distortions is yet to be determined. For example, cognitive distortions would be activated within Stage 2 of Finkelhor's model, to allow for the development of 'not okay thoughts' and may also come into play in the third and the fourth part of Wolf's cycle, presumably in order to facilitate the initiation of planning the offence. However, how far these distortions are protective mechanisms against any shame or guilt regarding the harm they are inflicting (or have inflicted) upon their victim, rather than supporting core beliefs and justification for their behaviour is unknown.

**Figure 17: Finkelhor (1984) Four Stage Model of Child Sexual Abuse**



**Figure 18: Wolf (1984) Cycle of Sexual Offending (from Aggrawal, 2014)**



It is difficult to ascertain if pro-offence cognitions such as those seen in Murphy (2010) and poorer pre-, post and follow up treatment scores for one of the cognitive distortions measures in the SOTSEC-ID (2010) research are as a consequence of difficulties with perspective taking or the increased ego-centricity often found in ASD. It is also possible that

cognitive rigidity and difficulties in assimilation in ASD of new information or applying/transferring existing information to novel contexts as a consequence of information processing or attentional bias (e.g. monotropism) may further compound the development and maintenance of cognitive distortions, impacting on treatment response and future offending.

A common theme reported in the case studies of sexual offenders with ASD is that of a lack of victim empathy. For example, Murrie et al. (2002) discussed case histories of six individuals with Asperger's Syndrome who displayed aggression, four of which included sexual aggression. They stated that the individuals in these four cases appeared "genuinely unaware of the harm they caused their victims" (Murrie et al., 2002, page 66). In a similar paper by Barry-Walsh & Mullen (2004), five cases of offending in Asperger's were examined (including one sexual offender) and reported that "all were surprised by the reactions their actions evoked in others and had difficulty understanding why they were now facing criminal charges" (ibid, page 105).

Empathy deficits are a key premise regarding the potential impact of ASD on treatment outcomes for sexual offenders. As discussed in Chapter Two (Autism Spectrum Disorders), ASD has been described as a disorder of empathy, with difficulties in identifying and responding to others emotional states considered a dominant feature (Baron-Cohen, 2009; Frith, 2004; Tantum, 2012; Wing, 1981). As discussed, brain structures implicated in processing social information have shown atypicalities in structure and activation in individuals with ASD including abilities to distinguish between self and other, interpret the intentions of others and recognise emotional states, potentially impeding the capacity to display and/or develop empathic behaviours. With empathy deficits being present in sexual offenders without ASD, it stands to reason that a potential cumulative effective of empathy deficits or alternative aetiology may result in poor response to treatment or increased risk of recidivism in ASD.

Victim empathy is believed to be present if an offender displays an appropriate emotional response to the experience undergone by his victim. This description incorporates two aspects of empathy: the ability to take the perspective of the victim, be 'in their shoes', and



an emotional reaction (vicarious affective response). These aspects are referred to as cognitive empathy and affective empathy (Bird & Viding, 2014; Decety, 2014; Hoffman, 2000; de Vignemont & Singer 2006), and current treatment programmes attempt to address both. The former tends to be covered through what could be described as psychoeducation e.g. mentalisation-based task to improve theory of mind abilities, and the latter through teaching emotion recognition and appropriate social responding. This approach however has been referred to as 'sympathy training' rather than actually addressing empathy (Mann and Barnett, 2013). There is scant information regarding treatment response in cognitive and affective empathy in individuals with ASD, yet, as was identified in chapters One (Sexual Offending) and Two (Autism Spectrum Disorders), individuals with ASD have a distinct empathy profile from other clinical populations (both forensic and non-forensic samples) such as those with conduct disorder and callous-emotional traits (Schwenck et al., 2012; Jones et al., 2010) which may present challenges in achieving positive treatment outcomes. Schwenck et al. (2012) for example found adolescents with ASD to showed better emotional empathy abilities than adolescents with conduct disorder with and without callous-unemotional traits, however demonstrated difficulties with cognitive perspective taking and emotion recognition.

Atypical cognitive processing and rigidity have been implicated with regards to special interests or obsessions. A number of case studies have made reference to repetitive or restrictive patterns of behaviours in autistic sexual offenders. These include physical manifestations such as excessive masturbation and paraphilias, as well as thought perseveration around deviant fantasies (Barry-Walsh & Mullen, 2004; Milton et al., 2002; Griffin-Shelley, 2010). Restrictive and repetitive patterns of behaviour in ASD are considered a form of enjoyment, they are also seen as self-soothing and a method to lessen anxiety due to the familiarity of the event/routine (Mooney et al., 2009; Tantum, 2012). These behaviours may, or may not, have an immediate or obvious positive reinforcing effect, such as a pleasurable physical sensation.

Attention and task-switching abilities are part of executive functioning, they require the inhibition of one response or stream of information in order to initiate attention to another, and direct action (Stuss & Benson, 1984; Shallice, 1982). Executive dysfunction in

individuals with ASD may impact repetitive behaviours due to a decreased ability to inhibit prepotent responses (those formed by habit), and atypical development in the prefrontal cortex could result in impairments in effortful control that restrict task-switching processes including orientation, attention, inhibition and activation. Therefore, treatment addressed at shifting repetitive and restrictive patterns of behaviour may be met with resistance, not only due to cognitive capacities but also if the incentive to change the behaviour is low e.g. if a behaviour or thought delivers positive reinforcement such as orgasmic release, or if the desire for social approval is not a motivator for pro-social behaviour (in contrast to offending behaviours). Repetitive and restrictive patterns of behaviour constitute another form or facet of cognitive inflexibility seen in autistic sexual offenders which may further increase the risk of poorer treatment outcomes. For example, a sexually deviant special interest compounded by distorted pro-criminal thinking patterns that feed into the attainment of the reinforcing behaviour: sexually arousing thoughts coupled with cognitive distortions which assist/allow for the planning or committing of a sexual offence followed by the subsequent sexual gratification; or, sexually arousing thoughts coupled with heightened ego-centricity, poor perspective taking and low empathy may facilitate the committing of a sexual offence and subsequent positive, including physical, reinforcement.

The small body of evidence currently available regarding treatment for sexual offenders with ASD does provide some support for proposed hypotheses regarding the potential impact of clinical features of ASD on treatment outcomes and risk of recidivism, however differences in methodologies, samples, study design and publication bias leaves little scope to generalise the results or draw firm conclusions about this population.

Recidivism and re-offending rates are the primary measure of treatment effect but service user involvement and opinion has become a key driver in UK health and social care policy (Attree et al. 2011; NHS England, 2015; Omeni et al., 2014). Relatively few studies have examined service user views of sexual offender treatment. Some interviews with participants have been completed alongside quantitative outcome measures that assess treatment objectives or evaluate risk (e.g. Blagden, Winder & Hames, 2016; Hanson et al., 2004; Large & Thomas, 2011; Hays et al., 2007; Sinclair, 2011; Courtney & Rose, 2004). It is possible that men with ASD participated in these studies, but it remains unclear. Unlike in

other areas of research, such as diagnosis, services and therapy, self-advocacy and human rights, being a victim of crime and being imprisoned (Alleley, 2016; Huws et al., 2008; Nora et al., 2016; Petri et al., 2017; Richardson et al., 2016), where service users with ASD have been interviewed about their experiences, the views of men with ASD have not been specifically sought or identified in relation to sexual offending treatment. This study was therefore designed to capture the views and experiences of men with ASD with a history of sexual offending who had received treatment.

In addition to the inclusion of service user views of treatment, clinical and professional opinion is also necessary in order to cultivate the evidence base. As identified in Chapters One (Sexual Offending) and Two (Autism Spectrum Disorders), a number of theoretical papers and literature reviews, some written by clinicians, provide views regarding the effectiveness and implementation of treatment for men with ASD who display harmful sexual behaviours e.g. (Dein & Woodbury-Smith, 2010) (Higgs & Carter, 2015). Additionally, authors of the case studies reported in Melvin et al. (2017) stated their opinions regarding treatment effectiveness for the individual with ASD e.g. Kohn et al., 1998; Murphy, 2010. However within these papers it was not always apparent as to the foundation of those views e.g. what was based on the therapist's interaction with the client and what stemmed from historical notes/records.

Interviews have a long history of being used to gather opinions, record lived experiences, explore social worlds and identify underlying cultural ideologies (Freud, 1963; Piaget, 1930, O'Toole, Thommessen & Todd, 2018). They are used in both therapy and research, often alongside quantitative measures including actuarial risk assessments (e.g. the HCR-20, Webster et al., 1997; Douglas et al., 2014) and outcome measures (e.g. Health of the Nation Outcome Scales (HoNOS), Wing et al., 1998). In research, interviewing and other methods of qualitative data collection may be undertaken prior to, or to supplement, investigations using experimental methodologies. Interviews have been used as a method to explore service user experiences and therapist or clinician views of treatment and practices for mental health conditions (e.g. Leksell & Billing, 2016; Biddle et al., 2013) with findings having the potential to influence healthcare practice.

Qualitative methods of data collection for treatment outcomes frequently draw attention to the implicit benefits of therapy and secondary, or indirect outcomes, often as a consequence of the group processes within a peer helping approach. Contemporary strengths-based models, such as The Good Lives Model (Ward & Brown, 2004), SOTSEC-ID (2010) and The EQUIP Programme (Gibbs et al., 1995), acknowledge these implicit benefits as a crucial aspect of the treatment, despite their lack of inclusion within outcome targets focusing on recidivism or re-offending.

The current study was therefore designed to explore the use of adapted sex offender treatment programmes for individuals with ASD by seeking service user and clinician experiences and views of the effectiveness and appropriateness of currently available programmes. This study, and the current chapter, consists of two data sets which are presented separately following a combined methodology, with the chapter culminating in a general discussion (including overall strengths and limitations) and study conclusion.

## **6.2 Aims of Study**

The principal research objective of this study was to gather the collective views and experiences of adapted sex offender treatment programmes from services users with ASD and treatment group facilitators, and explore their views as to whether treatment was helpful in reducing risk of re-offending. In addition, the study also sought to consider whether the features of ASD are a vulnerability to effective participation within treatment programmes.

The research questions were:

1. Do service users and clinicians think that sex offender treatment programmes reduce future instances of harmful sexual behaviour or sexual offending in offenders diagnosed with ASD?
2. What are staff and service user views on the potential role of the clinical features of ASD in acts harmful sexual behaviour?
3. Are there any emerging trends in the severity of ASD symptomatology and perceptions of treatment effectiveness?

### 6.3 Design

A mixed-methods research design was adopted to investigate the views of clinician and service users regarding the perceived benefits of adapted sex offender treatment programmes, with the study employing an interview protocol for data collection.

Purposeful sampling was utilised due to the specific niche of the target population and constraints relating to time and resources, but also to ensure that the sample was able to effectively take part in the interviews. Eligible men for the service user views study were required to: (a) have the capacity to consent, (b) be over eighteen years old, (c) have a diagnosis of ASD (either from an assessment or through clinician opinion) or meet the cut-off threshold for an ASD from the ADOS ( $n=3$ )<sup>31</sup>, and (d) have completed a CBT sex offender treatment programme. A co-morbid intellectual disability diagnosis was not a requirement to be eligible for inclusion, it was simply anticipated that the majority of those approached would have due to the prevalence rates of ASD and intellectual disability discussed in the literature review and from the avenues being approached for recruitment (e.g. mental health and learning disability services).

Clinicians were required to: (a) be familiar with the service user participant, and (b) have experience of sex offender treatment programmes for individuals with ASD.

Semi-structured interviews were used to allow participants the freedom to recount their narratives and give opinions, whilst providing some direction about the challenges to treatment in relation to difficulties with empathy and cognitive rigidity. It was also felt that some guidance and structure to the interview would be beneficial to those anxious about social situations and/or unfamiliar people.

Specific participant groups can bring additional challenges to the interviewing process. For example, offender populations, including sexual offenders, may require more stringent confidentiality parameters or additional safeguarding procedures within the research protocol. Furthermore, the participants may display higher levels of denial, deception or

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<sup>31</sup> Completed by the author who is trained to research reliability level, when ASD diagnosis was otherwise uncertain.

social desirability than non-offending populations, and the researcher must also remain aware of the risk of collusion during the interview process (Clipson, 2004).

In conducting interviews with individuals with intellectual and developmental disabilities, the challenges brought by the impaired cognitive function definitive of intellectual disability include difficulties with understanding, memory and concepts of time and processing speed as well as an interactional style with a higher propensity towards suggestibility and acquiescence (Finlay & Lyons, 2002; Prosser & Bromley, 1998; Shaw & Budd, 1982). A diagnosis of ASD may further complicate the picture due to social and communication difficulties (Creaby-Attwood & Allely, 2017; Dobbinson, 2016; Dewinter et al., 2017). For example, an idiosyncratic style of communication may create difficulties in understanding between the researcher and interviewee, theory of mind difficulties and/or irregular use of pronouns may create confusion in narratives involving others, along with concrete thinking styles and obsessions or special interests that may divert the interview from the desired topic. Furthermore, as identified in the literature review alexithymia or difficulties with insight and expression of emotion, challenges with autoneotic memory and absence of interoception may restrict the depth/richness of information.

Interviewing clinicians and those who provide therapeutic services can also present challenges in data collection. For example, in the clinician interviews there was the opposite power imbalances to those in the service user interviews, in relation to the author (a student) and a registered clinician/medical professional. Furthermore, the 'therapist-effect' is a well-recognised phenomenon suggesting that some variation in treatment outcomes is related to the therapist (Beutler et al., 2004; Wampold and Bolt, 2006). This variance can include: therapist experience, use of a manual, length of treatment and type of treatment (Crits-Christoph et al., 1991) in addition to personal characteristics (Anderson et. al., 2016, 2019). As such, this may render the clinicians interviewed reluctant to emphasise a lack of positive treatment outcomes due to any potential implications regarding their skills and competencies.

## 6.4 INTERVIEW STUDY: SERVICE USER DATA SET<sup>32</sup>

### 6.4.1 Participants

Eighteen men with ASD were identified by services and invited to take part. Fifteen men agreed to participate and fourteen consent forms were returned. One participant withdrew from the study during the consent process (Participant 15). A further individual (Participant 9) failed to attend the interview after providing consent and did not respond to attempts to re-schedule. The service provider stated that this participant wished to withdraw from the study and so all information for this individual was destroyed. Therefore, thirteen men with ASD who had completed an adapted sex offender treatment programme participated in the study and were interviewed (Figure 19).

The demographics of the service users are found in Table 12 (Service User Demographics) and are comparable to other samples of individuals with intellectual and developmental disabilities who display offending behaviours in relation to age, offending behaviour, referral to community or secure provision, legal status, involvement with the Criminal Justice System, co-morbid psychiatric diagnoses, histories of adverse childhood events and other problem behaviours such as aggression and substance abuse (e.g. Langdon et al. 2013; Sinclair, 2011; Lindsay et al., 2014; Carson et al., 2010, 2014).

All men in the study had ASD (see below) and were in receipt of support from intellectual disabilities services. The mean age of the sample was 38 years and 3 months (SD: 11 years and 1 month) and, where available (n=9), the mean full-scale IQ score was 71 (SD=9.5, range=57-85). Seven of the men interviewed were living in the community and six were detained under the Mental Health Act (1983) in locked rehabilitation wards or low and medium secure services.

The men had various ASD diagnoses which were not always consistent with diagnostic protocols (e.g. a diagnosis of Asperger's Syndrome alongside an IQ score below 70). A

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<sup>32</sup> A version of this chapter has been published within a peer reviewed journal under the title "*I feel that if I didn't come to it anymore, maybe I would go back to my old ways and I don't want that to happen*". Adapted sex offender treatment programmes: Views of service users with autism spectrum disorders." (Melvin et al., 2019). This chapter contains only minor alterations to wording in order to fit it into the PhD.

higher number than would be anticipated had diagnoses of atypical autism (n=4) and one man was diagnosed with Social Communication Disorder on his records but there was agreement by three of his clinicians on his having an ASD.

During recruitment it was recognised that some men had a diagnosis of ASD but no record of an assessment or formal diagnosis. For these participants (n=3)<sup>33</sup>, The Autism Diagnostic Observation Schedule (ADOS-2) (Lord et al., 2012) was completed as part of the screening process. All of those assessed met the cut-off threshold for an ASD.

As would be expected from a sample recruited through intellectual disability services, the men presented with various psychiatric co-morbidities (Table 12), and as such co-morbid diagnoses did not constitute an exclusion criterion.

A range of sexual offending behaviours were displayed within the sample (Table 13). Many of the men had long histories of sexually abusive behaviours and typically offended against women, children and vulnerable peers. Ten of the men had received convictions and placed on the sex offenders' register and three of these had received custodial sentences. The men also displayed other antisocial or risky behaviours, with many receiving convictions for these behaviours (more so than for the sexual offending behaviours). The presence of additional problem behaviours is consistent with other studies of intellectual and developmental disabilities offending populations (Lindsay et al., 2009; Wheeler et al., 2009).

The average number of sex offender treatment groups completed by the men was two, each group lasting approximately one year with one session a week. One service user reported to have completed a group six times, however the average remains at two if this outlier is removed. The majority of the men interviewed had completed the SOTSEC-ID (SOTSEC-ID, 2010) or a prison/probation programme such as the ASOTP (Williams, Wakelin & Webster, 2007) or Becoming New Me (Williams & Mann, 2010). It was not possible to ascertain which group all of the men completed, nor the number of sessions attended as for some men it had been some time since they had completed the treatment group, or this information had

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<sup>33</sup> Completed by the first author who is trained to research reliability level, when ASD diagnosis was otherwise uncertain.



been lost during transition between services and was not in their clinical file. From the self-reported data generated during interviews, the size of the groups attended ranged between three and ten men. Many of the service users were in receipt of, or had previously received, individual therapy (n=10). This was often related to sexual behaviours but also other areas of the men's life such as anxiety or transitions.

The current study aimed to recruit participants who had completed the treatment programme within the last 18-24 months to minimise the possible effects of memory degradation as a consequence of time since completion of the group, however this criterion had to be extended due to low recruitment numbers. Prompts and visual support were also available for the participants with ASD to aid memory and enhance recall e.g. copies of handouts, examples of session material.

#### **6.4.2 Measures**

Demographic information: Information about the service user's history, offending behaviour and living status was gathered using a personal data sheet completed by staff (Tables 1 and 2).

The Interviews: The interview schedule (Appendix 4) consisted of questions addressing: what the individual remembered from the group; what they thought of the group including aspects they found challenging, helpful, or missing?; how they found taking part in a group; if the group has helped them from re-offending?; how they have managed any behaviours or risks since completing the group (e.g. attending maintenance groups, etc.).

The schedule was developed from previous research interviewing sexual offenders with intellectual and developmental disabilities (e.g. Hays et al. 2007; Sinclair, 2011) and was revised in line with the study's research aims to explore/identify any issues specific to those with ASD e.g. regarding module content such as the victim empathy or the group nature of treatment.

Interviews lasted approximately thirty minutes (M=26:09, SD =09:06) and took place in Community Learning (intellectual) Disability Team offices, residential homes, secure wards and service users' homes (with carers in adjacent rooms).

Interviews were recorded on a Dictaphone and transcribed by the first author using DSS Player Standard Transcription Module (v2) software. Following the interview, the men received a £10 voucher in payment for their time.

### **6.4.3 Procedure**

### **6.4.4 Ethics**

The study required the recruitment of potentially vulnerable individuals through NHS and private sector services, therefore ethical approval was sought from the National Health Service (NHS) and a full review by the Bromley Research Ethics Committee (REC) was undertaken. Following receipt of a favourable opinion (see Appendix 4), approval from the Health Research Authority (HRA) was granted along with agreement from the local NHS Research and Development offices (R&D) for each site (Appendix 4). For independent healthcare services the study followed the specified research policies and procedures for each.

Receiving ethical approval took a prolonged period of time due to changes in the NHS Research procedures and the transition from the Integrated Research Application System (IRAS) to the Health Research Authority (HRA). This changeover led to a significant delay in approval of projects (See Appendix 4 for email communications from HRA), with response times increasing from between 3-15 days, to 8 weeks. Despite receiving approval from the REC and IRAS before the changeover date (31<sup>st</sup> March 2016), this study (and subsequent amendments, see below) were required to go through the new HRA process, and as a consequence a time period of nine months passed between the initial submission of application and the final receipt of favourable opinion for the ADOS amendment.

The full REC ethical application, including a timeline detailing the approval process can be viewed in Appendix 4.

**Table 12: Service User Demographics**

Participant <sup>34</sup>	Age (Yrs/mths)	ASD Diagnosis	Co-morbid Mental Health Conditions	Reported IQ	Intellectual Disability	Residential Status	Marital Status
P1	36.6	Autism spectrum disorder	Not Known	57	Mild	Living in community under probation order and community treatment order.	Single
P2	29.5	Atypical Autism	None reported	65	Mild	Living in own flat in community.	Married
P3	47.2	Autism spectrum disorder	None reported	69	Mild to borderline	Living in community.	Single
P4	57.11	Autism spectrum disorder	Eating disorders	65	Mild	Living in community in supported group home. Has 24hr 1:1 staffing levels.	Married
P5	51.8	Social Communication Disorder	Paranoid Schizophrenia	62-70	Borderline to mild	Detained under Section 37 of the MHA. Resides on locked ward.	Single
P6	39.1	Meets threshold for Autism on ADOS	None	85	None reported	Detained under Section 37 of MHA. Resides on locked ward.	Single
P7	52.8	Atypical Autism	Mixed and other Personality Disorder; Dissocial Personality Disorder	75	Mild	Detained under Section 47/49 of MHA Resides in medium secure hospital.	Single (is thought to have had previous sexual relationships)
P8	37.2	Autism	Features of Personality Disorder	61	Mild	Detained under Section 3 of MHA. Resides on locked rehab ward.	Not stated

<sup>34</sup> Participant 9 withdrew from study (by not attending interview) and all data deleted, Participant 15 withdrew before any data collection had taken place.

Participant <sup>34</sup>	Age (Yrs/mths)	ASD Diagnosis	Co-morbid Mental Health Conditions	Reported IQ	Intellectual Disability	Residential Status	Marital Status
P10	26.1	Autism/Asperger's Syndrome	None reported	-	Possible mild	Living in community (submits to monitoring and restrictions from care staff on a voluntary basis).	Single (previous relationships with younger girls - see next section).
P11	21.2	Meets threshold for Autism on ADOS	None reported	-	Mild	Living in community (own flat), supported living.	Single (previously had a girlfriend)
P12	47.10	Classical autism reported (plus meets threshold for autism on ADOS)	Anxiety and Depression	59-67	Mild	Living in community. Supported living in private flat.	In relationship (previously married/engaged)
P13	35.5	Atypical Autism	Klinefelter's Syndrome	79 <sup>35</sup>	Mild	Detained under Section 37 of MHA. Resides in low secure hospital.	Not stated
P14	36.6	Classic Autism	Personality Disorder	80	Borderline/low average IQ	Detained under Section 37 of MHA. Resides in locked rehab ward.	Not stated

<sup>35</sup> Reported IQ score inconsistent with Mild intellectual disability diagnosis (see discussion on page 127)

**Table 13: Service User Offending and Risk Behaviours**

Participant <sup>36</sup>	Harmful/risky sexual behaviours displayed	Convictions	Other offending/risky behaviours	Adapted SOTP completed	No. times completed group	Maintenance Group Attendance?	Received other/additional therapy?	Re-offending behaviours displayed? <sup>37</sup>
P1	<ul style="list-style-type: none"> <li>• Public Masturbation</li> <li>• Defecating in public</li> <li>• Staring/talking to young adolescents</li> <li>• Voyeurism</li> </ul>	<ul style="list-style-type: none"> <li>• Probation order for Public Indecency</li> <li>• Community Treatment Order</li> </ul>	<ul style="list-style-type: none"> <li>• Physical and verbal aggression</li> </ul>	SOTSEC-ID (and currently undertaking BNM) <sup>38</sup>	3	Y	Y	Y (Public indecency behaviours)
P2	<ul style="list-style-type: none"> <li>• Making indecent images of children</li> <li>• Possessing indecent images of children with intent to distribute</li> <li>• Sexual touching of peers</li> </ul>	<ul style="list-style-type: none"> <li>• Community order and placement on sex offenders' register (5yrs)</li> <li>• Caution and registration on sex offenders' register (2yrs)</li> </ul>	<ul style="list-style-type: none"> <li>• Previous aggression towards partner. No recent incidents</li> </ul>	SOTSEC-ID	1 (but has previously completed similar work on 1:1)	N	N	N

<sup>36</sup> Participant 9 withdrew from study (by not attending interview) and all data deleted, Participant 15 withdrew before any data collection had taken place.

<sup>37</sup> Acts constituting offending, regardless of police involvement, since completion of first sex offender treatment programme.

<sup>38</sup> Becoming New Me (Williams & Mann, 2010)

Participant <sup>36</sup>	Harmful/risky sexual behaviours displayed	Convictions	Other offending/risky behaviours	Adapted SOTP completed	No. times completed group	Maintenance Group Attendance?	Received other/additional therapy?	Re-offending behaviours displayed? <sup>37</sup>
P3	<ul style="list-style-type: none"> <li>• Obscene telephone calls</li> <li>• Previous behaviours include obscene letters and suggestions, exhibitionism</li> </ul>	<ul style="list-style-type: none"> <li>• Probation order and requirement to complete SOTP</li> </ul>	<ul style="list-style-type: none"> <li>• Shoplifting women's underwear (fetish behaviour)</li> <li>• Gambling</li> </ul>	SOTSEC-ID	2	Y	Y	N (not since second group but displays some risky behaviours e.g. inappropriate use of telephone help lines)
P4	<ul style="list-style-type: none"> <li>• Stalking</li> <li>• Inappropriate touching</li> <li>• Rape</li> <li>• Approaching/ displaying interest in teenage girls</li> </ul>	<ul style="list-style-type: none"> <li>• None reported</li> </ul>	<ul style="list-style-type: none"> <li>• Physical and verbal aggression,</li> <li>• Damage to property</li> <li>• Unlawful entry to property</li> <li>• Attends brothel</li> </ul>	SOTSEC-ID	3	Y	Unclear	N (continues to show interest in and approaches young girls)
P5	<ul style="list-style-type: none"> <li>• Rape and assault of adult female</li> <li>• Reports touching women in clubs</li> </ul>	<ul style="list-style-type: none"> <li>• Convicted of rape of adult female</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple drunk and disorderly convictions</li> </ul>	Unclear if prison, probation or community programme	2	Y	Y	N (continues to display attitudes consistent with sexual offending)

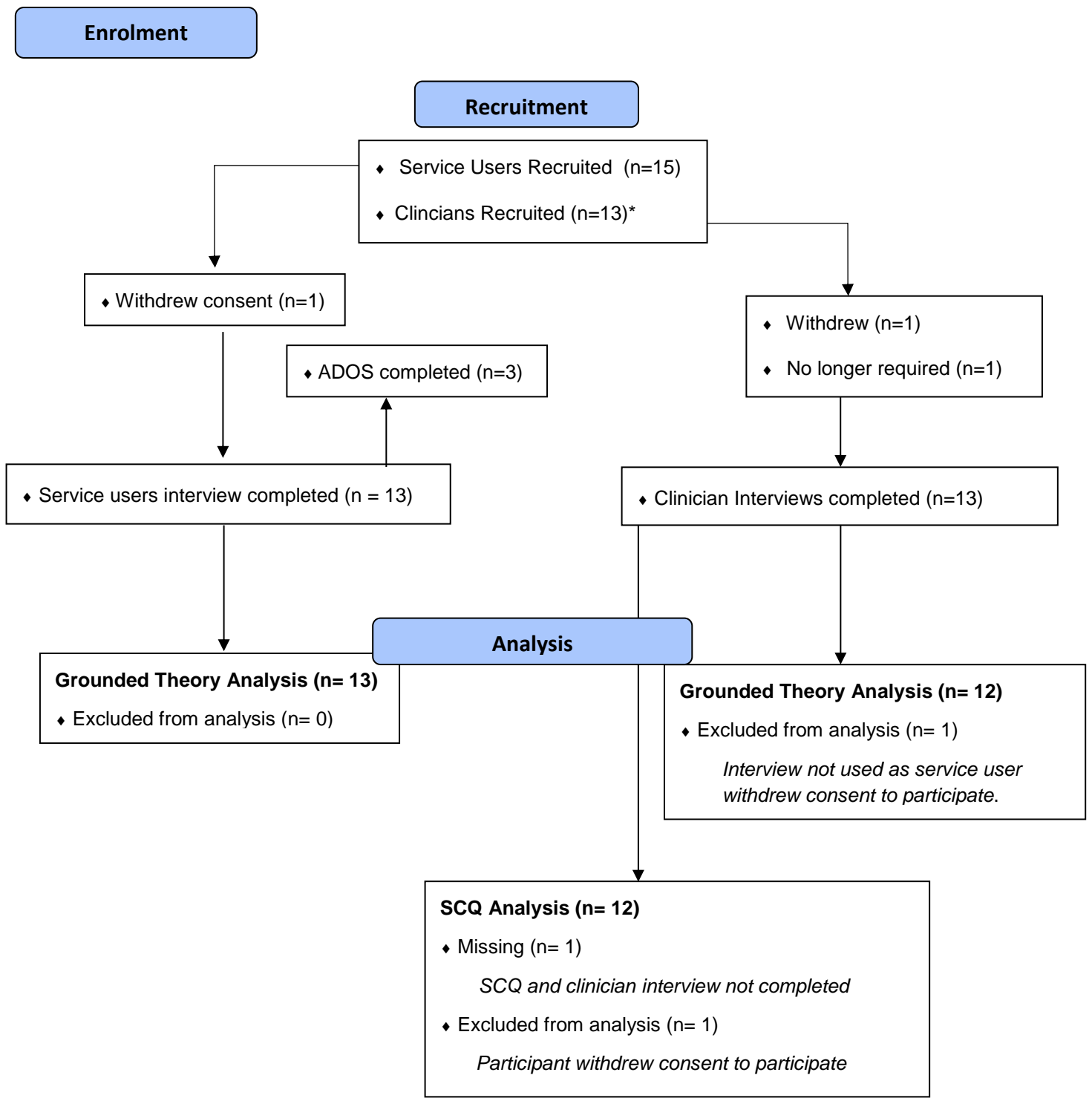
Participant <sup>36</sup>	Harmful/risky sexual behaviours displayed	Convictions	Other offending/risky behaviours	Adapted SOTP completed	No. times completed group	Maintenance Group Attendance?	Received other/additional therapy?	Re-offending behaviours displayed? <sup>37</sup>
P6	<ul style="list-style-type: none"> <li>Exhibited sexualised behaviours from puberty</li> <li>Indecent assault of young girls and female staff</li> <li>Expressions of abusive sexual fantasies</li> <li>Displays interest in young girls in the community and expresses inappropriate thoughts</li> </ul>	<ul style="list-style-type: none"> <li>Caution (5 year) following assault of young girl</li> <li>Convicted of sexual assault following assault of child</li> </ul>	<ul style="list-style-type: none"> <li>Historic accounts of violence and aggression towards other children when younger</li> <li>Reported alcohol and cannabis during adolescence</li> </ul>	SOTSEC-ID	6	N	N	Y (sexual assault and continues to display interest in young girls and expresses inappropriate thoughts)
P7	<ul style="list-style-type: none"> <li>Necrophilic behaviour.</li> <li>Reports of 'stalking' - watching females.</li> </ul>	<ul style="list-style-type: none"> <li>Convictions of wounding and murder (with sexual intent)</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	SOTSEC-ID incomplete (but has completed SOTP previously)	2	N/A	Y	N (continues to display 'stalking' behaviours)
P8	<ul style="list-style-type: none"> <li>Long history of sexually abusive acts against vulnerable adults and children</li> </ul>	<ul style="list-style-type: none"> <li>No convictions relating to sexual behaviours</li> </ul>	<ul style="list-style-type: none"> <li>History of physical aggression, destruction to property (has convictions for these offences)</li> <li>Also displays racially</li> </ul>	SOTSEC-ID	2	Y	Y	Y (sexual assault)

Participant <sup>36</sup>	Harmful/risky sexual behaviours displayed	Convictions	Other offending/risky behaviours	Adapted SOTP completed	No. times completed group	Maintenance Group Attendance?	Received other/additional therapy?	Re-offending behaviours displayed? <sup>37</sup>
			abusive behaviours					
P10	<ul style="list-style-type: none"> <li>• Reports of abuse against peers and siblings during childhood</li> <li>• Concerns over behaviour towards younger/ adolescent girls and vulnerable peers</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• None reported</li> </ul>	SOTSEC-ID	1	Y	Y	N
P11	<ul style="list-style-type: none"> <li>• Stalking behaviours followed by sexual assault of adult female</li> <li>• History of sexually inappropriate behaviour beginning in childhood, including disinhibited behaviours and assaults of females</li> </ul>	<ul style="list-style-type: none"> <li>• Prosecuted and received referral order</li> </ul>	<ul style="list-style-type: none"> <li>• Previous history of aggression as child, adolescent and adult</li> </ul>	SOTSEC-ID	1	Y	N	N (displays 'watching' behaviours and taking photographs)



Participant <sup>36</sup>	Harmful/risky sexual behaviours displayed	Convictions	Other offending/risky behaviours	Adapted SOTP completed	No. times completed group	Maintenance Group Attendance?	Received other/additional therapy?	Re-offending behaviours displayed? <sup>37</sup>
P12	<ul style="list-style-type: none"> <li>Multiple incidents of rape and indecent assault of females under 16yrs</li> </ul>	<ul style="list-style-type: none"> <li>Convicted of sexual assault</li> </ul>	<ul style="list-style-type: none"> <li>No</li> </ul>	SOTSEC-ID	2	Y	Y	N
P13	<ul style="list-style-type: none"> <li>Sexual assault of females (adults and children)</li> <li>Reports of touching fellow peers</li> <li>Possession of indecent images of children (include level 5)</li> </ul>	<ul style="list-style-type: none"> <li>Conviction for possession of indecent images of children</li> <li>Conditional discharge and entry into sex offenders' register (5 years)</li> </ul>	<ul style="list-style-type: none"> <li>Convictions for arson, burglary, possession of drugs and theft</li> <li>Use of social media to contact young females</li> </ul>	Unclear which programme completed	2	Y	Y	Y (possession of child sexual abuse images)
P14	<ul style="list-style-type: none"> <li>Sexual/sadistic fetishist interest</li> <li>Grievous physical assaults related to fetish</li> <li>Continues to express abusive thoughts and fantasies in relation to fetish</li> </ul>	<ul style="list-style-type: none"> <li>None related to sexual behaviours</li> </ul>	<ul style="list-style-type: none"> <li>Long history of physical violence (received convictions for these behaviours)</li> </ul>	Unclear which programme completed	1	Possibly 2 but unclear if a previous group was relapse prevention or another adapted SOTP	Y	N (continues to display sadistic interests and express abusive fantasies)

Figure 19: CONSORT 2010 Flow Diagram of Participant Recruitment, Retention and



\*Two clinicalians completed multiple interviews.

#### **6.4.5 Amendment to ethics application**

Following the initial recruitment drive it was recognised that a number of men with a putative diagnosis of ASD were identified by services however they did not have a formal diagnosis within their clinical records, either provided by an medical professional/approved Clinician or from an ASD assessment such as the Autism Diagnostic Observation Schedule (ADOS) (Lord et al., 2003) or DISCO (Wing et al., 2002).

Assessment for ASD has typically been prioritised in children with the need for assessing ASD in adults only recently emphasised in the UK following the implementation of the Autism Act (2009). The latest Autism Strategy (2014) has further recognised the specific needs of offenders with ASD, however this delay in recognising the needs and presence of ASD in adults is likely to have resulted in a percentage of older individuals with ASD who have gone undiagnosed. Some individuals with ASD may have come into contact with health and social care services if they have a co-morbid intellectual disability yet the ASD may go unrecognised, especially if the individual presents at the higher functioning end of the spectrum or if other behaviours (e.g. challenging behaviour) take precedence with regards to support needs.

Some of the men approached to participate in this study were likely to fall within this category due to their social histories and ages. Therefore, in order to avoid excluding these older or undiagnosed men and risk omitting their experiences and opinions from the study, an assessment of ASD was included as part of the screening and recruitment process where it was not already available (n=3).

As discussed in the literature review, the features of ASD can overlap with other disorders such as personality disorders, attachment disorders and schizophrenia (Sandiq et al., 2012; Moran, 2015; Blair, 2005) therefore screening measures such as the Autism Quotient (Baron-Cohen et al., 2001) were not considered appropriate for this study. The chosen screening method would therefore be required to establish the presence of an ASD rather than identify 'traits' or typicality of presentation.

The ADOS is a standardised structured assessment which is one of two tools considered ‘the gold standard’ in the assessment of ASD (Kamp-Beck et al., 2001). It provides the opportunity for an individual to display the social and communication behaviours associated with a diagnosis of ASD. The assessment involves a series of puzzles, activities and answering a number of questions and takes approximately an hour to complete.

When used in a clinical capacity and coupled with another assessment tool such as the Autism Diagnostic Interview-Revised (ADI-R) (Lord et al., 2003) or DISCO (Wing et al., 2002) the findings can be used for diagnostic purposes. However the ADOS alone can be used for research to assess whether an individual meets the cut-off threshold for an ASD, and thus met the ASD eligibility criterion for inclusion within this study (see Table 14).

The addition of the ADOS was considered a substantial amendment and required re-submission to the REC and HRA. Approval of this amendment was granted and the assessment was subsequently included in the procedure for men who were assumed (or strongly suspected) by their clinical teams to have an ASD. Documents pertaining to the ADOS amendment are included in Appendix 4.

Only three service users required completion of the ADOS (see Table 14 Service User ADOS Assessments). All met the cut-off threshold for an ASD and thus fulfilled the criteria for inclusion in the study. All three men subsequently consented to take part in the study and completed an interview.

#### **6.4.6 Recruitment**

Services providing adapted sex offender treatment programmes were approached for inclusion in the research and participants were recruited via Community Learning (Intellectual) Disability Teams (CLDT) and through secure services. Both independent healthcare and NHS sites were included in the study.

Potential participants with ASD were identified initially by clinicians within the services and consultation with the participant's clinical and care team was undertaken to ensure that

participation in the research would have no impact upon the individual's recovery or mental state.

It is widely accepted that individuals with intellectual and developmental disabilities are more inclined to acquiesce and this needed to be taken into consideration during the recruitment procedure. Potential participants were approached by a member of their support network or care team in the first instance to reduce any pressure to take part and lessen any anxieties over being asked to participate by a stranger. It was made clear that participating in the study would have no effect upon their care or treatment and that the study was being conducted independently of all service providers and care facilities.

Accessible information sheets and consent forms were provided for the men with ASD as it was anticipated that potential participants would have poor literacy skills (Appendix 4). The information sheet contained details of the nature, benefits and risks of the study, along with information about the duration and expectation (i.e. potential topics) of the interview.

Criminal and other disclosures were a possibility during the interviews and it was clearly stipulated on the accessible information sheets and consent form that this information would be passed on in certain circumstances and the procedure for doing so was explained.

At the beginning of each interview the author confirmed capacity and consent to participate in the study.

Each participant and associated staff member was assigned an individual code that was used on the form requesting personal details, on the audio file and on the corresponding transcription file. This was done to all ensure personal information was kept anonymous. All data were recorded and stored in accordance with the Data Protection Act (1998) and subsequent General Data Protection Regulations (2016).

**Table 14: Service User ADOS Assessments**

Participant	Date assessment completed	Age at assessment	Meets cutoff threshold for ASD? <sup>39</sup>	ADOS-2 Classification	Communication & Social Interaction Total	Communication Subscale	Reciprocal Social Interaction Subscale	Imagination/Creativity Subscale	Restrictive & Repetitive Behaviour Subscale
P6	13/10/2016	39yrs 4mths	Yes	Autism	12	4	8	3	0
P11	22/09/2016	21yrs 2mths	Yes	Autism	14	6	8	2	0
P12	10/12/2016	47yrs10mns	Yes	Autism Spectrum	10	2	8	1	1

<sup>39</sup> ADOS-2 Classification Thresholds:

Autism: Communication Total  $\geq 3$ ; Social Interaction Total  $> 6$ ; Communication + Social Interaction Total  $\geq 10$

Autism Spectrum: Communication Total  $\geq 2$ ; Social Interaction Total  $\geq 4$ ; Communication + Social Interaction Total  $\geq 7$

#### **6.4.7 Analysis**

#### **6.4.8 Grounded Theory**

Grounded theory (Glaser, 1978; Glaser & Strauss, 1967, 2009; Corbin & Strauss, 2014; Charmaz, 2006, 2014) was chosen for this study as it allowed for the structured analysis of qualitative data. It is an interpretive method that moves beyond identification and description of themes or concepts and allows the analysis to develop new theory grounded in the data.

As a method, Grounded Theory is widely used in the social sciences and applied to various data sources such as interviews and ethnographic data to explore a multitude of topics including constructions of mental health and developmental disorders (Malli & Forrester-Jones, 2016), the experiences of ethnic and sexual minorities (Richards & McCleod, 2016; Dispenza et al., 2016) and variables or factors influencing offending behaviour (Lopez & Emmer, 2000; Joyce et al., 2013; Wainwright et al., 2016; Webster & Beech, 2000).

Originally developed by Glaser and Strauss (1967), the method has since been adapted, refined and continued by what are often referred to as second-generation grounded theorists. These include Strauss and Corbin (1990, 1994, 1998), Charmaz (2006, 2014) and Clarke (2003). Although the central premise of the Grounded Theory method remains the same, approaches taken by Grounded Theories vary in their epistemological stance, coding strategies and method, and the nature of the theory developed.

There are a number of criticisms of Grounded Theory, particularly from the positivist traditions and researchers firmly located in a nomothetic-hypothetico-deductive approach, which are in contrast to the ideographic-inductive approach employed by grounded theorists. Criticisms of grounded theory, and many other qualitative approaches, include issues of validity and credibility when a method involves subjective interpretations of individualised narratives data (Corbin & Strauss, 2014). Positivist theorists strive for objective, impartial findings and seek to separate value from fact in their search for truth and knowledge (Popper, 1959; Abend, 2008). As such the involved, interpretation of the grounded theory method often comes under fire for being incapable of producing verifiable, robust and refutable findings (Atkinson et al. 2003; Swedberg, 2012). Grounded theorists

counter these arguments in the first place by determining what is meant by a 'theory'. Thornberg and Charmez (2012) argue that the purpose of theory is to state "relationships between abstract concepts and may aim for either explanation or understanding" (p41). This account of theory would also apply in positivist traditions however, positivist and objectivist theorists focus on generalisability, explanation and prediction whereas interpretive and constructionist approaches seek to understand meaning and action, exploring the construction of multiple realities rather than seeking a universal truth (Charmez, 2014). Charmez (2014) also emphasises that objectivist theories can contain subjectivity, interpretation and bias however these are hidden behind established research practices and traditions, particularly within the scientific arena. Grounded theory can take the form of objectivist (e.g. Glaser, 1978, 2003, 2009) and constructivist approaches (e.g. Charmez, 2006). However, it has been argued that distancing or attempting to remove oneself from the research and analytical processes in grounded theory can limit the depth reached and subsequent interpretations and resulting theory (Corbin & Strauss, 1998; Charmez, 2014).

Alternative methods of analysing interview data include thematic analysis (Braun & Clarke, 2006) and Interpretive Phenomenological Analysis (IPA) (Smith & Osborn, 2007). IPA is used to explore lived experiences, however it typically employs a smaller sample size, with two or three participants being viewed as sufficient and more than nine being considered too large (Eatough & Smith, 2006). Although this study was interested in the service users' and clinicians' experiences of the treatment group, the research objectives were designed to draw conclusions that moved beyond the individual case studies and idiosyncratic data identified in the literature review and Melvin et al. (2017), and explore themes, commonalities and differences across a wider sample, one larger than would typically be considered for an IPA study. Additionally, whilst the study is concerned with recording the experiences of service users involved in sex offender treatment groups for men with ASD, it is also designed to identify and begin exploring a number of hypotheses suggested in the literature on ASD and sexual offending. It is for these reasons that Grounded Theory was selected in favour of thematic analysis.



#### 6.4.9 Analytical Procedure

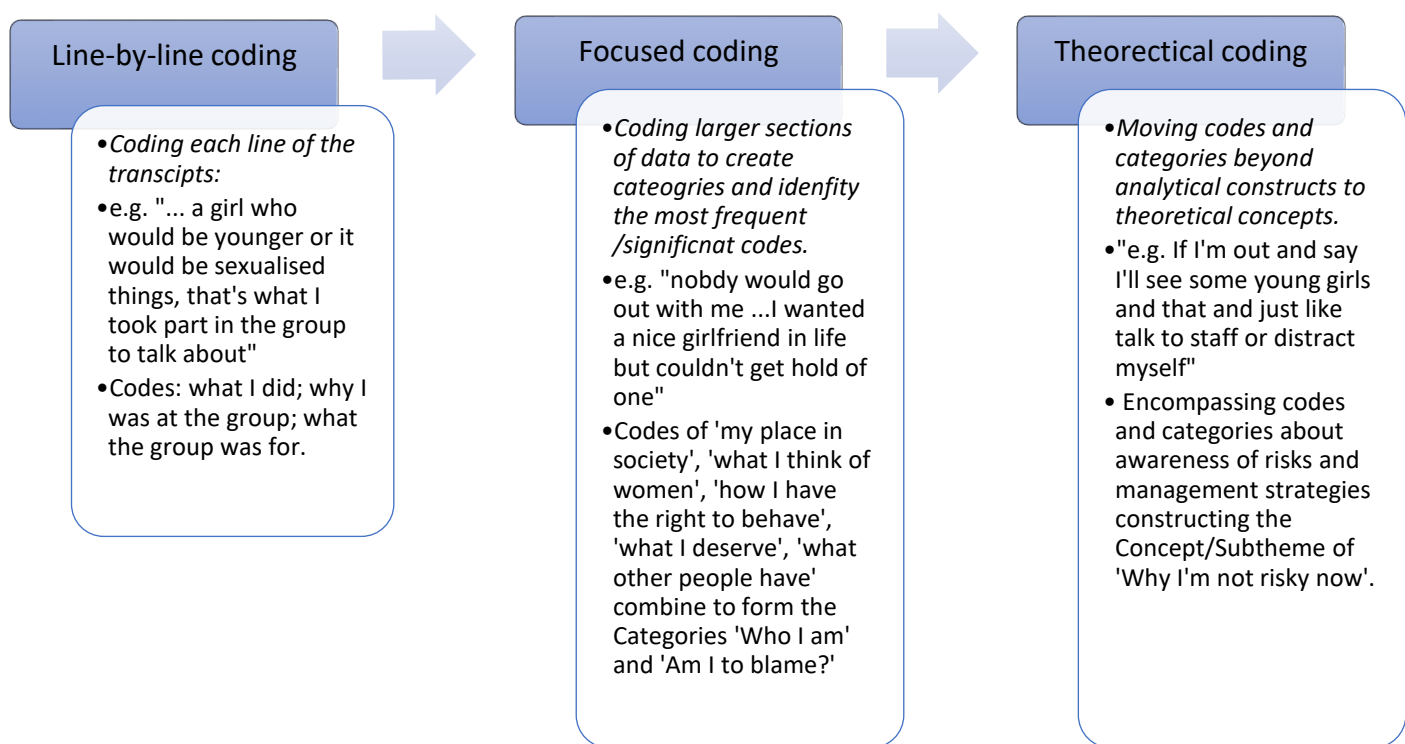
This study incorporated the approaches of Charmaz (2006, 2014) and Corbin & Strauss (2014) in the Grounded Theory analysis. All interviews were transcribed by the researcher and read in full on multiple occasions. The transcripts were then coded guided by Charmaz's (2006) process (Figure 20).

The transcripts were coded in a line-by-line system to extract the descriptive-level content of the men's narratives. One hundred and nine codes resulted from this initial process which were then refined and ordered into higher level categories. This stage involved exploring the codes in relation to each other, and when pieced together (examining larger chunks of text), led to the identification of a number of themes and processes involved in the men's experiences and views of the treatment group, including their perceptions of their offence and risk of re-offending. The categories and themes were then elevated, moving away from the data, to abstract concepts that had explanatory power and subsequently developed into a model of how men with ASD experience sex offending treatment groups and perceive their effectiveness (Figure 21).

The coding process was accompanied by extensive memo writing and also periods of free writing. Theoretical sampling was used to ensure focused exploration, refining of the categories and to ensure fidelity to the data collected. Techniques from Strauss and Corbin (2014) were also utilised to aid the process, including constant comparison (both within and between the transcripts) and the flipflop technique of rotating concepts to obtain a different perspective. Standard practices of paying attention to language and the use of *in vivo* phrases - language used every day that has established social connotations and wider understanding (e.g. '*all in the same boat*') - and expressions of emotion were also used in the analysis.

The analysis and procedure were reviewed by the author's doctoral supervisor, Glynis Murphy, on multiple occasions to ensure sufficient codes for saturation, and agreement was reached for all categories, concepts and the resulting model.

**Figure 20: Coding Method**



#### 6.4.10 Results

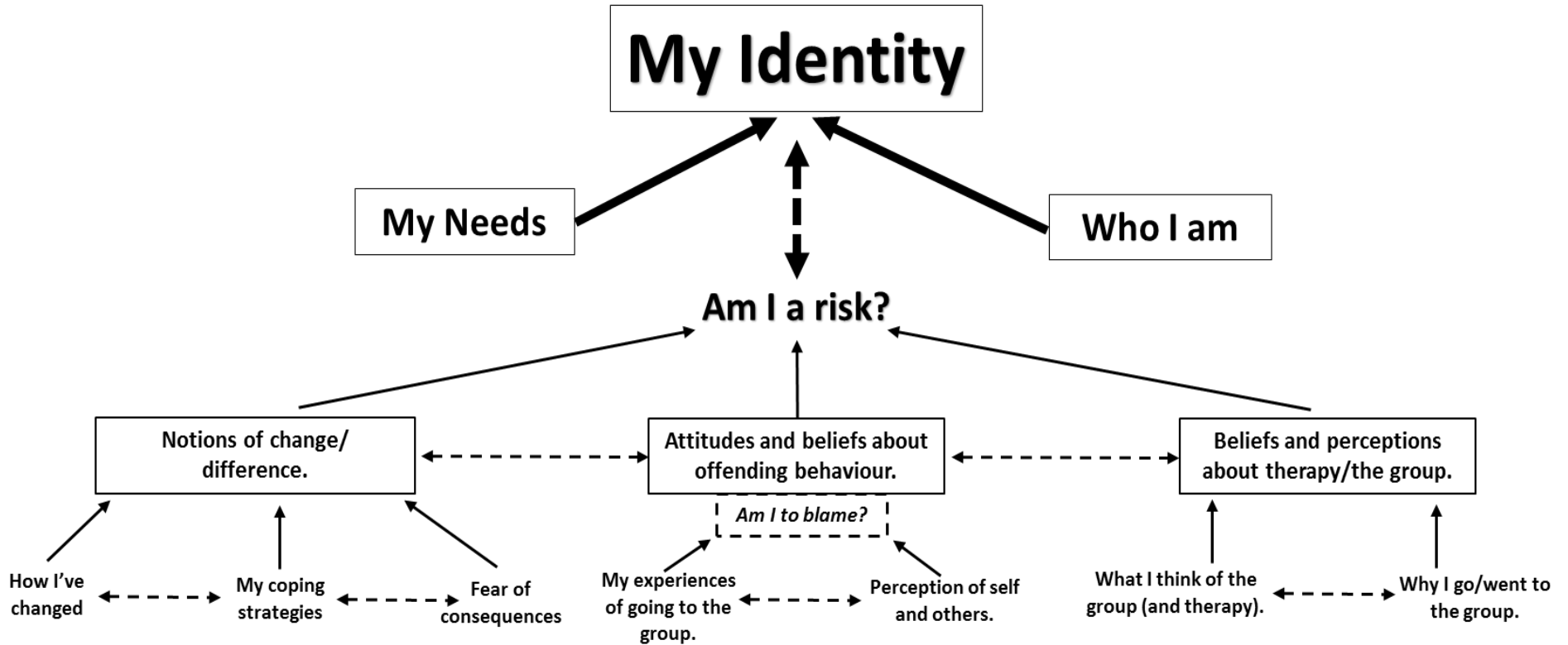
All thirteen service user interviews were included in the analysis and used to develop the resulting model (Figure 1).

The men's **identity** formed the overarching theme in the data (Figure 1). Their sense of self was constructed through themes of (i) *who I am* and (ii) *my needs*, which were influenced by internal motivators and experience (including the group), immediate relationships (family, peers, professionals) and wider social and cultural factors.

The men acknowledged assimilation of some aspects of the treatment into their identity, such as development of new social roles and skills. However, opinions and experiences of the group were largely shaped by how the men viewed their offending behaviour specifically, if they considered themselves at risk of re-offending or if this view (themselves as a risk) was inconsistent with their constructs of identity. They formulated beliefs about 'Am I a risk?' through the subthemes of (i) *beliefs and perceptions about the group and therapy*; (ii) *attitudes and beliefs about offending behaviour*, and (iii) *notions of*

*change/difference* (Figure 21). Attitudes towards offending behaviours were mediated through views of blame and culpability.

Figure 21: Men's Construction of their Identity, including sexual risk, following treatment



Beliefs regarding treatment effect were also conveyed through accounts of change in the men's lives following the group, particularly within the theme of *my needs*. As would be expected, those whose lives had changed very little since attending the group, frequently those who denied their offence, faced more restrictions and losses of freedom and thus experienced the group as unhelpful or believed it to be 'not worth doing'. There was however little difference between those detained in secure services under the mental health act and those in the community regarding views of group helpfulness. For example, five out of seven men in the community described the group as helpful, as did four out of six who resided in secure services. Only one individual in the community stated the group did not help whereas two in secure services felt it was unhelpful. The majority of participants who saw improvements to their life, regardless of how they accounted for those improvements (refer to pages 13-14), believed the group to be "worth doing":

*"If you didn't have those groups something could have happened along the line that you could've ended up in prison if you hadn't have come".*

#### **6.4.11 My Identity**

In constructing **identity**, the theme of *who I am* included statements regarding 'how I see myself', 'what I like', 'what I deserve', 'how I behave', 'what I need help with', 'what I am good at', etc. Whereas *my needs* were conveyed through narratives about whether the men felt their *needs* were met, what *social goods* they had, and their level of *social inclusivity*.

The role of others was a significant factor in constructing identity and the impact of different relationships spanned both themes of *who I am* and *my needs*, in addition to feeding into perceptions of risk. 'Others' were categorised into relationships in the 'personal' or 'professional' sphere, with some having a direct influence or contact with the individual e.g. family, spouse, clinical team etc., and others being *indirect* e.g. the police, media, identified social groups. Many relationships were constructed as a protective factor e.g. staff, wives, family, employer etc. (e.g. Quotes Q1, Q3, Q4 & Q8), or a risk factor e.g. victims, potential victims. Professional relationships tended to be characterised as those 'providing help' and those 'hindering progress' (as illustrated in Q20, Q29 & Q31).

*Met needs, social goods and inclusivity* were framed in terms of ‘freedoms vs restrictions’, and ‘gains vs. losses’ (post-group), and included what the men believed they deserved or expected, as well as what they had. *Needs, goods and inclusivity* varied in precedence across the data, but each combination constituted ‘*what I have/what I want*’ and formulated hopes/plans for the future.

*Q1: “[I] just want to start again and a job, a girlfriend and a house and start building something up ... so I can buy a house, when I get a job somewhere and maybe a girlfriend might come into my life”.*

Individual desires/wants were shaped by cultural norms and comparisons to others. Employment and relationships, particularly romantic or sexual relationships, were key social goods, with employment mentioned in ten of the thirteen interviews, and romantic/sexual relationships mentioned in eight. Both jobs and relationships were used to symbolise met or unmet needs and contributed towards feeling part of society. Employment created monetary benefits and a sense of worth and self-esteem e.g. Q2: “*And my boss was very pleased with my work, gave me a pay rise once*”. It also provided opportunities to be part of a team and included in shared experiences:

*Q3: “This morning we had a bit of fun and games, I got there [to work] and the shutter had broken ... So they had to call out somebody to come down to fix it, [it was] a nightmare and you know, and I’ve been put on the till [laughs].”*

Identities were formulated and supported by propositions of how the men are alike or dissimilar to others, with justifications of behaviour made through statements of ‘*what I say*’ and statements of ‘*what others say*’ (including in relation to offending behaviours, e.g. Q24-6). Membership of social groups and recognised roles, such as employee, husband, son, musician etc., contributed to identity, as well as individual factors and relationships, i.e. likes/dislikes, skills and abilities, childhood/life experiences, health or disability, people/relationships in their lives, and wishes, hopes, expectations and failures. A framework of similarities and differences was used, and comments fell into one of four statement types: ‘how I am like others’, ‘how I am different to others’, ‘me compared to others’ and ‘others compared to me’, depending on where or how the men placed themselves in relation to others. The men used these strategies to construct aspects of their

identity in which they were just like 'other men', either simply by being a man or by identifying with a particular social group or subculture as mentioned previously e.g. the established roles/identities of 'husband', 'employee' gender norms/expectations, e.g. Q4: *"[get back to] being a decent chap ... and be more gentleman[ly]"*.

#### **6.4.12 Notions of change/difference**

In portraying their sense of self and identity, contrasts of 'me before the group vs. me after the group' and 'different life, different me', illustrated notions of change and difference. These contrasts were presented throughout the narratives, with the former being loosely based on references to internal motivations and behaviours ('me before vs. me after' representing changes to self), and the latter on external changes and situations ('different life, different me' indicating changes to circumstances) e.g. staffing/support levels and service provision, employment, marriage, etc. Changes to both self and circumstances were used to support the men's propositions about their risk of re-offending.

For some, their circumstances were similar to, or worse than, before their offence or attending the group e.g. unmet needs, lack of social goods and feeling socially excluded. For those whose lives had improved, the desire to retain these improvements and achieve more acted as protective factor, potentially reducing risk of re-offending.

*Fear of the consequences* was a primary motivator against re-offending, particularly the risk of social exclusion. Consequences were frequently framed as 'punishments', indicating an immature level of moral development, characterised by an emphasis on concrete aspects and 'rules' of behaviour (Gibbs et al., 1992). Morality is seen as dictated by physicality or authority (e.g. being older or 'bigger', or a parent, God, the police, etc.) or defined by 'quid pro quo' arrangements and calculating the advantages/disadvantages of demonstrating pro-social behaviours e.g. obeying the law to avoid going to jail. At the immature stages morality is not viewed as something that transcends contexts and situations or is malleable e.g. morality as governed by societies' laws and principles which can change/be adapted where needed or deemed appropriate e.g. stealing food to feed a starving child.

The men repeatedly referred to removal or 'loss' of freedoms/activities as a consequence of their behaviours, as illustrated in the quotes that follow. For example, all narratives

indicated a level of social exclusion as a consequence of offending and anxieties of future exclusion were often expressed in terms of physicality i.e. being sent/locked away.

*Q5: I mean I know alright, they gave me a fine as well, but when they recommended [the group] ... I thought at least ... it's better than sitting in some ... prison cell... where you can't on with your life ... once you're there, you can't really speak to people ... you're kind of shut off there and it's difficult ... I'd rather be going to a programme and get to talk about these things than be sitting in prison ... I think everyone's said all along, prison is not a place for me, you know? Cos' I am you know, a vulnerable person".*

Impact on family, and loss of other freedoms or gains also contributed to a *fear of the consequences* of re-offending e.g. Q6: *"If [I] re-offend in the future and go back to prison [my] family [will] get upset"* and, Q7: *"(if I re-offended) I'd have to start from the bottom and get that trust again that I built up to be able to use the internet"*.

As mentioned, employment was viewed as a key social good and key motivator against re-offending, Q8: *"It's what I lost my job for and that, one of the last things was, [I'm] never ever making a phone call [like that] again and losing my job over it"*

Other differences in circumstances and changes in self referred to romantic/sexual relationships. These were described in terms of 'having' or 'wanting' a wife/girlfriend. Some men identified these unmet needs in the context of their offending, for example:

*Q9: "I was in a pretty bad state, couldn't get a partner at the time.", and "I split with my girlfriend and [I made] a sexual type of phone call to her family ... they told me I was not to see her again".*

Within the theme of *how I've changed*, changes to romantic or sexual relationships were conveyed as of great relevance to risk and a sense of being different post-group (also see Q13). For some, having their sexual needs met was a priority (see quote below), whereas for others the esteem/status of being a husband or partner was dominant. References to love, companionship, finding 'the right person' or consideration of the others' feelings were minimal or absent.

*Q10: "Since that [sex] stopped I see prostitutes now ... [I'm] quite happy with going to the brothel and having [wife] as a partner still."*



Poor mental health and other stressors such as family relationships or substance abuse were also identified as potential triggers or risk factors for offending and indicated to have since improved and thus reduced risk e.g. Q11: *"I don't know what was going through my mind, it was a lot of things. There was a little bit of aggravation with my sister"*.

Men who denied any risk or offending behaviour (and subsequent need to be at the group), presented themselves as compliant and/or obedient i.e. they attended the group and did what was asked, but indicated any change in their belief/attitudes or behaviour was unnecessary.

*Q12: "The psychiatrist has still told me to carrying on [attending the group] for the time being ... So I'm doing what they say, they're the champions ..."*

New roles as well *coping strategies* acquired from the group (such as 'Stop and Think' cards and reminding oneself of the consequences) were readily incorporated into the men's identities and used to indicate change and reduced risk. For some, completion of the group and continued adherence to therapeutic principles or risk management strategies became an integral part of the 'changed' life and self, as seen below:

*Q13: but I learnt if I don't do much and I think about re-offending ... [if] you [are] having a lazy day, you do something creative like on the computer, brush the cat ... and then [the] brain [is] occupied and then I don't think about ... 'what could I do' or 'let's go re-offend'. So now I've got everything in my life that I need, I've got a good cat, I've got a flat, I've got my wife and I've got jobs to do ... and so I have completely changed my routine from what I was doing before when I was re-offending and thinking about what could I do to stop myself from re-offending ... I knew I needed to get more volunteering, [then it] was a case of getting my bottom in gear ... and [now] I don't have to think about going to find more volunteering or going to work I ... do that automatically.*

Other men denied or omitted any potential effect from the group and assigned changes to the result of others causes e.g. Q14: *"I just don't think of hurting people any more ... I just woke up one day and said 'won't do it anymore"* and, Q15: *"(Interviewer:) Is there one thing that has been helpful in keeping you safe and making sure that whatever happened before doesn't happen again? (Interviewee:) I'm on the 1:1 [staffing level]"*.

#### 6.4.13 Attitudes and beliefs about offending behaviour

These were founded upon *experiences of going to group* and *existing perceptions of self and others*, and were shaped by notions of blame and responsibility.

*Experiences of the group* were described as: (i) those that affected the men on a personal level and centred on them as an individual, (ii) those that impacted upon their social sphere, including their immediate friends and family but also the wider community and their place in society, and (iii) those that were related to the group as a form of treatment. These themes were not mutually exclusive and fed into each other e.g. going to the group impacted them both socially and individually.

Opinions regarding the group were sometimes expressed directly e.g. it being '*boring*' or inconvenient and interfering with college or relationships, etc., Q:16 "*so it was a little bit hard [going to the group] because I wanted it to concentrate on getting married*"; whilst others were implied or conveyed through their relationships with other group members and staff.

Group treatment was described as a positive and negative experience. Some men had received individual therapy at some point in their life (n=10) (not necessarily related to offending) and there was little preference between the two with only two men stating they preferred 1:1 and most saying they enjoyed both.

*Q17: "I did feel in one [way] it's better working one-to-one but you don't get the ... other people ... because what you might ... think about, I might not think about."*

Difficulties identified from the presence of others were those common to most social interactions e.g. personality clashes, shyness, social anxiety, fear of bullying, etc., with some specific to sex offender treatment i.e. disclosure of offence and hearing other members' offences was sometimes identified as distressing. However, for many men the group provided a space of common ground, with numerous references to all "*being in the same boat*" (Q18) and members were seen as sources of support and encouragement, "*We just help each other*" (Q19).

Q20: *"I suppose you get over the initial thing of why you're there ... You just meet on a regular basis, like coming here, I'll say, Rich the facilitator, you treat [him] as your mates (sic.) ... whoever you're with in groups, you do similar things and you have laugh and you talk about things."*

How the men *perceived themselves and others* impacted on their engagement with the group and its members. These perceptions included the sense of identity and needs/expectations, as referred to previously i.e. *'who I am'* and *'what I want'*, but in relation to their offence e.g. Q21: *"nobody would go out with me so I was panicking ... I wanted a nice girlfriend in life but I couldn't get hold of one"*. This subtheme also includes perceptions of the men's place within the group and their relationship to the other members.

#### **6.4.14 Beliefs and perceptions about therapy/the group**

For some, the group created a sense of belonging, identity and opportunities for shared experiences as shown in the quote above (Q20). Additionally, it provided the chance to develop pro-social roles and relationships. For instance, in supporting other members of the group some men became role models or advocates for the less able or experienced. Members established specific roles and played their own part in the group such as reading the group minutes each week or helping to provide refreshments. Some roles and benefits stretched beyond the group leading to employment or involvement with charities/organisations to advocate or represent men with intellectual and developmental disabilities who have offended. One man regularly travels to events and discusses his experiences *"I explained why I was there, a little bit the problems and the autism that I have and explained to a whole a group of people"* (Q22). These positive experiences and new roles/skills were strongly emphasised during the interviews and appear an important integration into the men's identities.

A handful of men (n=4) rejected the group and its members by isolating themselves e.g. Q23: *"I don't bother with them [other group members], I just stick to myself"*. Other members were not part of their experiences, only being referred to if asked directly. These types of 'group' experiences were described mostly by men who denied any offending behaviour and perceived themselves as *"not like the other men"* (Q24), distancing

themselves from any sense of sexual risk *"It's mainly the staff, maybe it's one or two people who had said stuff, [like] 'I'm [the participant] not a rapist', 'there's no way I'm a rapist' that sort of thing"* (Q25).

Whilst the group did create a shared identity and recognition of similarities between self and others, this did not always extend to perceptions of offending behaviours. Differences were often emphasised between the men's own behaviours and other's offences. For example, in the below quote, one member illustrates his perception of his non-contact (online) offence in comparison to members who had committed contact offences:

*Q26: "Often somebody else saw them [other group members] doing it, but it was like (inaudible) sexual, sexualised [acts] with other people ... so I just thought [why] on earth [do I need to] come to the men's group ... if no one who got hurt by it".*

Throughout the narratives, cognitive distortions were prominent in maintaining an identity which minimises or does not acknowledge sexual risk. This was particularly evident in statements relating to the victim, typically in terms of it being 'their fault' e.g. Q26: *"I've not done a sexual offence on anybody, ... she was taking drugs, sometime in the day, she was different"* and, Q27: *"I was saying she probably wouldn't understand because of, she was, the person what I did it [the victim] wasn't English"*.

The consequences for the men were also important, particularly whether they considered them to be justified or unnecessary in relation to their 'risk'. Any impact on their family relationships or loss of employment, imprisonment or sectioning under the Mental Health Act (1983), etc., influenced whether they believed themselves the victim rather than a threat to others, or treated unfairly as opposed to being punished for their crimes:

*Q28: "I've been in hospital for over fourteen years, actually I should have only done six years and I done fourteen. They should have let me out by now".*

Group facilitators were important in the men's experiences of the group, not only in terms of providing support and guidance *at* the group but group 'membership' was also seen as providing an additional route to staff and support. For example, men in the community and secure services asserted with confidence that they could contact staff, outside of their

designated therapy sessions and express that they were experiencing 'risky thoughts' or 'needed to talk' and the staff would respond/provide support.

*Q29: "I just think I am doing so well and if [there's] anything to be concerned of, I know she's [facilitator] at the end of the telephone"*

*Q30: "it's not like no one cares and no one worries about you, you know, the door is open"*

In this sense, the group is not seen a method of lessening support from services but is viewed as something that enables the men to be visible and get the help they need.

Opposing experiences of group facilitators were reported when they were seen as 'hindering progress' - "... the ones who [are] meant to help me to move on ... they didn't listen to anyone" (Q31) - or were unavailable e.g. not being able to work with the facilitator of their choice.

All men indicated a lack of choice in the decision to undergo treatment for sexual offending behaviours.

*Q32: Interviewer: "And do you have to go [to the group], are you told to go?"*

*Interviewee: "No no, if we don't go, it will hinder us moving on"*

*Interviewer: "Is that what some told you?"*

*Interviewee: "No, that's what I know"*

In addition to feeling little choice over attending the group, the men typically recounted long histories of involvement with services, many having been in institutional care from a young age and undergoing multiple transitions. These accounts frequently depicted a life (and identity) lacking autonomy or control, with choice of care pathway being determined by finance and the judgements of others regarding risk, health, mental state and wellbeing.

*Q33: "[I moved here] because my funding was costing them too much money, to fund me ... So they want[ed] to try and find somewhere, what [cost] less"*

*Q34: "[you] try not to break any of their laws or try and keep rightness and [do] ... what the doctors want".*

How the men approached the group was influenced by how they believed it was going to help them, if at all. For example, those who saw it as a forum for personal development or change, perhaps related to 'keeping safe' or staying out of trouble (risk), indicated an openness to, and potential for internalisation of, therapy i.e. acknowledging the potential need for behaving differently. For others, the practice of attending the group and use of external management strategies (e.g. staffing levels) were understood as a method of 'keeping safe' (reducing risk) with little reference or insight to the need for self-directed behaviour and motivation.

Attending a group was commonly seen as a way of remaining in, or returning to society e.g. being diverted from prison to a facility offering a treatment group or agreeing to treatment as part of licence conditions:

*Q35: "Learnt my lesson, don't want to get sectioned again. It took nearly nine years for me to get back into society".*

Perceptions of the group and therapy were influenced by the men's beliefs about why *they* were required to undergo treatment and attitudes towards their offending behaviour, including whether they acknowledged it or not. Narratives which included the aforementioned views of the group being a forum for change or method of keeping safe tended to admit that an incident or behaviour had indeed preceded the group. This was regardless of whether they felt they *needed* therapy or not. Whereas those who denied their offence, or any risk, often stated they couldn't remember, or didn't know why they were asked to go to the group, that it was "*probably just the newest thing they [psychology] started*".

#### **6.4.15 Discussion**

This study aimed to explore the experiences of men with ASD who have completed an adapted CBT sex offender treatment programme and to ascertain their views about whether treatment was helpful in reducing risk of re-offending.

Positive experiences from the group related to social benefits, professional support and the prospect of increasing social inclusion. These benefits were emphasised by many of the

men and frequently portrayed as the 'treatment objectives' or primary goals of the group, more so than reductions in sexual risk or offending behaviours.

Despite an initial lack of choice in attending the group, for some it became a forum for empowerment and self-development, providing the opportunity for pro-social roles and skills to be integrated into their identity. For other men, particularly those who denied any offending behaviours, the group was a negative experience and seen as another occurrence in which they suffered a lack of choice, control or autonomy, doing little to change their circumstances, sense of self, or identity.

The social goods identified by the men in constructing their identities are universally recognised, appearing across genders, ages, ethnicities, in those with and without intellectual and developmental disabilities, and those with and without convictions. They included: loving relationships, employment, a social life, meaningful activities, belonging and acceptance, choice, independence, self-esteem/sense of worth and control. These provide support for the use of strength-based models (e.g. the Good Lives Model) and attainment goals (e.g. Ward & Maruna, 2007) in treating offenders with ASD.

The indicated immature levels of moral reasoning amongst the men interviewed are consistent with research exploring offenders with intellectual and developmental disabilities and moral development (e.g. Langdon et al., 2011; Langdon et al., 2013), and suggests the use of avoidance goals may also be of utility in treatment, particularly in considering the subtheme 'fear of the consequences'. The men alluded to the 'punishment' quality of 'losses' for themselves as a consequence of breaking the law, more so than internal feelings of guilt or shame about harming another. Therefore, treatment focusing on social rules and risks to the offender's quality of life associated with violating such rules may be a stronger motivator than impact on the victim or deviance of the offending behaviour.

The findings from this study regarding the group nature of treatment are inconsistent with some literature on men with ASD who sexually offend where offenders with ASD have been removed or considered potentially unsuitable group treatment (e.g. Higgs & Cater, 2015; Murphy, D., 2010b). Not all participants in this study had participated in both group and individual therapy, however, of those who had, only one preferred individual therapy, while

two preferred or enjoyed the group more and the remainder claimed no preference or that they enjoyed both.

Other, non-offending group therapies have illustrated benefits for individuals with ASD (Reaven et al., 2011; Sofronoff, Attwood & Hinton, 2005). A meta-analysis of CBT for people with ASD (including group treatment) by Weston et al. (2016) found small to moderate effect sizes depending on the type of outcome measures used e.g. self-report, carer/parent or clinician, suggesting that a diagnosis of ASD should not automatically mean group-based approaches are contraindicated. As highlighted, for many men in this study the other group members were key in their positive experiences and provided the opportunity to develop pro-social roles and relationships as well as offering support, encouragement, acceptance and belonging, and different viewpoints/opinions.

The degree to which these positive experiences increased social opportunities and improvements in wellbeing and thus reduced risk, was unclear. As illustrated in Table 13 nine of the thirteen men did not re-offend however four did. Of the nine that did not re-offend six continued to display risky behaviours post-treatment e.g. inappropriate sexual behaviour whilst using the telephone. The behaviours are similar to those displayed pre-treatment, however, it is unknown whether these would occur at a higher frequency or have elevated in severity without the attending the treatment group.

Protection of others was not a dominant feature in the men's narratives nor did it appear prominent in their perceptions of risk or treatment objectives. The notion of themselves as a threat to others was not constructed as part of their identities, concern for victims or potential future victims was strikingly absent from their accounts. This was perhaps to be expected as a lack of victim empathy, or perspective-taking is frequently referred to in offenders with ASD (Griffin-Shelley, 2010; Murphy, 2010a); however it is difficult to know if this may be the result of difficulties in emotion recognition or alexithymia, or egocentricity, each of which can be seen on the autistic spectrum.

It is unclear from this study, and other research, whether an absence of regard for the victim is due to problems with understanding other's emotional states and theory of mind or, understanding but disregarding the feelings of others (Jones, Happe, Gilbert, Burnett &



Viding, 2010). Furthermore, it remains to be seen if this absence of regard holds any function in neutralising shame and/or psychological distress caused by offending behaviours (Bumby, 2000), and what, if any, potential impact this may have on risk of re-offending (Mann & Barnett, 2012).

Reductions of risk were primarily conveyed through notions of change and difference and were implied treatment outcomes. These assertions of change and subsequent reductions in risk were frequently justified by references to differences in circumstances and external controls e.g. access to staff or being married, rather than indications of internal change or shift in attitudes. Many of the men's 'post-group' identities still displayed cognitive distortions consistent with their 'pre-group' identities. These included a sense of grievance or entitlement, self as victim, super-optimism and victim blaming which are commonly reported in the sexual offending literature (Mann & Beech, 2003; Mann and Hollin, 2001; Ward, Keoen & Gannon, 2007). The persistence of these thought patterns could be indicative of the cognitive inflexibility or rigidity, characteristic of ASD, but it is not possible from the current data set to identify if this rigidity is any different to that displayed in persistent offenders without ASD. Research has highlighted the difficulty of ascertaining if pro-criminal beliefs and attitudes are causative of offending behaviours or a method of defence, shielding against subsequent feelings of shame from acknowledging actions which are ego dystonic (Ward, Keown & Gannon, 2007; Lindsay et al., 2010). This challenge is present in non- intellectual and developmental disabilities populations and further complications are likely to arise with additional cognitive complexities such as those associated with ASD.

#### **6.4.16 Strengths and Limitations**

Whilst it was emphasised that all data from the study would be kept confidential and anonymous, additional findings replicated wider research interviewing vulnerable populations e.g. non-offending intellectual and developmental disabilities populations and mental health service users, in that the men were reluctant to criticise their service or suggest improvements to the group (Hare, 2004; Goodley, 2000). Despite highlighting the independence of the study from service providers, it is possible that fear of reprisal or withdrawal of service remained a concern. Furthermore, the men may have been reticent

to suggest improvements as it could imply that the therapy was unsuccessful and subsequently hinder their progress, and reassurances regarding confidentiality may not have been sufficient to allay the participants' anxieties. As such, suggestions for improvements or further adaptations to treatment for sexual offenders with ASD were missing from this service user dataset. Further strengths and limitations in relation to the entire study (service user and clinician interviews) are discussed in the final section of this chapter (page 218).

## **6.5 INTERVIEW STUDY: CLINICIAN DATSET<sup>40</sup>**

### **6.5.1 Participants**

Following the recruitment of fifteen service users, fifteen accompanying clinician interviews were required. This number dropped to fourteen following the withdrawal of one service user prior to data collection. Ten group facilitators were recruited for the fourteen clinician interviews which were conducted by the author. The facilitators had worked with more than one service user participating in the study and was therefore able to complete multiple interviews where other facilitators were unavailable. Staff participants One and Eight completed two interviews each. Group facilitators were approached for participation to ensure the individual possessed an understanding of the treatment aims and objectives and thus was able to comment how well these have been achieved for each participant rather than provide an overarching/general description of the individual's behaviour.

### **6.5.2 Measures**

### **6.5.3 Demographic information**

The gender and profession of the staff member were recorded along with the length of time the staff member had worked with the participant (service user) with ASD (Table 15). The duration of time the staff member had worked with or been involved in the service user's care was not necessarily in relation to their sexual offending behaviour. The reported length of time the staff participant had worked with the service user is not a measurement of treatment resistance or responsivity but to give an indication of the staff member's knowledge of the service user, their offence history and ability to comment on their presentation pre- and post-treatment.

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<sup>40</sup> A version of this chapter has been submitted for peer review under the title "*They're the hardest group to treat that changes the least*". Adapted sex offender treatment programmes for individuals with Autism Spectrum Disorders: Clinician Views and Experiences." (Melvin et al., 2019b). This chapter contains minor alterations to wording in order to fit it into the PhD.

#### **6.5.4 Social Communication Questionnaire (SCQ) (Rutter et al., 2003)**

In addition to the personal information sheet, the clinicians completed the Social and Communication Questionnaire (SCQ) (Rutter et al., 2003) for each man who participated in the first part of the study.

The SCQ is a forty-item screening questionnaire that is completed by parents or caregivers, designed to assess/identify qualitative abnormalities in the domains of social interaction, communication and restrictive, repetitive and stereotyped patterns of behaviour. The measure is used clinically to screen for ASD (however is not suitable for individual diagnosis) and can also be used for research purposes.

The SCQ is validated for children and adults (Berument et al., 1999) and consists of two versions. The Current version assesses behaviour occurring over the last three months, whereas the Lifetime version focuses on behaviour occurring at any point over the lifespan with a proportion of the items pertaining specifically to the time between the individual's fourth and fifth birthday.

A cutoff score of 15 is considered optimal for differentiating between individuals with an ASD diagnosis and those without (sensitivity = .85; specificity = .75). The measure has significant correlation with the ADI-R for both the total score ( $r = .71, p < .0005$ ) and the ASD domains: Reciprocal Social Interaction ( $r = .57, p < .0005$ ), Communication ( $r = .61, p < .0005$ ) and Repetition/Stereotyped behaviours ( $r = .63, p < .0005$ ) (Berument et al., 1999), which has been replicated across other studies (e.g. Bishop & Norbury, 2002)

The majority of research has focused on the use of the SCQ in youth populations (e.g. Bishop & Norbury, 2002; Gonzalez, 2008), including those with intellectual disabilities (Witwer & LeCavalier, 2007). There is a dearth of literature on use of the SCQ in adult populations however a recent body of work has focused on using the measure with adults with intellectual and developmental disabilities, suggesting different cut-off thresholds with varying levels of sensitivity and specificity (see Table 16).

**Table 15: Clinician Information**

Participant	Position	Gender	Partnered Service User Participant	Length of time worked with participant	Group Facilitator (Y/N)	Facilitated original treatment group or maintenance/ follow up work?
St1	Challenging Behaviour Specialist, (Psychology Team)	Female	P1	10+ years	Y	Both
St1 <sup>41</sup>	Challenging Behaviour Specialist, Psychology Team)	Female	P4	10+ years	Y	Both
St2	Specialist Practitioner in ID	Male	P2	Missing	Y	Both
St3	Consultant Clinical Psychologist	Male	P3	10+ years	Y	Both
St5	Trainee Forensic Psychologist	Female	P5	2+ years	Y	Maintenance Group
St7	Clinical Psychologist	Female	P7	1.5 years	Y	Treatment Group
St8	Trainee Forensic Psychologist	Female	P8	2+ years	Y	Maintenance Group
St8 <sup>42</sup>	Trainee Forensic Psychologist	Female	P14	2+ years	Y	Maintenance Group and 1:1 sessions
St10	Clinical Psychologist	Female	P10	1.5 years	Y	Both
St11	Intellectual disability Nurse	Male	P11	2.5 years	Y	Both
St12	Psychiatrist	Male	P12	3-4 years	Y	Treatment Group
St13	Forensic Psychologist	Male	P13	10+ years	Y	Treatment Group

<sup>41</sup>Participant completed interviews for service user Participants 1 and 4.

<sup>42</sup> Participant completed interviews for service user Participants 8 and 14.

**Table 16: SCQ in adult intellectual disabilities (ID) population studies**

Study	Sample	Version of SCQ	Cut off	Sensitivity	Specificity	Comments
Berument et al. (1999)	Individuals with and without pervasive developmental disorder diagnoses	Current and Lifetime	15	.85	.75	A higher threshold of 22 was required to separate autism from other pervasive developmental disorders (sensitivity: 0.75; specificity: 0.60)
		Autism with No ID		.96	.80	
	n=200 (160 with PDD & 40 no PDD)	Autism & ID		.96	.67	
Brook & Benson (2014)	Adults with ID and ASD (range:18-40yrs)  n=69 (21 ASD & ID; 40 ID only)	Current	12 (15)	.86 (.71)	.60 (.77)	Good internal consistency of total scale ( $\alpha=.87$ ) and social interaction and restrictive, repetitive behaviour subscales ( $\alpha=.83$ and $\alpha=.81$ ). Poor performance of communication subscale ( $\alpha=.48$ )
Sappok et al. (2015)	Adults with ID from Germany (range: 15-76yrs, SD: 12.8)	Current (German version) n=151	18 (15)	89.2% (96.7%)	66.2% (47.1%)	Advise caution in using Lifetime version with ID adult populations
	n=151 (83 ASD & 68 ID only)	Lifetime (German version) n=75	20 (15)	78.7% (92.3%)	47.8% (21.7%)	
Sappok et al. (2017)	Adults with ID from the UK, Germany and US in receipt of mental health services  n=451 (220 ASD & 231 ID only)	Current (English and German versions)	13	0.87	0.58	ROC analysis of matched sample (n=164, AUC: 0.803) used to determine optimal cut-off threshold  Suggest potential need for further adjustments dependent on level of ID and gender

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Derks et al. (2017)	Adults with ID from the UK, Germany and US in receipt of mental health services  n=226 (test sample) n=225 (cross-validation sample for reduced item scale)	Current (English and German versions)	9 (15)	.81-.89 (.84-.86)	.62-.72 (.62-.66)	24 item SCQ for adults with ID (SCQ-AID), with a cut-off threshold of 9 reflected similar diagnostic validity to original 40 item algorithm with a threshold of 15
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In addition to screening purposes, the SCQ can be used as an indication of the approximate level of severity of ASD symptomatology. This can be done to explore potential differences across groups or look at changes across time, for example following an intervention (Rutter et al., 2003).

It was for this reason that the current study utilised the SCQ to assess social interaction and communication deficits, and identify repetitive, restrictive or stereotyped behaviours to explore any potential trends in ASD symptoms severity and perceptions of treatment effectiveness.

Alternative screening measures including the Autism Quotient (AQ) (Baron-Cohen et al., 2001) and the Autism Behaviour Checklist (ABC) (Krug et al., 1978) were considered, however the AQ is not recommend for use with those with an IQ below 70 (it is acknowledged that the scores might be increased due to the communication/conversational element on the measure) and the ABC norms have not been validated for adults.

The new standardised algorithms of the ADOS-2 (Lord et al., 2012) can now provide a continuous measure of overall ASD symptom severity, however the length of time required to complete and score the ADOS was not deemed feasible for all participants as part of the study. Furthermore, some of the participants may have completed the ADOS previously and as such the outcomes may be subject to practice effects.

The SCQ was therefore selected as a measure that could be completed without placing onerous time demands on the participant with ASD or clinician and was able to provide

details on ASD symptomatology across the domains of social interaction, communication and repetitive or restrictive behaviours. The Current version of the SCQ was used in the study as the measure was to be completed by the staff participants for the Men with ASD. As such, the potential for details regarding the men's childhood were likely to be limited however, it was anticipated that the clinicians would have worked and interacted with the men within the previous three months, which is the timeframe assessed in the Current version of the SCQ.

Despite being validated on adults and children (Berument et al., 1999) a minority of the items on the SCQ refer to children or situations that are not necessarily relevant to adults. The staff participant therefore received the instructions below when completing the SCQ:

*“Some of the questions refer to engaging with children however please think about your answer in relation to the individual's current age and their interactions with other adults rather than children.”*

#### **6.5.5 Clinician interviews**

There were two aspects to the clinician interviews. Initially, the questions focused upon the specific participant with ASD, for example their engagement in the treatment and any perceived challenges or benefits of the group. In the later part of the interview the questions explored the clinician's experience in general of men with ASD in adapted sex offender treatment programmes, focusing on their opinions of the effectiveness and appropriateness of the groups for men with ASD who display harmful sexual behaviours (full interview schedule in Appendix 4). Themes covered in the clinician semi-structured interview included: *How the individual engaged with the treatment programme i.e. any areas they found difficult or challenging e.g. victim empathy, or any topics they found particularly helpful?; How the individual found taking part in a group i.e. working with other men, how they found discussing the topics in the group, how they engaged compared to other treatment programmes and interventions?; Whether they think the treatment has helped to reduce the risk of the individual displaying further sexually abusive behaviours? i.e. any shift in cognitive distortions or attitudes consistent with offending? strategies for risk and management of behaviours? internalisation of therapy?; Their experience of men working with men with ASD who display harmful sexual behaviours and views regarding*



*treatment e.g. if they feel the groups are appropriate, effective? How the men with ASD compare to men with intellectual disabilities alone?*

Clinician interviews were longer than service user interviews at approximately fifty minutes (M=52:16, SD=23:47), and took place in similar settings to the service user interviews e.g. Community Learning (Intellectual) Disability Team offices, residential home staff rooms and offices within secure services.

#### **6.5.6 Procedure**

#### **6.5.7 Ethics**

The clinician interviews were subject to the same ethical approval as the service user interviews. Staff were made aware that participation was voluntary and the study was being carried out independently of their employer.

#### **6.5.8 Recruitment**

Once a potential service user was identified the local care team also approached a suitable staff member for interview and provided them with participant information sheets and consent form (Appendix 4). Following return of the service user and staff consent forms, interviews were arranged and the SCQ and demographic information sheets provided to the staff participant.

#### **6.5.9 Analysis**

#### **6.5.10 SCQ Data**

The SCQ data was scored in lined with the manual guidance and cutoff thresholds applied (Tables 17 and 18).

#### **6.5.11 Interview Data**

The same analytical method of grounded theory was applied to the clinician data as was used for the men's data. Line-by-line coding, followed by focused and theoretical coding was used to develop a model of how clinicians frame and assess the effectiveness of

adapted sex offender treatment programmes for individuals with ASD .Four hundred and seventy seven codes were identified in the data refined into the Risk Formulation model displayed in Figures 22 and 23.

### **6.5.12 Results**

#### **6.5.13 SCQ Data**

For the fourteen men recruited, thirteen completed SCQs were returned (Figure 19, page 162). One (P9) was excluded as the participant failed to attend the interview and declined for re-arrangement. This was taken as withdrawal of consent to participate and all information gathered until this point was deleted from the study. One clinician was unable to attend or complete the SCQ. This left twelve sets of data for analysis (shown in Tables 17 and 18, and Figures 22 and 23).

As is shown in Table 18, the mean SCQ Total score for the study sample is 12.33, with a standard deviation of 6.30 and a range of 22 (2-24). Only three service users reached the cut-off threshold for the SCQ using Berument et al.'s (1999) score of fifteen (P5, P7 & P12), with one approaching this at fourteen (P11). Using the lower thresholds of thirteen and twelve suggested by Sappok et al. (2017) and Brook and Benson (2014) increased the number of participants to four (P5, P7 P12 & P11) and six (P5, P7, P12, P11, P8 & P14) respectively. A further four participants (P1, P3, P4 & P10) were approaching the threshold with scores of ten and eleven.

Applying Derks et al.'s (2017) reduce-item SCQ-AID to the data, did not greatly alter the number of men reaching the threshold. Only three participants scored positive on the 24-item screening measure (P5, P7 &P12), with an additional man approaching the cut-off with a score of 8 (P11).

As can be seen in Tables 17 and 18, the men scored very low on the domain of restrictive and repetitive behaviours (Mean= 1.33; SD=.95; range= 0-3) and seven men scored less than half of the items on the social interaction and communication domains, with an overall mean score of 5.17 (SD=3.43) and 5.50 (SD=2.68) respectively for the two domains. One participant (P10) had a third of items missing from completion of the questionnaire,

however excluding this participant from the results made only a minor difference to the outcomes (as shown in Table 18), and excluding those with an SCQ score of less than 5 increased the mean SCQ total to 14.20 (SD=5.01) from 12.33 (SD=6.30). These exclusions still do not put the mean within the Berument threshold of 15 but would fall within the lower thresholds set by Brook and Benson's (2014) and Sappok et al. (2017).

Table 17: SCQ (Rutter et al., 2003) Scores

Participant	Total SCQ Score (cutoff $\geq 15$ ; 40 items)	Social Interaction Domain (items 15)	Communication Domain (13 items)	Repetitive Restrictive Behaviour Domain (8 items)	Brook & Benson (2014) Total SCQ Score (cutoff $>12$ ; 40 items)	Sappok et al (2015) Total SCQ Score (cutoff $>18$ ; 40 items)	Sappok et al (2017) Total SCQ Score (cutoff $>13$ ; 40 items)	Derks et al (2017) SCQ-A ID Score (cutoff $>9$ ; 24 items)	Missing answers
P1	11	3	5	2	11	11	11	4	0
P2	2	1	1	0	2	2	2	1	0
P3	10	4	5	1	10	10	10	3	1
P4	11	4	4	1	11	11	11	6	0
P5	<b><u>16</u></b>	7	7	2	<b><u>16</u></b>	16	<b><u>16</u></b>	<b><u>10</u></b>	0
P6	Missing <sup>43</sup>	Missing	Missing	Missing	Missing	Missing	Missing	Missing	Missing
P7	<b><u>22</u></b>	10	9	2	<b><u>22</u></b>	<b><u>22</u></b>	<b><u>22</u></b>	<b><u>13</u></b>	0
P8	12	7	4	1	<b><u>12</u></b>	12	12	7	0
P9	Excluded <sup>44</sup>	Excluded	Excluded	Excluded	Excluded	Excluded	Excluded	Excluded	Excluded
P10	10	4	4	2	10	10	10	6	13
P11	14	5	9	0	<b><u>14</u></b>	14	<b><u>14</u></b>	8	5
P12	<b><u>24</u></b>	12	10	2	<b><u>24</u></b>	<b><u>24</u></b>	<b><u>24</u></b>	<b><u>10</u></b>	0
P13	4	0	4	0	4	4	4	0	3
P14	12	5	4	3	<b><u>12</u></b>	12	12	5	1

<sup>43</sup> Clinician unable to attend interview or complete SCQ

<sup>44</sup> Participant withdrew consent to participate

**Table 18: SCQ (Rutter et al., 2003) Data Descriptive Statistics**

SCQ Cutoff Threshold	All Participants			Excluded Ppt10 (missing data)			Excluded Ppt2 and Ppt13 (Total SCQ score <5)		
	N	Mean (SD)	Range	N	Mean (SD)	Range	N	Mean (SD)	Range
Berument et al. (1999) Total SCQ Score (cutoff $\geq 15$ )	12	12.33 (6.30)	2-24	11	12.55 (6.56)	2-24	10	14.20 (5.01)	10-24
<i>Social Interaction Subscale (15 items)</i>	12	5.17 (3.43)	0-12	11	5.27 (3.58)	0-12	10	6.10 (2.92)	3-12
<i>Communication Subscale (13 items)</i>	12	5.50 (2.68)	1-10	11	5.64 (2.76)	1-10	10	6.10 (2.42)	4-10
<i>Repetitive Restrictive Behaviour Subscale (8 items)</i>	12	1.33 (.95)	0-3	11	1.27 (1.01)	0-3	10	1.60 (.84)	0-3
Brook & Benson (2014) Total SCQ Score (cutoff $\geq 12$ )	12	12.33 (6.30)	2-24	11	12.55 (6.56)	2-24	10	14.20 (5.01)	10-24
Sappok et al (2015) Total SCQ Score (cutoff $\geq 18$ )	12	12.33 (6.30)	2-24	11	12.55 (6.56)	2-24	10	14.20 (5.01)	10-24
Sappok et al (2017) Total SCQ Score (cutoff $\geq 13$ )	12	12.33 (6.30)	2-24	11	12.55 (6.56)	2-24	10	14.20 (5.01)	10-24
Derks et al (2017) SCQ-ID Score (cutoff $\geq 9$ ; 24 items)	12	6.08 (3.83)	0-13	11	6.09 (4.01)	0-13	10	7.20 (3.08)	0-13
Missing Answers	12	1.92 (3.83)	0-13	11	.91 (1.64)	0-5	10	2.00 (4.16)	0-13

Chi-square analyses did not show any trends in relation to ASD symptomatology and responsiveness to treatment ( $\chi^2(1)=.148, p>0.5^{45}$ ) for the Berument et al. (1999) scoring paradigm (cutoff  $\geq 15$ ), nor for the lower score of the SCQ-ID  $>9$  cutoff (Derks et al., 2017)  $\chi^2(1)=.8, p>0.5^{46}$ .

There are several potential reasons as to the low scores found in the sample identified in this study, including ASD symptomatology across the lifespan and accuracy of use of the SCQ in adults with intellectual disabilities. For example the SCQ has shown lower specificity in those with intellectual disabilities potentially due to overlap between ASD and intellectual disabilities symptomatology (Matson et al., 1996; Wilkins & Matson, 2009). Additionally,

<sup>45</sup> Fisher's exact test reported due to 3 cells with a count of less than 5.

<sup>46</sup> Fisher's exact test reported due to 3 cells with a count of less than 5.

many of the men in this study had co-morbid mental health diagnoses which can complicate presentation further and reduce accuracy of the measure (Underwood et al., 2015). The older age of some of the participants within this sample may also have affected the outcomes as research has suggested lower specificity of the SCQ in older participants (Brooks & Benson, 2013; Cosello et al., 2007).

In addition to the complexities of presentation and concomitant behaviours, for those in the community, group facilitators may not be present at times when certain behaviours, rituals or special interests are most prominent. Furthermore, a number of the men had received considerable therapeutic input (e.g. from psychology and occupational therapy), which may have reduced previous anxiety levels or other mental illnesses and incidentally affected the presentation of autistic symptoms. Alternatively, some of the men may have undertaken social skills training potentially impacting their communication style, as measured by the Current version of the SCQ.

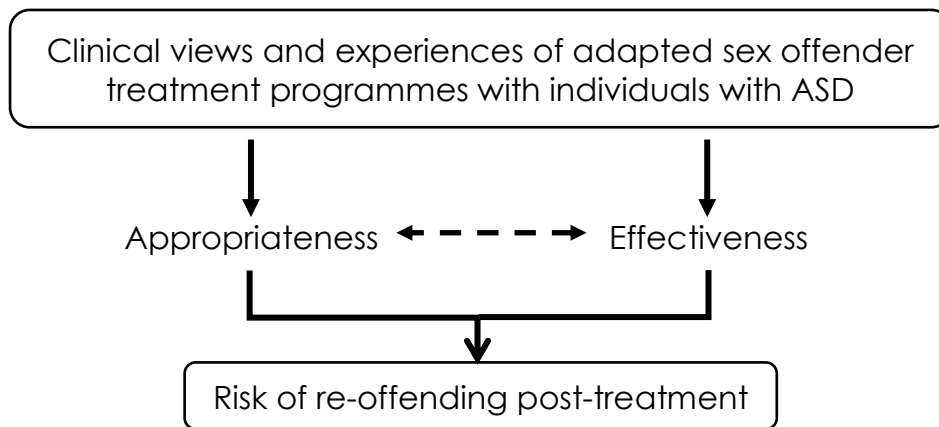
#### **6.5.14 Interview Data**

The analysis resulted in 477 identified codes which were refined into the Diagram (Figure 22: Clinician views and experiences of adapted sex offender treatment programmes with individuals with ASD) and Risk Formulation model displayed in Figure 23 (Clinician's Formulation of Sexual Risk Following Treatment).

Clinician views and experiences regarding the use of adapted sex offender treatment programmes for individuals with ASD were characterised by opinions on appropriateness and perceptions of effectiveness. These two aspects were interlinked, with appropriateness (relevance, accessibility, etc.) of the treatment content and processes being associated with perceptions of successful facilitation of the group and subsequent 'effect' or positive outcomes.

Effectiveness was primarily conveyed by the clinicians in relation to judgements regarding an individual's risk of re-offending following treatment (Figure 23).

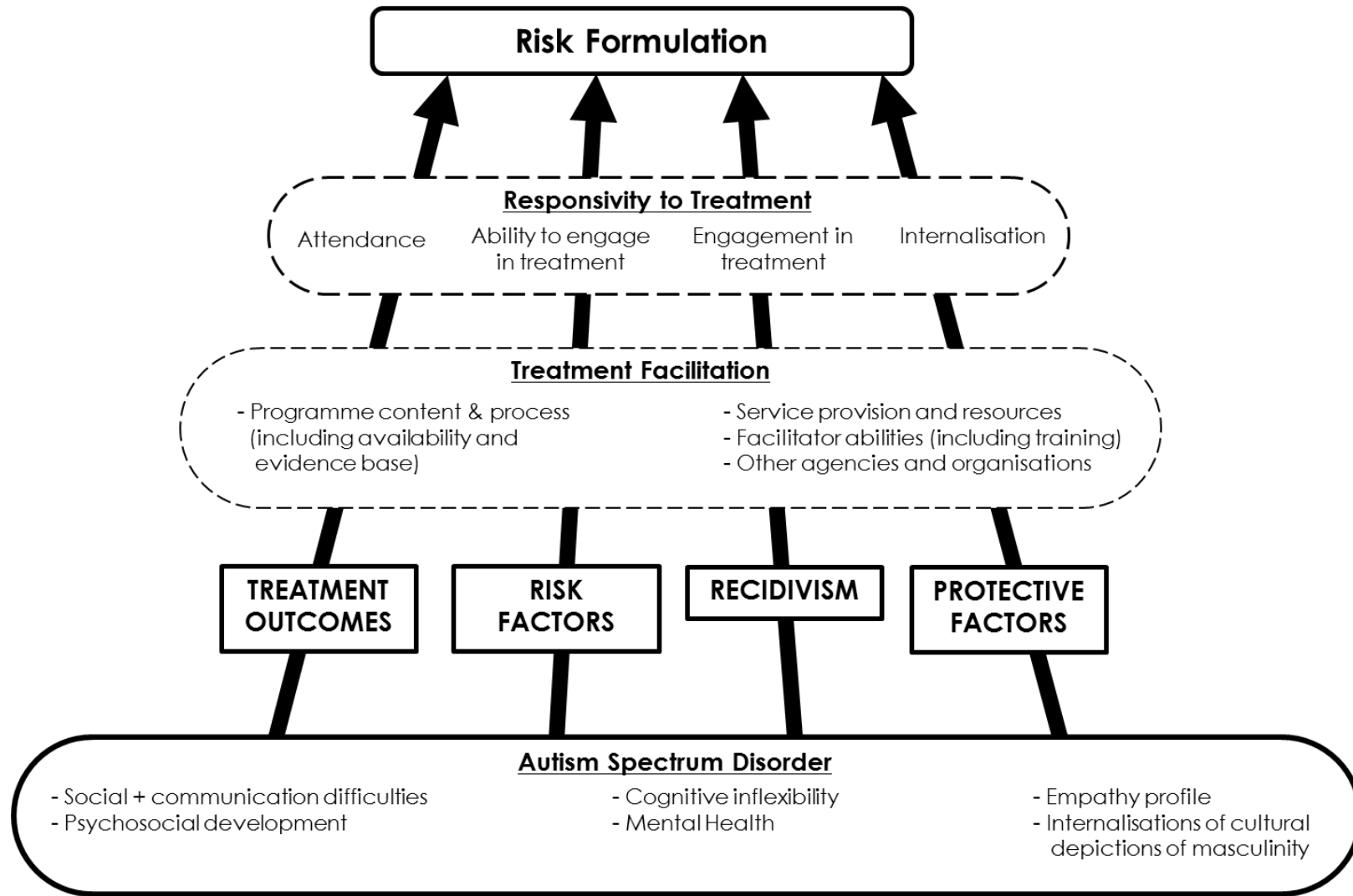
**Figure 22: Clinician views and experiences of adapted sex offender treatment programmes with individuals with ASD**



#### 6.5.15 Overview of Risk Formulation Model

From the questions asked to the clinicians regarding their experiences of facilitating adapted sex offender treatment programmes for autistic offenders **formulation of risk** (of re-offending) emerged as an overarching theme (Figure 23) that was grounded in four factors or subthemes regarding client presentation following sexual offending treatment. The subthemes were: (i) **treatment outcomes** (outcomes other than recidivism e.g. changes in empathy, sexual knowledge, cognitive distortions etc.), (ii) **risk factors** e.g. anti-social attitudes and/or other criminogenic behaviours, poor mental health, limited support/social networks, etc. (iii) incidents of **recidivism**, and (iv) **protective factors** (such as employment, family and staff support, romantic or sexual relationships, and 'keeping safe' tools and management strategies, etc.). Although separate within the model, the treatment outcomes and risk factor subthemes were closely aligned.

Figure 23: Clinician’s Formulation of Sexual Risk Following Treatment





Assessment of these themes was shaped by a diagnosis of an **autism spectrum disorder** (in relation to the individual, their offending and the treatment) as well as wider, systemic issues regarding **treatment facilitation** (such as evidence-base, facilitator abilities and service provision). These informed clinical judgements regarding **responsivity to treatment** and subsequent risk formulation of re-offending.

**Responsivity to treatment** was constructed from views of the individual's *attendance*, their *ability* to engage with the treatment, their level of *engagement* and any *internalisation* of therapy, as presented across the four subthemes.

#### **6.5.16 Autism Spectrum Disorders**

Throughout the interviews, the clinical features of ASD (e.g. social and communication difficulties, cognitive inflexibility and a deficient empathy profile) were referred to directly in the context of the treatment group. The possible impact of ASD symptomatology on psychosocial development, mental health and perception/assimilation of wider social influences was also discussed in relation to the development and maintenance of sexual offending behaviours.

The data contained numerous examples of the potential impact of ASD on **treatment outcomes, risk factors** and **recidivism** and how these shaped clinicians' formulation of risk following treatment. These were expressed for the specific service user under discussion, and for those clinicians with more experience with reference to individuals with ASD in treatment groups in general. Whilst some observations were made concerning rule adherence tendencies in ASD, there were few references to any **protective factors** associated with a diagnosis of ASD throughout the interviews.

The *Social and communication difficulties* associated with ASD impacting on **treatment outcomes** were reported in accounts of group members who were unable to engage appropriately or integrate into the group, as well as in their difficulties interpreting social contexts and adhering to conventions:

*Q1: "Well he just says sort of totally random things ... he'll go off on tangents and not really pick up what's happening, the mood of the room"*

The misinterpretation of social contexts or violation of convention included an atypical motivation to attend the group and/or failure to recognise its purpose and acknowledge personal **risk factors** in some men. For example, two service users were identified as using the group to enlarge their social network, whilst another saw meetings as time with friends and not undergoing treatment with the specific objective to reduce risk of offending:

*Q2: "one of his goals that was set very early on in the early stages was to meet new people and make friends, so I think he saw a goal from this group was to enlarge his social networking rather than it be solving an issue around his inappropriate sexualised behaviour"*

Additionally, the increased social engagement as a consequence of offending (through attendance at a treatment group or interaction with other agencies such as Probation services) was also noted as a possible form of positive reinforcement for one service user rather than a factor reducing risk of **recidivism**:

*Q3: "... he likes going to probation because it's a 1:1 chat, ... a weekly meeting with probation, he enjoys that, it's not deterrent at all."*

Wider social and cultural influences, including *internalisations of cultural depictions of masculinity*, were associated with social interaction difficulties which could impact **treatment outcomes**, possibly resulting in the persistence of some **risk factors**. Interaction difficulties identified in offenders with ASD included poor interpretation and negotiation of social and sexual scripts. For example, clinicians reported that service users made reference to their behaviours in the context of popular cultural figures such as James Bond and TV programmes illustrating promiscuous or debauched lifestyles. These fictitious or 'staged' depictions of relationships were interpreted, by some with ASD, as illustrative of 'real life', thus setting expectations for social encounters which then did not meet expectations:

*Q4: "Those types of [TV shows] where it's all quite sexual and you don't see people asking for consent, you see people drunk and having fun so he attributes that to that's real life and he'll ask staff and assume that staff will go out and drink and have sex at the weekend ... he talks a lot about what sound like indecent assaults [he's committed prior to his index offence] so groping girls in clubs and he'd say, sometimes it works"*

*sometimes he got a kiss, sometimes he got a slap, but he's kind of saying, you know, 'it's worth it'."*

As illustrated in the extract above, the service users also reflected certain social values, such as misogynistic or persecutory attitudes towards women, including a sense of entitlement to sexual gratification, which fell within the **risk factor** subtheme in clinicians' judgements of re-offending risk. Whilst these attitudes or assumptions are not specific to autistic sexual offenders, social naivety, information processing abilities, poor emotional regulation and communication difficulties may limit flexibility and assimilation of new information into a behavioural response when a social script deviates from expectation and increase risk of **recidivism**.

Difficulties with social interaction were frequently framed in relation to other aspects of ASD such as heightened ego-centricity, lack of victim empathy and cognitive distortions in conjunction with anti-social behaviours and/or satisfying criminogenic needs.

*Cognitive inflexibility* was illustrated in distorted thinking styles and perseverance around denial or blame, deviant fantasies, and in relation to issues of de-centralisation and theory of mind. Rigidity was described across multiple interviews in the context of persistently reaching the same point in therapy, indicating limited **treatment outcomes** and minimal reduction in **risk factors**:

*Q5: "... everyone's I think gone through the same cycle of 'no I really think I can help him' and then, 'okay no, may not'"*

*Q6: "I don't feel that we are in a different place to what he was pre-the group, erm or indeed, pre-individual work, he did build on some of the [work] ... but we're not in a different place"*

An extreme example is given in the extract below, which refers to a service user who committed a sexual murder and illustrates the complex combination of ASD features, including rigidity in cognitive distortions, poor victim empathy, concrete thinking styles and low motivation to address deviant fantasies and how these interplay in the individual's risk and response to treatment:

Q7: "We have consistently come to the same point where Henry (not his real name) will say, 'but I like these thoughts, I like these fantasies' and for him often his fantasy world is much more appealing his current situation, and so he actually doesn't want to change them ...we tried to a lot of work with the Good Lives and we were getting positive things to do in the community, but nothing seems to equate with the good feelings that these fantasies provide for him ... [The other group members] felt quite shocked at some of the things in his offence [during disclosure] and they'd asked him about his victim who was a father and they asked about the child, and they commented on [his] lack of emotion and I think they found that difficult to understand, but for Henry, he finds it difficult to understand how they think that way .. [in thinking] about the victim ... he will say, 'yeah I don't understand... I don't feel that feeling that the other patients are talking about'"

The above account is not an anomaly in the data and countless references were made to an *empathy profile* characterised by difficulties or deficits in victim empathy and perspective taking. These difficulties were portrayed in various ways, often seen as stemming from different causes, however victim empathy difficulties were reported across *all* clinician interviews.

Of the twelve interviews, only one clinician reported improvements in empathy in relation to increased feelings and understanding for his victim. This increase is believed to be linked to feelings of shame regarding the offender's behaviour and the negative social consequence experienced e.g. the shame of losing his job and recognition of how unpleasant the situation would have been for his victim. Despite an apparent increase in empathy, this was not transferred across all situations for whilst this individual was able to recognise and acknowledge the distress caused to his initial victim, distortions and denial around current 'potential' victims were still present e.g. denial regarding harm to help line responders when he will masturbate whilst talking to them as the respondent "*isn't aware*". This example demonstrates some limitation in the achievement of positive **treatment outcomes** and persistence of **risk factors**.

There appeared to be a general consensus amongst those interviewed that autistic sexual offenders can understand to an extent, the cognitive aspects of empathy i.e. the concept of putting yourself in another person's shoes. The only reference regarding exceptions to this

was in relation to offenders with more severe learning disabilities, or higher cognitive functioning but lower adaptive and social skills:

*Q8: "Well I think the further you go down the severity of learning disability the less likely that the people are likely to be aware of other people's viewpoints so I think it gets worse the more severe you go down the cognitive functioning scale and perhaps, it also gets worse the more severe you go up the autism spectrum when the functioning is a bit higher, the more sort of Asperger's types of guys are really rigid in their thinking and able to sort of argue against you a bit and kind of formulate their own viewpoints that are contrary to yours and yeah, so that's a whole new challenge in itself".*

For the most part however, the service users in question were considered to have cognitive empathy but struggled with affective empathy and victim empathy.

As would perhaps be anticipated in descriptions of individuals that present challenges in achieving positive **treatment outcomes** regarding affective empathy, clinicians also made reference to poor emotion recognition and regulation. This included the ability of the service user to access and understand their own emotions i.e. those that were present during their index offence (also see Q34 and Q35), as well as in the context of their future offending and recognition of emotional dysregulation as a possible **risk factor** that need to be managed at times of increased stress or heightened arousal:

*Q9: "Also, they're [sexual offenders with ASD] the group that's most likely to struggle with identifying with their emotions, so it's quite hard for them to articulate the impact on others. Partly because it's hard for them to appreciate their own emotions around it, let alone other people's emotions in difficult situations."*

When not constructed in relation to emotional processing difficulties or ASD associated egocentricity, victim empathy deficits were conveyed as a criminogenic trait and form of anti-social behaviour. This was reported as disregarding others' feelings, rather than not knowing/understanding them, or showing empathy towards others (such as celebrities), but not their own victims:

*Q10: "That's not saying they're not able to empathise [sexual offenders with ASD]. They empathise with other people but not trying very hard to empathise with the victims."*

*Q11: "he was very, very disgusted that Rolf Harris was put in prison ... the consequences for Rolf Harris are obvious aren't they, he's gone to prison."*

Although there are questions regarding the utility of increasing victim empathy as a deterrent against reoffending, many of the extracts identified illustrate its absence as a potential **risk factor** for the men with ASD.

Whilst a number of **protective factors** were identified by clinicians, these did not necessarily appear to be specific to individuals with a diagnosis of ASD or associated with its symptomatology. The only exception referred to was that, in comparison to individuals without ASD, anticipation of negative consequences for self, including family, was reported as a stronger deterrent than negative consequences for others (i.e. the victim). General social approval or desire to adhere to social rules and conventions was not recognised as a strong motivator for inhibiting reoffending behaviours in the sample.

*Q12: "I think the other thing that makes - prevents - him offending is he's lost one job for doing it. Haleem's got a part time job ... I think it does help him stay off of offending again. It's not wanting to lose his job, not wanting to lose the money, the shame of losing his job."*

*Q13: "[he] thinks of the consequences for himself ... and can widen that out to his family who mean a lot to him ... but then taking it that step further [to] think about the victim ... he will say '... I don't feel that feeling [empathy]'"*

The continued and consistent contact with the men throughout the duration of treatment, and from any subsequent maintenance group, was highlighted by the clinicians as a **protective factor**. This was not only from the regular, direct communication with the group members, but also in liaison with the men's staff and support teams. This was reported as protective in that it facilitated the development of external management strategies (such as staff teams being able to utilise pro-active management approaches e.g. Q27), as well as the clinicians meeting the men on a regular basis and being able to notice any increase in risk:

*Q14: "I think shift has been more around his ability to talk about these things which I think is really positive as we can start to get more of an insight into what is going on for him and look at strategies to manage it, but in terms of him being able to use the group to develop his own internal*

*coping, I don't think he's managed that and he's very dependent, still on the external management"*

*Q15: If they are re-offending, is [the group] reducing the frequency or intensity? ... I think so because of the indirect measures ... I think [the men with ASC] would find it easier to forget the consequences ... find it easier to start bring those distortions back without the group"*

Interestingly, and perhaps controversially in terms of treatment implications, a number of the clinicians identified current or prospective romantic/sexual relationships as a **protective factor** against risk of re-offending:

*Q16: "... and we think, well we know the protective factor for that is the fact that he's married and going to the brothel regularly, because if that relationship broke down, we would, could almost guarantee he would offend within a week."*

*Q17: "I don't think any circumstances or anything had changed in him apart from, I suppose in terms of life circumstances his, personal life situation had changed since the time he committed the offence was that he got a girlfriend ... it was understood that they were having a sexual relationship so I think with that aspect that people felt that the risk was slightly reduced"*

Multiple references were made by clinicians to service users' childhood and the potential impact upon their *psychosocial development*. The reported backgrounds were similar to sexual offenders without ASD, with many from dysfunctional homes including multiple care placements and experiences of abuse or neglect, often being subject to family environments with pro-criminal or anti-social attitudes. As such, the possibility of maladaptive psychosexual development and inconsistent consequences (for the services users as a victim or an abuser), coupled with ASD, were identified as a potential **risk factor** for the development and continuation of sexual offending behaviours:

*Q18: "I think there are some [empathy] deficits there, he's very much focused on meeting his own needs ... I think there are a number of issues there, part of which is his autism impacting on his ability to understand the other person's perspective ... but I also think there's his own sense of uncertainty about what's right and what's wrong ... because he was abused as a child and nothing happened to his perpetrator ... and he's never been convicted so there's no clear message in his life either as a victim or perpetrator that its wrong"*

Additionally, chaotic, absent or dysfunctional family relationships were likely to reduce the opportunity for pro-social support networks to act as a potential **protective factor** (as identified for some of the service users described in the sample e.g. Q13).

Poor *mental health* was recognised as a **risk factor** by the clinicians, with difficulties in emotion and information processing (potentially related to a diagnosis of ASD) considered to limit positive **treatment outcomes**. In particular, reference was made to the service users' poor understanding of the potential increase in risk at times of poor mental health:

*Q19: "I don't think he feels that he could be risky again, ... and he doesn't recognise that, when he was less supported in the community things got really difficult for him, so I'd say his insight, insight, understanding of those issues is limited still"*

A re-occurring theme within the domain of *mental health* and *psychosocial development* was the impact of a co-morbid diagnosis of Personality Disorder (or a potentially differential diagnosis). One clinician reported that men with ASD were "*the group that's most likely to give accurate accounts, to be truthful*". This refers to an accurate description of the event that happened (rather than interpretation of the interaction):

*Q20: "it felt cold, you know quite graphic descriptions of what he'd done but presented in a very factual, cold way."*

This kind of 'honesty' was also echoed by other clinicians and raised questions regarding anti-social personality traits as a **risk factor** and any potential impact on **treatment outcomes**. The similarities between ASD and psychopathy in this callous, unemotional or detached portrayal of their offences was recognised across the data, particularly for two services users where there were questions regarding the ASD diagnosis (as opposed to Personality Disorder). Personality Disorders, particularly those with traits of psychopathy, has been associated with poor treatment response and high risk of recidivism, as well as negative impacts upon the staff and team 'splitting' (D'Silva, Duggan & McCarthy, 2004; Whittle, 1972). These aspects were observed in the data as illustrated in the extracts below.

*Q21: "I ..., if it's more viewed as personality [disorder] or psychopathy, the staff will then often adopt this narrative, well there's nothing we can do and how can we work with someone whose not even able to express empathy and emotion etc., etc., and then the work becomes much more*



*difficult and it becomes then more focused on the staff team reflective practice ... we were formulating more in terms of autism but a couple of the facilitators were likening some of the traits to psychopathy in terms of feeling like he, not manipulates, but will do what he needs to do for people higher up in the MDT and say what he needs to say ...the discussions very much went around how much of this is autism and how much could be psychopathy?"*

### **6.5.17 Treatment Facilitation**

In addition to a **diagnosis of ASD**, the four subthemes contributing to clinicians' risk formulations were shaped by wider, systemic elements that impacted the **facilitation of treatment**. These elements, or issues, moved beyond the individuals within the treatment groups, placing them within broader social structures, with clinicians identifying matters concerning the *content and process of available programmes (including the evidence-base), facilitator abilities (including training), engagement with other services/organisations, and service provision and resources.*

Clinicians often made reference to the lack of available *evidence-base* regarding sexual offending treatment for this population. As illustrated, clinicians commonly reported components of therapy where offenders with ASD appeared to struggle with the *content* more than those without ASD i.e. emotion recognition and the cognitive model, the victim empathy module etc. (e.g. Q9), but emphasised the lack of available guidance or alternatives:

*Q22: "...to compare it [adapted sex offender treatment groups] it to the alternative – I mean compared to what? Compared to no treatment? Absolutely!"*

In relation to the group *process* of the sexual offending treatment programmes, clinicians emphasised the need for an individualised approach, with a **diagnosis of ASD** not being something that should automatically exclude an individual from engaging or being supported in group therapy:

*Q23: "I've had guys (with ASD) go through that have benefitted, definitely but I wonder if that benefit could be just as powerful and even more powerful if the work was done on an individual basis and was adapted specifically to that person's specific behaviours and traits relative to*

*autism. I think they can benefit from treatment definitely whether or not a group-based treatment is the most effective..."*

*Q24:"Well I felt that was the whole thing of the group last year... they were not that bothered about what we [facilitators] said ... but whenever some else [a group member] said it, it was always the thing that made the difference."*

*Q25:"I think he's overcome that [social anxiety around groups] with a lot of normalising and sharing other people's worries."*

Clinicians' perceptions of their own and other *facilitator abilities (including training)* were associated with familiarity and competency with the material, as well as risk formulation.

Reference was often made by clinicians to the overall ability of themselves and the team to effectively assess re-offending risk following treatment. As highlighted, some of this was connected specifically to a **diagnosis of ASD** and the complexities it can add to the formulation, especially if there was a co-morbid or suspected alternative personality disorder diagnosis:

*Q26:"... one pattern (in the team) is, almost like the dynamics which will happen with people with Personality Disorder - but not in terms of us necessarily being split, is switching from one alternative to the other side, being punitive and setting strong boundaries so when it comes to external controls, there's a tendency to say is that 'the only thing that's going to shift this person's behaviour is understanding the consequences.' Sometimes that switches to us thinking 'well hang on, we need to formulate more, we need to understand this a bit more'."*

Provision of external management strategies for offenders who struggle to control their impulses or lack the motivation to (perhaps indicating minimal positive **treatment outcomes**) were identified as reliant on liaison with *other services and organisations*. This included care and support staff, as well as the Criminal Justice System, with comments regarding inter-agency working linked particularly to assessments concerning **risk factors, recidivism** and **protective factors**, during and following treatment:

*Q27:"... his staff team are very very good, it's very consistent, they know to distract him, and that makes a big big difference and they also communicate [with us] ... we've got other services that are not so good and*

*those people continually re-offend or their placement breaks down so I think the fact he has a really good service does keep him protected. "*

*Q28: "I would like to see the court system back us up a bit more because if they haven't a treatment order, we can't make them come, and there are some people that desperately need to come, but because the court hasn't told them, they won't come and are continually re-offending out in the community."*

Furthermore, clinicians reported supporting offenders 'out of Borough' due to lack of adapted treatment programmes in their home area:

*Q29: "he's not actually in our borough anymore but we continue [permitting attendance to the maintenance group] because there isn't this type of group [in his] Borough".*

Internal service provision and resources were also identified by the clinicians as impacting on judgements regarding risk of re-offending. For example, it was reported that one service user could benefit from repeating the SOSTEC-ID programme however this was dependent upon the current demand for treatment and comparative levels of risk:

*Q30: "it depends on referrals - who's judged more in need, more of a priority, more of a risk."*

#### **6.5.18 Responsivity to Treatment**

The final component of the model, and contribution to the clinicians' formulation of risk of re-offending as illustrated in Figure 23, constituted judgements of **responsivity to treatment**. Responsivity was constructed throughout the interviews with reference to surface level engagement in terms of *attendance* at the group and the individual's *ability* to engage with the material. This then progressed to ability coupled with motivation resulting in *engagement* in the group. At this stage, motivation may not necessarily be focused on reducing sexual risk but, as discussed previously, for social benefits or being seen to be doing 'the right thing':

*Q31: "He chose to keep going, [he's] keen on doing his treatment and wanting to leave hospital so he's engaged but he doesn't really see himself as part of the [treatment] group".*

The fourth step or level of responsivity was conveyed as *internalisation* of the therapy. This included references to perceptions of assimilation of new behaviours and management strategies into existing thoughts patterns and lifestyle choices, resulting in positive **treatment outcomes**, a reduction of **risk factors** associated with re-offending and/or an increase in **protective factors** against **recidivism**.

*Q32: "I think generally he's more empathic about victims.. not just [his] particularly victim, but hearing other men's accounts and the impact that's had on their victim."*

The atypical *social communication and interaction* style and *empathy profile* reported in offenders with ASD appeared to make it more challenging to assess the extent of achievements in positive **treatment outcomes** and/or reduction in **risk factors**. This was reported by the clinicians in endeavouring to ascertain levels of treatment responsivity, particularly in relation to internalisation:

*Q33: "You sometimes felt with the others [without ASC] that they 'clunked' into a better place where they really had taken it on board ... I didn't perhaps feel that with [the men with ASC], it wasn't quite possible to know whether or not they'd really internalised it."*

Much of this difficulty appeared to be framed around clinicians' interpretation of emotional responsivity (or absence of) in the offenders with ASD:

*Q34: "Yeah almost like a dissociation which I hadn't felt in the others [without ASD] ... I mean everybody finds it hard [disclosing offence] ..., but there's a quality to the finding it hard that's slightly different [with offenders with ASD], ...So other people [without ASD] are either really traumatised about it and they don't want to say it because it's so awful or you they're really worried about it or they can't admit it at all, but you know these guys [with ASD], it's like the saying of the words but how, how connected are they?"*

Interpretations of service user behaviour and mental state were complicated by clinician beliefs that the men with ASD struggled to understand their own behaviour or offence. Potential difficulties with insight, related to a diagnosis of ASD, affected opinion about how far the men were "*agents in their own behaviours*" and subsequently affected the clinicians' ability to assess any response to treatment and risk of re-offending:

*Q35: "Somehow, it feels like the formulation doesn't tell us enough about why the person does it (re-offend) ... we get a sense that they're not just telling us what we want to hear, but really puzzled themselves about what's going on about why they did something. ... Not understanding themselves in terms of offending cycle, not understanding their cognition. Sometimes, trying to piece that together afterwards feels like they're just trying to make a coherent account of what happened without it making sense at the time."*

### **6.5.19 Discussion**

The interview data from clinicians facilitating adapted sex offender treatment groups for individuals with ASD provided clear support for some of the proposed hypotheses regarding the potential impact of the clinical features of ASD on treatment outcomes.

Social communication and interaction difficulties coupled with cognitive inflexibility were thought to impact upon engagement and internalisation of key therapeutic aims such as increasing victim empathy or shifting cognitive distortions regarding deviant fantasies and a sense of entitlement.

Social naivety and the negotiating of social and sexual scripts has been proposed as a possible vulnerability to sexual offending in individuals with ASD (Woodbury Smith & Dein, 2014; Geluk et al., 2014) and there was some evidence of this within the current dataset. However, with the exception of those with more severe intellectual disabilities, these difficulties were not always placed within the context of poor theory of mind or cognitive perspective taking, but were more in line with heightened ego-centricity and a disregard for the victim's feelings (affective empathy).

A different pattern of empathy deficits was implied within the clinician interviews regarding autistic sexual offenders in comparison to existing literature. The clinicians in this study often spoke of an ability to say the right words or understand the premise of thinking from another's point of view, however emotional resonance or affective response to the situation of another did not appear to evoke empathic responding. This finding is in contrast to those from Jones et al. (2010) and Rogers et al. (2006) who reported individuals with ASD to struggle with cognitive empathy, in contrast to individuals with psychopathy or C/U traits

who display lower levels of affective empathy. Additionally, Schwenck et al. (2012) described higher emotional empathy in adolescents with ASD compared to adolescents with callous-unemotional traits. It must be noted that the different findings cannot be compared directly as the current study is reported clinical opinion and qualitative data, and has not used any formal measures or assessments of empathy as was undertaken in the other studies reported. It is also important to recognise that a certain level of cognitive functioning is required to complete the programme and higher levels of cognitive empathy may be a consequence of the individual's overall level of cognitive functioning.

As with other literature, it is difficult from the findings to ascertain when a lack of concern/interest in others is anti-social, and a conscious disregarding the feelings of others and when it is due to insufficient de-centration and under-arousal, or low empathic distress, or a combination of both. The men described in the interviews showed similar distorted patterns of thinking to sexual offenders without ASD, including attitudes towards women (*women as sex objects*), nature of harm and entitlement (Ward & Keenan, 1999; Polaschek & Ward, 2002). The findings confirmed propositions of low victim empathy in sexual offenders with ASD, however, as said, a general deficiency of empathy was not consistent across the data. There were examples of empathy for other sexual offenders, including peers and celebrities such as Rolf Harris or Gary Glitter, however this may be reflective of difficulties in imagining what a victim feels (for those who did not have their own history of abuse), whereas the men can identify with the experiences of other sexual offenders. The discrepancy in portrayals of empathy contributes to the debate on the status of such thought patterns as consequence of deficient empathy or as a particular type of cognitive distortion (Fernandez et al., 1999; Marshall et al., 2001)

Unpicking this picture may be further complicated in sexual offenders with ASD by the atypical development, processing or functioning within areas of the social brain such as the mPFC, OFC, IFG, CC and TPJ (Baron-Cohen, 2011), impacting on self-awareness, emotion regulation and recognition, theory of mind, development of empathy and mental flexibility.

For instance, in order for a cognition to be considered 'distorted' it must be ego-dystonic, that is something which is at odds with the sense of self. The information contained within the cognition does not fit within an individual's internal working model of the world (including themselves and others), therefore it is 'distorted' in order for it to be assimilated e.g. children as sexual beings allows the continued belief that the perpetrator is not doing something harmful as children are seen as able to enjoy or seek out sex with adults (Ward & Keenan, 1999).

For individuals with ASD, poor de-centration and theory of mind may culminate in action orientated towards meeting one's own needs without considering the experience of the other. Additionally, difficulties with effortful control coupled with positive reinforcement (such as sexual gratification) and poor emotion recognition could result in a reduced capacity to orientate attention towards another, interpret socio-communicative behaviours e.g. facial expression and signs of distress, and inhibit a pleasurable or habitualised behaviour in order to activate a socially desired response.

As such, thoughts of 'entitlement' (a recognised cognitive distortion in sexual offenders) may not *be* ego-dystonic as one's own pleasure is considered without reference to the other and then neither internal (delayed gratification) nor external factors (desire for social approval) evoke guilt, shame or empathic distress and so do not lead to an empathic response nor inhibit sexual offending behaviours.

This interaction between the atypical or impaired cognitive development and subsequent social functioning could account for the illustrated lack of empathy and persistent thought patterns in the data which were reported following completion of the adapted sex offender treatment programme (often multiple treatments).

The challenges of working with individuals who display characteristics such as increased ego-centricity and low victim empathy were prominent in the data. This was particularly pronounced in relation to service users where there was question of a co-morbid or alternative diagnosis of personality disorder, with the subsequent impact on staff echoing

findings of other research in this area (Adshed & Jacob, 2009) e.g. splitting of the team, low expectations for therapeutic outcomes, etc. The parallels between ASD and psychopathy/anti-social personality traits have been discussed throughout the literature review and illustrated in other research regarding sexual offenders with ASD (e.g. placement of the individual in a personality disorder service and treatment programme (Milton et al., 2002). This profile, particularly one of disordered personality development, may be the consequence of early childhood experiences, however it may also be impacted by cognitive functioning styles as a consequence of the ASD. For example, judgement of own behaviours compared to others could be attitudinal and related to narcissistic traits or related to differences in brain activation when decisions regarding the 'self' and decisions about the 'other' are taken (Garrigan et al., 2016) and if these are dysfunctional or atypical in autistic brains.

Some of the findings from the study support the proposition that offenders with ASD may struggle with the group delivery of therapy due to their ASD (e.g. Higgs & Carter, 2015; Murphy, D., 2010), with some men clearly finding it difficult to ingratiate themselves into a group or being unperturbed by the viewpoints/challenges of peers. However, clinician experiences and opinions varied across the data and the group was constructed as a way of managing risk with examples of positive outcomes that have not been so forthcoming across other literature on sexual offenders with ASD.

Overall clinician views regarding the effect and appropriateness of adapted sexual offender treatment programmes for those with ASD were generally defined in terms of how these concepts were characterised. For example, some of the treatment components were considered ineffective, primarily those addressing victim empathy and shifting cognitions around perceptions of anti-social behaviour. The poor responsivity in these areas fed into a general belief regarding lack of internalisation of the therapeutic aims and thus little, if any, reduction in risk. The complexities around resistance to therapeutic aims referred to anti-social tendencies as well as difficulties in social interaction and cognitive functioning. For example, how far can internalisation occur if an individual has difficulty with their own sense of agency and understanding of the behaviour, including processing of information at the



time, coupled with the potential difficulties of autoneotic memory (temporal memory for self) seen in individuals with ASD (Boucher, 2008). The limited benefits of repeating the treatment programme with offenders with ASD identified, also raises questions regarding conscious control over mental inflexibility in addition to motivation to change.

The challenges in treatment for sexual offenders with ASD perhaps requires a shift in focus on the treatment outcomes of therapeutic programmes. The data set did provide positive findings in relation to the use of adapted sex offender treatment programmes with individuals with ASD, including increased opportunities for monitoring and responding to behaviours, along with the opportunity to develop prosocial roles, skills and relationships. References to external management strategies and a focus on negative consequences for the self within the data identified these aspects as key deterrents of further offending behaviours which is consistent with existing research of offenders with ASD (Higgs & Carter, 2015; Dein & Woodbury-Smith, 2014; Melvin et al., 2017). This suggests a potential need to refocus emphasis on certain elements with treatment in order to achieve the primary objective of reducing risk to others and prevent further incidents of offending behaviour.

## **6.6 INTERVIEW STUDY: OVERALL DISCUSSION**

### **6.6.1 Service User and Clinician Views**

The aim this study was to gather the collective views and experiences of adapted sex offender treatment programmes from services users with ASD and group facilitators, and to explore their views of whether treatment was helpful in reducing risk of re-offending. The study also sought to consider whether the features of ASD are a vulnerability to effective participation within treatment programmes.

From the service user and clinician datasets it was clear that adapted sex offender treatment programmes for individuals with ASD can provide benefits and positive outcomes. These outcomes mainly took the form of benefits as a consequence of the group process, such as the opportunity to develop pro-social skills and relationships, and increased support and monitoring of risk behaviours. However, questions over the ability of such programmes to reduce risk remain unanswered.

Different priorities in clinician and service user objectives of treatment were prominent in the data, potentially impacting on treatment outcomes. Service users were primarily focused on ways in which the group could improve their lives and/or meet their needs, with risk to others being minimal or not part of their narratives. In contrast, clinicians' aims were focused on reducing risk of future re-offending behaviours and enabling the men to meet their needs through adaptive, pro-social methods.

Both datasets reflected the potential utility of a strengths based approach such as the Good Lives Model, as the men identified common social goods (e.g. romantic/sexual relationships, employment) and the clinicians referred to the attainment of these goods as a protective factor against sexual offending behaviours. These findings provide support for a number of offending and sexual offending models including Strain theory (Merton, 1938), which purports that individuals commit crimes in order to attain 'socially desirable' goals or aspirations and the men's previous offending behaviours were attempts at acquiring such goods by maladaptive and socially unacceptable means.

Alternatively, Agnew's General Strain theory (GST) (1992, 2007, 2013) focused on criminogenic strain as a method of managing negative experiences and events. GST can be conjoined with the developmental model of sexual offending such as Marshall and Barbaree's Integrated model (1990) to examine the development and presentation of sexual offending behaviours reported in the dataset. Marshall and Barbaree suggested that vulnerability factors to sexual offending develop from aversive childhood events, which were present in the majority of service users identified. These adverse events may inhibit the ability to develop self-regulation and lead to the formation of maladaptive coping strategies to cope with negative emotions, including sexual release. Atypical neural development and cognitive functioning in individuals with ASD may reinforce such coping skills on an autonomic level (e.g. prepotent responding) and ego-centric information processing may limit insight or access to any sense of agency or accountability, subsequently affecting victim empathy and persistent cognitive distortions.

As illustrated by both the men and clinicians interviewed, external management and consequences for the individual were stronger motivators for desistance of repeat behaviours than concern for others or internalised motivation to conform to social

conventions. The necessity of displaying emotionally empathic behaviour (and not simply 'saying the right words') was highlighted by the clinicians, along with its importance in the formulation of risk and assessment of responsiveness to treatment. The difficulties in understanding the absence or deficit of affective empathy (in comparison to cognitive empathy) is likely complicated by the presence of an ASD coupled anti-social behaviours. As discussed in Chapter Two (Autism Spectrum Disorders), low empathy profiles are found in individuals with ASD and those with anti-social, particularly psychopathic personality or behavioural traits, however the two may stem from different aetiologies and thus require different treatment approaches.

This suggests that whilst the Good Lives Model has its benefits, avoidance goals and frameworks identified in traditional Risk-Needs-Responsivity models (Bonta & Andrews, 1994) may also need to be incorporated into treatment and management plans for offenders with ASD. The potential lack of ego-dystonia created by sexual offending behaviours could explain the dearth of positive treatment outcomes in relation to the internal components of therapeutic change e.g. empathy and criminogenic attitudes that were reflected in the men's data and supported by the clinicians corresponding formulation of risk and incidents of recidivism.

### **6.6.2 Strengths and Limitations**

Despite the study sample being small, it was fairly heterogeneous and included roughly equal numbers of service users from the community and those detained under the Mental Health Act. Clinicians were primarily psychologists, however the majority of those interviewed had extensive knowledge/a long working relationship with the service user in question (range: 1-10+ years) and all were group facilitators enabling them to comment on the treatment components at a theoretical level (having undergone training), as well reporting on the service user's engagement/response to the material.

The clinicians' knowledge of the service users and length of time working with them was a strength as noted above. Alternatively, it could be said to reflect bias in the selected sample and suggest a particularly treatment resistant group of individuals with a prolonged need for service involvement, especially as service involvement was not exclusive to sexual offending

but also for other offending/risky or mental health behaviours e.g. violence, gambling, anxiety.

However, the continued involvement with services and attendance at a sexual offending 'maintenance'/follow up group was a key protective factor against re-offending and as such was reflective of responsivity to treatment through continued engagement with the therapeutic programme. Further investigation and comparisons with non-ASD samples would need to be undertaken to ascertain of patterns of service involvement and treatment responsivity in ASD.

The study included services users with long histories of offending as well as younger men who had committed a first offence. The similarity of the sample to other studies of offenders with ASD (which have not focused on treatment), including sexual offenders (e.g. Lindsay et al., 2004, 2013), indicates the participants to be representative of the target population (offenders with intellectual and developmental disabilities).

The sample did not include men currently in prison or those not in receipt of some form of mental health or intellectual disability service. By interviewing numerous men from each site the study was able to gather different opinions on the same treatment group, however the sites were few in number and the majority were NHS (5 out of 6); therefore men receiving treatment from independent healthcare services or charities were underrepresented.

Difficulties in attaining details of the men's treatment such as which programme they completed, the number of sessions attended and the facilitator's fidelity to the treatment model, meant it was not possible to examine effect in any systematic way or compare different programmes, bearing in mind that this was not the purpose of this study. Additionally, as the men had often completed more than one group comparisons of particular approaches or content were not possible.

This potential confound is also applicable to the clinician data in that many had run multiple interventions with services users, including individual and group therapies for non-sexual or non-offending behaviours and thus any changes reported are likely to have been influenced by that as well as a consequence of the adapted sex offender treatment programme.

Lastly, the views of men who withdrew from group treatment are not represented in this study and further research should investigate potential differences between men with ASD who partake in group treatment and those who do not.

The disappointing results from the SCQ meant that it was not possible to ascertain any trends within ASD severity and responsivity to treatment, or if any specific clinical feature of ASD was associated with poor engagement or treatment outcomes. Future research should explore this further and seek an alternative method of assessing ASD symptomatology.

### **6.6.3 Conclusion**

The findings contribute to the existing literature on ASD and sexual offending, gathering service user experiences of an adapted sex offender treatment group and how they perceive its effectiveness. In addition, clinician opinion of the use of such programmes and their potential to reduce risk of recidivism was collected. Future research should continue to investigate the views and experiences of men with ASD who sexually offend and explore potential adaptations or alternative emphasis on treatment outcomes to expand the evidence-base for determining appropriate treatment. Whilst group treatment will not be suitable for all individuals with ASD (as it is not suitable for all individuals without ASD), the findings from this study suggest that adapted group sexual offending treatment groups can be beneficial to men with ASD despite potential social or communication difficulties, however challenges remain in shifting cognitive distortions and increasing theory of mind and empathy.

## 7 CHAPTER SEVEN: EMPATHY INTERVENTION STUDY

### 7.1 Introduction

The findings from the clinical/staff views of the use of adapted sex offender treatment programmes for offenders with ASD found empathy to be a crucial component, illustrating a complex profile and the difficulties the men experienced with this aspect of the treatment.

The ability to identify another's feelings and resonate with their emotional state is an evolutionary trait concerned with emotional connectedness. This is said to help facilitate social interaction and enable prosocial behaviour (Hoffman, 1981). We refer to this ability of emotional identification and congruence with others as Empathy. Upon closer examination empathy reveals itself as a complex construct encompassing a process and an outcome (Davis, 2001, 1980, 2018; Smith, 2009). It is multi-dimensional and dynamic, shifting across situations and contexts, impacted by external and internal factors such as cultural norms, cognitive functioning and biological drives.

The central premise of empathy is the ability to put oneself in another person's shoes and/or have an associated, appropriate emotion as a response to their situation. The capacities necessary for empathy have been demonstrated in rats and non-human primates, with both displaying acts of sympathy, consolation and emotionally reciprocal social behaviours e.g. not pressing a lever for food if a companion animal receives an electric shock as a consequence (Church, 1959; de Waal & Aureli, 1996; Romero et al., 2010). Empathy encompasses more than sympathy and/or helping in exchange for mutual benefit, it has an altruistic facet. It is often triggered unconsciously (although higher cognitive processes play a role) and, as illustrated above, can come at a cost to the individual empathising.

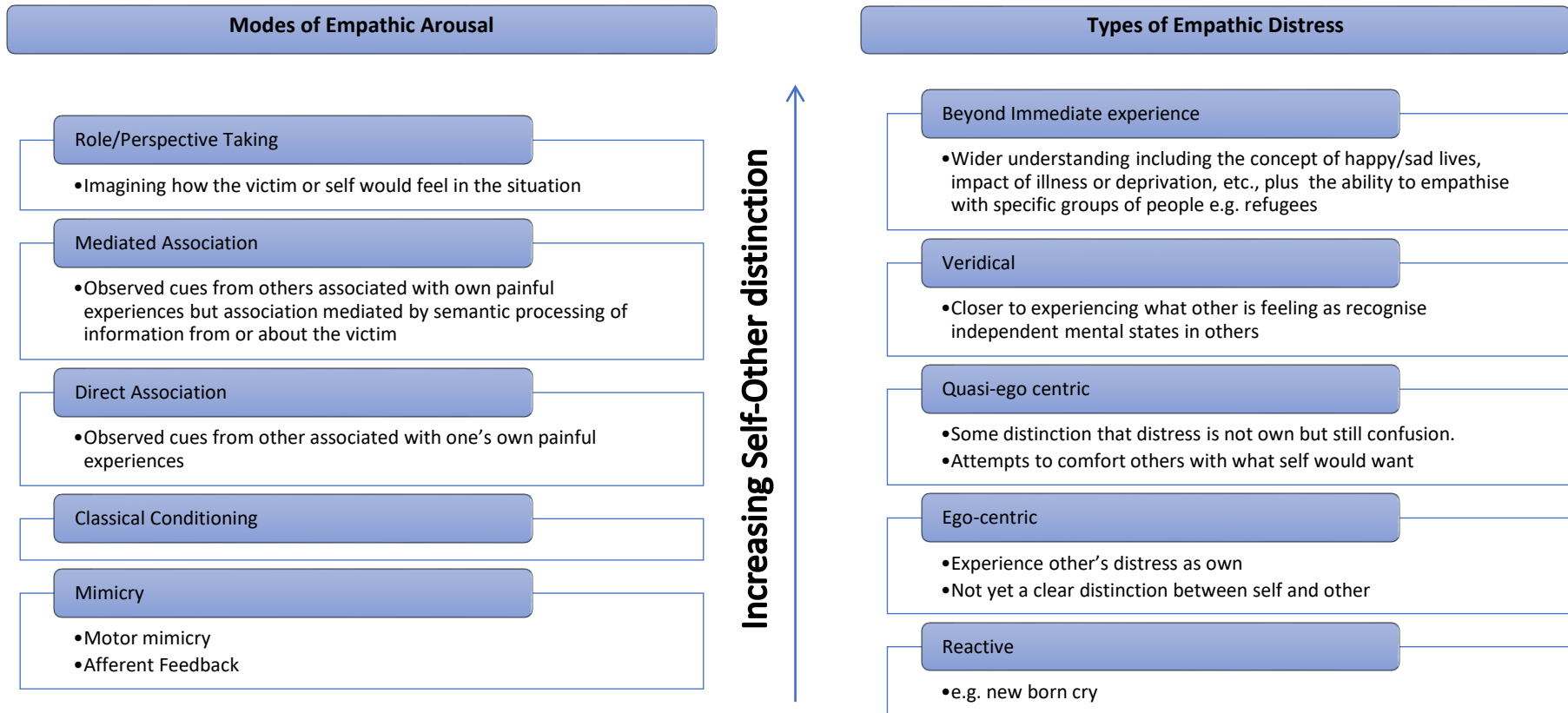
The concept of empathy has been in use since the 1900s. Its etymology stems from the German term *einfihlung*, first used by Lipps (1903) to denote the notion of '*feeling into*'. In its most simple form, empathy has been referred to as 'emotional contagion' (Scheler, 1954) whereby emotion observed or imagined in another 'triggers' an emotional reaction in the observer/imaginer. The emotion triggered can be the same emotion or a different 'appropriate' emotion e.g. experiencing empathic anger at the distress or hurt of the

observed. Empathy is considered distinct from sympathy in that it involves a more active element and an array of feelings that move beyond compassion or pity, and incorporate the conscious, cognitive action of *“respond[ing] with care to the affective states of others”* (Decety, 2014, p.v). The positive affect towards, or emotional alignment with, the individual in distress is typically a distinguishing feature (rather than the distress of another causing pleasure or satisfaction), however a small minority of researchers have argued that this is not necessary e.g. Stotland (1978) referred to *contrast empathy* in that enjoyment felt at the suffering of another is still empathy, although this is not the dominant view.

A contemporary, developmental, multi-dimensional approach towards empathy was proposed by Hoffman in the 1980s (1981, 2000). Hoffman (2000) emphasised the role of empathy in moral development and its status as a motivator for prosocial behaviour, specifically the role of ‘empathic distress’. Empathic distress is said to be the arousal of *“sympathetic distress and/or empathic anger”* (p6), encompassing sadness or disappointment at the victim’s situation and anger at the culprit/reason. Hoffman defines empathy as *“an affective response more appropriate to another’s situation than one’s own”* (p4). Hoffman (2000) sought to synthesise the affective and cognitive processes and outcomes underlying pro-social behaviours and framed them using modes of empathic arousal, types of empathic distress and he argued how together, these account for human action in situations requiring the consideration of others (or the ‘other’).

In Hoffman’s model, cognitive empathy is characterised as perspective taking and affective empathy is viewed as emotional resonance. They are displayed in the presence of emotional distress (sympathetic distress and/or empathic anger), of which he identifies five types, along with five modes of empathic arousal, Modes of Empathic Arousal and Types of Empathic Distress (Hoffman, 2000) (Figure 24). The model proposes that the first three types of distress and modes of arousal are physicalistic, autonomic and passive, whereas the latter stages involve more advanced, conscious, cognitive processes.

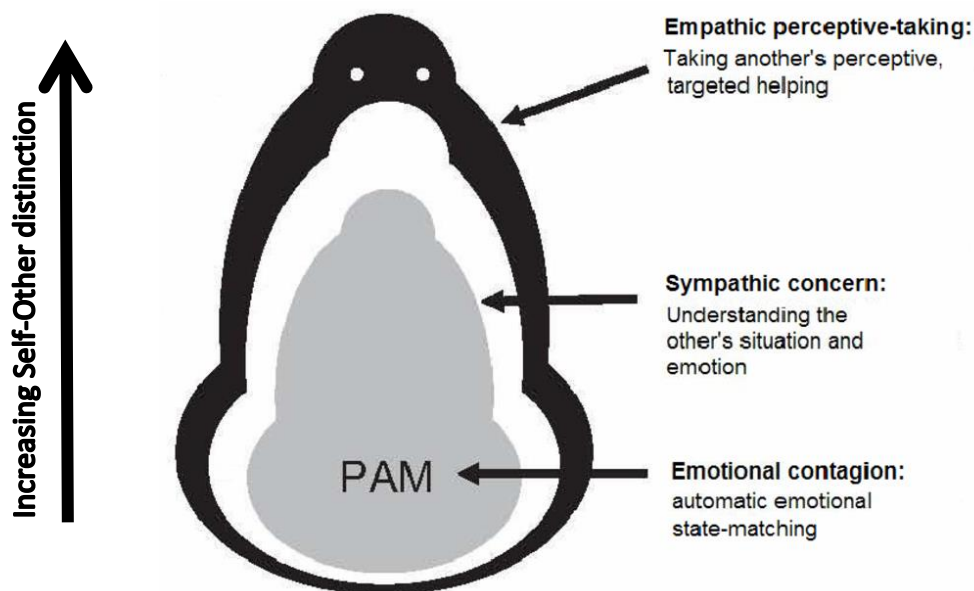
**Figure 24: Modes of Empathic Arousal and Types of Empathic Distress (Hoffman, 2000)**





An alternative model to Hoffman is that of de Waal's (2014) Russian Doll, which suggested that empathy is an 'umbrella' term encompassing the emotional processes and social capacities which together form empathy. Rather than identifying cognitive or affective empathy as distinct, he saw them as different layers and considered that all are required for empathic displays of behaviour. De Waal's model (2014) is grounded in biology and argues that the foundational stage of development required for empathy is neural representations of self and other, and that this distinction allows for a 'mirroring' of bodily states and recognition of emotions and needs Preston and de Waal (2002) termed this the 'perception-action mechanism of empathy' (PAM), the core of the 'Russian doll'. De Waal argues that human adults have the potential to possess all emotional processes and social capacities necessary for empathy, whereas human infants and primates may only display the 'inner layers'. Progression to the 'outer layers' is a consequence of increasing self-other distinction and development of more cognitively complex processes and capacities (Figure 25).

**Figure 25: Russian Doll Model of Empathy (de Waal, 2014)**



The distinction between self and other plays an important role in deciphering, displaying and understanding empathy. As discussed in Chapters Two (Autism Spectrum Disorders) and Six (The Interview Study), the failure or inability to de-centralise and consider the mental states and needs of others restricts the assimilation and utility of socio-emotional

information, limiting capacity to develop empathic responses and/or display pro-social behaviours. De Vignemont and Singer (2006) specified that empathy was present if:

*“(i) one is in an affective state; (ii) this state is isomorphic to another person’s state; (iii) this state is elicited by the observation or imagination of another person’s affective state; (iv) one knows that the person is the source of one’s own affective state”*

(in Decety, 2014, p11).

This explanation incorporates multiple aspects of emotional and cognitive empathy. For instance, it states that for an empathic response to be displayed an individual must have an emotional reaction that is triggered (*‘be in an affective state’*), and that this reaction is ‘shared’ i.e. evokes a parallel or comparable emotion (*‘an isomorphic state’*). It also requires the observer/imaginer to be aware that their own emotional state is the consequence of observing/imagining emotion in another (*‘elicited by ... another person’s affective state’*, *‘one knows the person is the source of one’s own affective state’*). This view of empathy contrasts to single factor approaches including those of emotional contagion (Lipps, 1903), and Kohler (1929) who argued affective resonance was not required for empathic response.

De Vignemont and Singer’s (2006) definition of empathy is concordant with Bird and Viding’s (2014) view of empathy as requiring more than emotional contagion (the shared emotional state from observing another) but also the acknowledgement that the observer’s current emotional state is triggered by the other. The Self to Other Model of Empathy (SOME) (Bird & Viding, 2014) attempts to integrate cognitive and affective information processing systems and identify the neural structures and cognitive processes involved. These include: understanding how another feels and the importance of theory of mind in empathy (e.g. the temporoparietal junction and medial pre-frontal cortex, de-centration and emotion recognition), how emotional contagion is triggered (e.g. somatosensory cortex, motor-mimicry, insular cortex and anterior-cingulate cortex) and the meta-cognitive processes that take place to represent another’s emotion and associate it with one’s current emotional state (dorso-medial pre-frontal cortex, anterior cingulate cortex, interoception and perspective taking) (Bird & Viding, 2014). The structures identified within this model map

onto Baron-Cohen's empathy circuit (Baron-Cohen, 2011) discussed in Chapters Six (The Interview Study) and Two (Autism Spectrum Disorders).

These models, alongside other theories and approaches discussed in Chapters Two and Six illustrate the complexity in defining, understanding and assessing empathy. The literature covered exemplifies the recognition of bottom-up, reactive, physical, subcortical, affective, unconscious, autonomic responses to others' distress, proposed as passive triggers to empathy (e.g. emotional contagion and imitation), as well top-down, conscious, cortical, cognitive, active triggering mechanisms (e.g. social scripts and internalisation of guilt), which incorporate social norms and mores as well as an individual's own motivation, intention and attitude. Developments in neuroscience and technology have advanced investigation into the neural structures and processes that underlie cognitive functioning and psychosocial development which govern empathic experience and subsequent behaviour.

The emphasis on defining a concept such as empathy may seem a philosophical exercise yet it is the premise which predicates what is judged to be impaired, and subsequently treated or 'punished' by our legal and medical systems. For example, impairments in empathic functioning feature within the diagnostic criteria for personality disorders, and disorders of social reciprocity are key within ASD (APA, 2013; WHO, 2018), and displays of remorse or empathy for a victim may influence sentencing (Sundby, 2003). It is therefore important to consider the development and characterisation of empathy as well as its social functioning and importance in cultural expectations of interpersonal relationships.

As introduced in Chapter One (Sexual Offending), a central premise regarding empathy and sexual offending is that sexual offenders *must* lack empathy otherwise they would not commit crimes causing such distress to their victims. Rehabilitative treatment (e.g. SOTSEC-ID, 2010) seeks to address these deficits, which have been framed as: (i) a lack of affective empathy and absence of emotional responding to the victim, and/or, (ii) deficits in cognitive empathy and difficulties with perspective taking or reduced Theory of Mind (Marshall et al., 1995; Ward et al., 2000; Ward et al., 2006). Either, or both, of these may contribute to an absence of response, or change in behaviour at the distress of another. In addition to general empathic behaviour in offenders, research has also examined the concept of victim specific empathy (e.g. Marshall et al., 2001; Kristensen Whittaker et al., 2006). This

hypothesis questions how, for example, a father can sexually abuse his youngest daughter, yet at the same time be described as loving and considerate to his other children and wife. Victim empathy is typically explored using the Victim Empathy Scale (Beckett & Fisher, 1994) or a similar format (Saleem, 2005), using brief vignettes, followed by questions in which the individual has to answer how they thought the victim felt and perceived the situation. Victim empathy deficits have been demonstrated in adult and adolescent sexual offenders, with and without intellectual and developmental disabilities (Fisher et. al. 1999, Fernandez & Marshall, 2003; Kristensen Whittaker et al., 2006; Sinclair, 2011).

It must be acknowledged that despite recognition of deficits of victim empathy in sexual offenders and its inclusion in current practice, questions remain over victim empathy as a distinct construct of empathy and its value within treatment programmes (Mann & Barnett, 2013). A meta-analysis by Hanson and Morton-Bourgon (2005; 2009) reported that clinical variables, including low victim empathy “*had little or no relationship with sexual or non-sexual recidivism*” (page 17). Furthermore, there is conceptual obscurity in identifying how and where victim empathy fits within a general empathy model (if this facet alone is impaired but not others), and in distinguishing between a lack of empathy for a victim and cognitive distortions acting as a shield against shame and recognition of the harm caused by their actions (Bumby, 2000; Hanson, 2003; Marshall et al., 1999; Ward et al., 2006). Despite the ambiguity surrounding victim empathy, the construct of empathy as a necessary precursor to prosocial behaviour, and positive offender feedback regarding the value an empathy component in treatment (Levenson et al., 2009; Wakeling et al., 2005) means it is thus considered prudent to continue its inclusion within current treatment for sexual offending.

Findings reported in Chapter Six (The Interview Study) on adapted sex offender treatment programmes were consistent with existing data on empathy and sexual offenders (both with and without intellectual and developmental disabilities), including reports of victim empathy deficits and questions over the effect of that treatment component. As discussed, a number of the narratives alluded to specific patterns of empathy difficulties between offenders with ASD and those without, and perhaps some augmentation of difficulties in the former. For example, the majority of clinicians identified differences between cognitive and affective

empathy in the men with ASD and those with intellectual disabilities alone, reporting that those with ASD appeared to grasp the cognitive aspect of empathy and know the 'correct answer', however displayed very little emotional resonance or affective empathy. Whereas those with intellectual disabilities alone at times displayed more difficulties in articulating or comprehending the idea of putting yourself in someone else's shoes, but exhibited an overtly emotional reaction. Although a very small sample, this particular finding was contrary to previous research exploring ASD and empathy profiles, and was the opposite pattern identified in Jones et al. (2010) whereby adolescent males with ASD showed less cognitive empathy but more affective empathy than adolescents with psychopathic tendencies. As indicated in Chapter Six (The Interview Study), due to differences in design, comparison sample and size the studies are not directly comparable, however they could support the possibility of multiple impairments of empathy (Rogers et al., 2006) or numerous avenues of deficits in sexual offending in individuals with ASD.

A number of theorists have referred to ASD as a disorder of empathy (Smith, 2009; Baron-Cohen, 2009), with evidence from neuropsychological models of empathy providing some support for suggested empathic structures e.g. medial pre-frontal cortex, orbito-frontal cortex, the insular and anterior cingulate cortex to be impaired in individuals with ASD (Baron-Cohen, 2011; Bird & Viding, 2014; Tantam, 2012). Smith's (2009) Empathy Imbalance Hypothesis and the Empathising: Systemising Theory (e.g. Baron-Cohen & Wheelwright, 2004), suggest that deficits in empathy and perspective taking come at a cost of enhanced analytical and rule-based processing systems, with some support from the aforementioned neuropsychological research. Other theories of ASD include wider references to difficulties (e.g. Baron-Cohen & Wheelwright, 2004), with some identifying global empathy deficits (Mathersul et al., 2013; Shamay-Tsoory et al., 2002) and reporting of variation in cognitive and affective empathy in clinical/forensic and non-forensic/clinical ASD populations (Dziobek et al., 2008; Rogers et al., 2007; Mazza et al., 2014; Baron-Cohen & Wheelwright, 2004). Recent research has proposed that empathy is not necessarily impaired in individuals with ASD but that it is perhaps not subject to the same triggers as those without, or that empathic responding is diminished due to *heightened* emotional distress as the observed/imagined affect of another (Baron-Cohen, 2011; Scwhenck et al., 2012; Jones et al., 2010).

Empathy research in ASD frequently falls within two paradigms: those which compare empathy in individuals with ASD to typically developing children and adolescents, or other populations such as offenders and individuals with personality disorders (including psychopathy), or mental illness (e.g. Rueda et al., 2015; Jones et al. 2010); and that which explores the use of interventions or treatment groups to increase empathy in individuals with ASD. This latter paradigm is predominantly undertaken within a general social skills framework or theory of mind programmes (Holopainen et al., 2018; Gates et al., 2017). For example, Gantman et al. (2012) reported that following a randomised control trial in young adults with ASD (18-23 years) using the PEERs programme (a care-giver assisted social skills intervention), the adults with ASD reported significantly less loneliness and improved social skills knowledge. Care givers reported overall improvements for the young adults, including significantly increased scores on the Empathy Quotient (the treatment group had a mean increase of +7, SD=9.75, whereas the delayed treatment group had a mean decrease of -1.13, SD=3.60,  $p < 0.04$ ). Using a theory of mind framework, Holopainen et al. (2018) investigated whether a theory of mind training is able to improve empathic responses and their findings illustrated a significant increase between baseline and post-intervention for the treatment group (Baseline mean = 3.34, SD=0.79, Post-Intervention mean = 3.60, SD=0.60,  $F(1,71)=7.74$ ,  $p < .01$ ) but not for the waiting list group (Baseline mean = 3.47, SD=0.72, Post-Intervention mean = 3.42, SD=0.71,  $F(1,62)=0.24$ ,  $p < .63$ ). Research addressing different facets of empathy i.e. teaching theory of mind, and using varying methods of treatment e.g. as standalone content or within a wider programme, can support investigation into the empathy profile of ASD and differentiation between impairments in affective and cognitive empathy.

Trials and interventions to increase empathy have been used in non-ASD populations and non-clinical or forensic settings to address both cognitive and affective aspects of empathy. For example Kremer and Dietzen (1991) reported that teaching students to recognise emotional states in themselves and others resulted in an increase in empathic skills, whereas Feshbach (1984) and Feshbach and Feshbach (2009) suggested increases in empathy following training in perspective taking. Other studies in educational settings addressing empathy have demonstrated positive learning outcomes and lower aggression levels but negligible changes in empathy (Feshbach & Konrad, 2001). Despite variability in

findings, studies such as these illustrate the importance of empathy not solely for social interaction but also resilience, learning and educational achievement.

Therefore, given that research suggests differences in empathy between individuals with ASD and those without, and that there is little known about differences in empathy across the autistic population, this study was designed to pilot in schools a six-week empathy training group, adapted for adolescents with intellectual and developmental disabilities, and to explore any potential change in empathy scores in adolescents with and without ASD, including those who display harmful or risky sexual behaviours.

Schools were approached to participate in the study due to lack of availability of forensic samples. Although organisers of the programme selected, ySOTSEC-ID, regularly held facilitator training, there were no groups of young people with autism and harmful sexual behaviour running at the time of the study that could be accessed. As such the empathy module from the programme (Keep Safe: Empathy, Malovic et al., 2018) was selected as a standalone unit to run in schools.

## **7.2 Methods**

### **7.2.1 Participants**

Sixteen participants were recruited from a special education needs school in the East of England. The school included a sixth form college and specialised in providing education services for pupils aged two to nineteen years with intellectual and developmental disabilities.

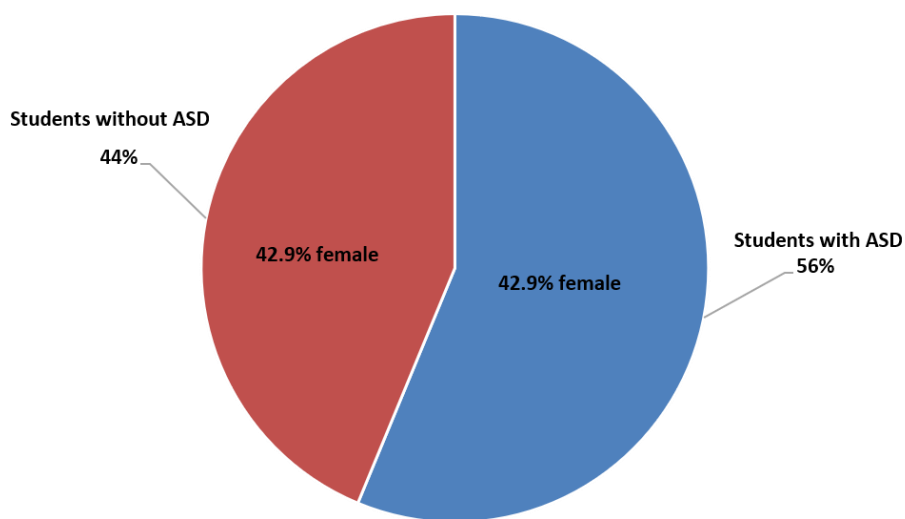
Participants in the study constituted all pupils from two classes, one larger group in the final year of secondary education (year twelve) (n=10) and a smaller group in the first year of college (year thirteen) (n=6). Participant characteristics are displayed in Table 19.

The participants had a mean baseline age of 16.56 years (SD=.96, range=15-18) and overall 56% had a diagnosis of ASD. Just over two thirds of participants were male (n=11) and 78.9% had a diagnosis of ASD, compared to 22.2% of female participants with ASD. Whilst

this difference is substantial, it is not significant ( $\chi^2=0.78(1)$ ,  $p>.596^{47}$ ), and typical of gendered ASD prevalence.

As a school for those with special education needs, individuals without an ASD would be anticipated to have an intellectual disability or mental health condition that impaired their ability to learn in a mainstream educational environment. Of those without an ASD diagnosis ( $n=7$ ), four had an intellectual disability, two mental health conditions and one, foetal alcohol syndrome. Surprisingly none of the participants with ASD were reported to have any co-morbid mental health issues. This is unexpected due to high rates of mental health problems in adolescences and increased risk amongst those with intellectual and developmental disabilities (Ghazuddin et al., 2002; Wing & Attwood, 1987).

**Figure 26: Number of Students with ASD (and shows gender %)**

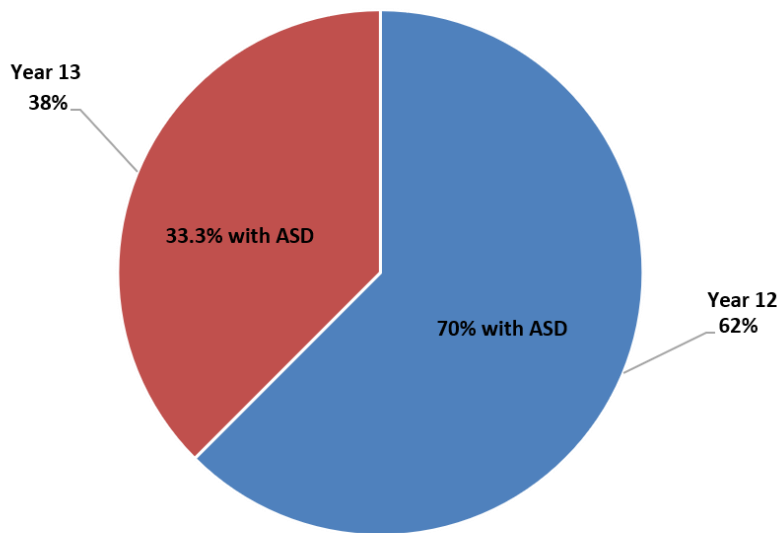


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<sup>47</sup> Fisher's Exact Test



**Figure 27: Number of Students in School Years (and shows % with ASD)**



As reported by the school facilitator on the demographic and historic information form, less than half of the entire sample displayed challenging behaviour 43.8% (n=7), of whom, 71.4% were on the spectrum. All who displayed harmful or risky sexual behaviours (n=3) had an ASD (again reported by the school facilitator by the same form). For those who displayed risky sexual behaviours this included stalking like/persistent behaviours, invading of personal space and touching (of non-sexual areas) and one case of looking in changing rooms and sexual assault of younger family members. Non-sexual behaviours included aggression (verbal and physical), non-compliance and antagonistic behaviours for both autistic and non-autistic participants.

### **7.2.2 Design**

A quantitative comparative control, pre- and post-intervention design was used for the study. The measures (described below) were completed at three time points: (i) time 1 (baseline) - one week prior to a control (treatment as usual) period where the students were on the six-week holiday period, (ii) time 2 (pre-intervention) – following the six-week holiday and prior to the start of the empathy intervention, (iii) time 3 (post-intervention) - one week following completion of the six-week empathy intervention.

### 7.2.3 Measures

A demographic and historic information form recorded intellectual disability, ASD and mental health diagnoses (as reported by the school facilitator) in addition to details of challenging behaviours (including harmful sexual behaviours), along with any help or treatment previously received (see Appendix 5 for demographic data collection form).

**Intelligence:** An approximate measure of intelligence was taken using the two-subtests (vocabulary and matrix reasoning)<sup>48</sup> of the *Wechsler Abbreviated Scale of Intelligence - Second Edition (WASI-II)* (Wechsler, 2011). The assessment was completed by the author individually with each participant.

**Autism.** Potential participants with a diagnosis of ASD were identified by the class teacher. The Autism Quotient Adolescent (AQ-Adolescent) (Baron-Cohen et al., 2006) was also completed for all participants at baseline (Appendix 5). The AQ-Adolescent is a short screening questionnaire to assess how many traits and behaviours characteristic of ASD an individual has. The AQ-Adolescent is a teacher- or parent- report version of the self-report Autism Quotient Adult (AQ) (Baron-Cohen et al., 2001). The AQ and AQ-Adolescent are made up of fifty questions covering five areas: social skills, attention switching, attention to detail, communication and imagination. A score above thirty is indicative of an ASD for the AQ Adolescent. Both the AQ and the AQ Adolescent display good face validity in discriminating between ASD and non-ASD populations. For example, 89.3% of adolescents with ASD scored above the critical threshold of 30 on the AQ-Adolescent (with no matched controls scoring this high, and only 2% of controls scoring at 29), and high construct validity (an alpha coefficient of 0.79) (Baron-Cohen et al., 2006). Despite recruited participants potentially being sixteen years old and thus eligible to complete the AQ-Adult, due to the expected intellectual disability and/or learning difficulties, the teacher-completed AQ-Adolescent was selected. For any participants who did not have a diagnosis of ASD yet met the cut-off threshold on the AQ, a further assessment (the Autism Diagnostic Observation

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<sup>48</sup> Vocabulary and Similarities subtests were used for one participant who was blind.

Schedule-2 (ADOS-2), Lord & Rutter, 2012) was offered (n=3), however these individuals did not accept further assessment and remained in the No ASD group for analysis.

**Behaviour.** The *Strengths & Difficulties Questionnaire* (SDQ) (Goodman, 1997) is a brief and very widely used screening measure used to assess behaviour, emotions and relationships (Appendix 5). The questionnaire takes approximately ten minutes to complete and consists of twenty-five items covering five domains: emotional problems, conduct problems, hyperactivity, peer problems and prosocial behaviours. The overall SDQ score consisting of the five domain subscales can be classified as 'normal', 'borderline' and 'abnormal' according to published norm data (Goodman, 1997). The subscales can also be used to calculate internalising and externalising behaviour scores. Although there are mixed views on whether a five or three factor model is optimal (e.g. Goodman et al., 2010) the SDQ has proved a robust measure of child mental health problems across countries and cultures (Achenbach et al., 2008), and in children with intellectual disabilities (Emerson, 2005) and individuals with ASD (Findon et al., 2016). There are self-report, parent/carer and teacher versions of the SDQ for those under sixteen. Due to the literacy and/or cognitive difficulties anticipated in recruiting students with special education needs the self-report version was considered inappropriate so, the teacher report version of the SDQ was completed by the student's teacher (and co-facilitator) at baseline, pre- and post-intervention.

**Empathy.** As empathy is a multi-faceted concept, multiple measures were employed in the study. Each measure was completed at baseline, pre- and post-intervention by the students.

The *adapted interpersonal reactivity index (IRI)* (Garton & Gringart, 2005) was selected to give a self-reported measure of empathy. The Interpersonal Reactivity Index (IRI) (Davis, 1980) is a self-reported measure of empathy for adults with good psychometric properties. The IRI assesses cognitive and affective aspects of empathy across four factors: perspective taking, empathic concern, personal distress and fantasy. Correlations of the IRI with other measures of empathy suggest construct validity (Davis, 1983), and alpha coefficients ranging between 0.68-0.79 have been reported (Christopher et al., 1993; Davis 1980). A higher score is said to reflect higher levels of empathy/empathic behaviours. Garton and Gringart

(2005) adapted the IRI for children and young people by simplifying the items and reducing the questions from 28 to 18 (the items still spread evenly across Davis' original four factors) following testing of 435 children aged 8 to 9 years old (See Appendix 5). Garton and Gringart's analysis also explored a two-factor model of empathy (with 12 items), splitting the items between cognitive and affective components of empathy only. As the target population were anticipated to have learning difficulties, if not disabilities, Garton and Gringart's adapted 18-item IRI was chosen despite individuals potentially being over sixteen.

**Table 19: Participant characteristics as recorded on the Student Demographics Form**

	<i>All % (n)</i>	<i>ASD % (n)</i>	<i>No % ASD (n)</i>
	<b>100 (16)</b>	<b>56.3 (9)</b>	<b>43.8 (7)</b>
<b>Gender</b>			
<i>Male</i>	68.8 (11)	77.8 (7)	57.1 (4)
<i>Female</i>	31.3 (5)	22.2 (2)	42.9 (3)
<b>Age at Baseline mean (sd)</b>			
	16.56yrs (.96)	16.56yrs (1.01)	16.57yrs (.97)
<b>School Year</b>			
12	62.5 (10)	77.8 (7)	42.9 (3)
13	37.5 (6)	22.2 (2)	57.1 (4)
<b>Autism Spectrum Disorder</b>			
	-	56.25 (9)	43.75 (7)
<b>ID/Other DD</b>			
<i>Yes</i>	37.5 (6)	22.2 (2)	57.1 (4)
<i>No</i>	62.5 (10)	77.8 (7)	42.9 (3)
<b>Mental Health diagnosis</b>			
<i>Yes</i>	12.5 (2)	-	28.6 (2)
<i>No</i>	87.5 (14)	100 (9)	71.4 (5)
<b>Display challenging behaviour</b>			
<i>Yes</i>	43.8 (7)	55.6 (5)	28.6 (2)
<i>No</i>	56.3 (9)	44.4 (4)	71.4 (5)
<b>Displays risky sexual behaviours</b>			
<i>Yes</i>	18.8 (3)	33.3 (3)	-
<i>No</i>	81.3 (13)	66.7 (6)	100 (7)

*Short empathy eliciting stories* employing the *Self-Assessment Mannequin (SAM)* methodology (Bradley & Lang, 1994) were used to explore participants' affective response (SAM stories). The Self-Assessment Mannequin, 'SAM', is a valence scale of a mannequin displaying a range of positive, neutral and negative emotions (moving from one emotion to other along the scale). SAM stories have been utilised in various studies of empathy to measure participants' emotional responses (Langdon et al., 2015; Seara-Cardoso et al, 2012, 2013). At each time point, participants in this study rated their emotional response to a story designed to evoke happiness, sadness or anger e.g. a family member dying, ruining a new coat or a receiving a puppy for Christmas. The stories are scored on five-point likert

scale ranging from 1 to 5, with 5 being the top end of the scale for the 'correct' emotion e.g. sadness for the family member dying or happiness for receiving a puppy. The participants received a total score from the three stories at each time point (control, pre- and post-intervention). Again, a higher score is said to reflect higher levels of affective empathy or emotional resonance. Stories were adapted from the mATCH Study (Langdon et al., 2015) and adjusted in order to be more appropriate for the age of the participant group. Minor amendments to the 'SAM' scale were made to ensure the difference between facial expressions along the scale was clear e.g. exaggerated facial expressions<sup>49</sup> (see Appendix 5 for adapted SAM story example and 'SAM' scale).

*Victim Empathy Vignettes* assess a person's ability to take the perspective of the victim and identify their emotions. A short story is read or listened to followed by five questions about the relationship between the victim and perpetrator and how the victim felt e.g. if the victim was at fault and how they felt about what happened, etc. Vignettes are frequently used in assessing victim empathy in offending and non-offending populations, and those with ASD (Becket and Fisher, 1994; Jones et al., 2010; Kristensen Wittaker et al., 2006). The vignettes in this study were adapted from Becket and Fisher (1994) and Saleem (2005), they involved one example of aggression/violence and one sexual example at each time point (see Appendix 5 for example). Each story was scored according to guidance in Saleem (2005), whereby a correct answer scored 5 points (i.e. identifying that the victim felt 'bad' and not 'good' after they had been attacked), an incorrect answer scored 1 point (reporting that a victim would like to be assaulted again) and 3 points if they answered 'Don't Know'. The participants received a score from each of two stories which were added together for the control, pre- and post- intervention time points, with a higher score indicated more empathy with the victims in the stories.

**Empathy Intervention:** Qualitative feedback was sought from staff and students following completion of the post-intervention measures. The Keep Safe Facilitator Review was completed by the two facilitators (the author and school facilitator). This review is part of the Keep Safe Programme (Malovic et al. 2018) and requires facilitators to provide a score

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<sup>49</sup> This was undertaken in response to early feedback from schools during the recruitment phase.

of concentration, comprehension and participation for each student. A maximum score of 10 can be attained for each domain with a combined high score of 30 indicating maximum participant in the group and successful engagement with the material. Support staff questionnaires were also distributed to those who regularly supported the group. The students were asked for their feedback individually by the school facilitator following the final session of the study (after the post-intervention data collection). Student comments were recorded and sent to the author.

#### **7.2.4 Procedure**

Ethical approval was sought, and granted from the Tizard Centre Ethics Committee, University of Kent. The study procedure underwent a series of amendments (described below) following recommendations from the school regarding how to obtain consent for the participants and each amendment was approved by the committee (see Appendix 5). Initially, signed student consent and parental assent forms were to be collected however following multiple discussions with the school facilitator, who anticipated difficulties in acquiring such forms (due to previous experience regarding return of school documentation and paperwork rather than parental disagreement with the study) it was felt that approaching the parents at parent-teacher evening (due to the timing of the study beginning at the end of the summer term and finishing with the end of the autumn term) would be the best method. An opt-out procedure was utilised following direction from the school and multiple consultations with the Tizard Ethics Committee, who gave approval for the recruitment to take place through this method (See Appendix 5). A number of criticisms face 'opt out' methods of recruitment, including that consent is 'nudged' and not 'freely given' (Junghans et al., 2005), however parents were provided with three opportunities to opt out of their child's data being included in the study. These opportunities included two face-to-face meetings at parent-teacher evening as stated above (coinciding with the baseline and post intervention data collection points), and an email/telephone call sent prior to the end of the study restating the nature and purpose of the study and offering a further opportunity to voice any concerns or opt their child out of the study (also see below).

The sampling method was purposive in order to ensure participants were identified. Potential candidates fell within a specific, niche population, therefore random sampling was not feasible for a study of this size with the resources available.

As the research was exploring the use of an intervention adapted for adolescents with intellectual and developmental disabilities, schools for students with special education needs were approached during the recruitment phase. This included intellectual disability and ASD specific schools, as well as mainstream schools and colleges that offered services for students with additional or complex needs. A total of sixty-five schools and colleges were contacted by email, post and telephone by the author. Two schools declined in the first instance, due to being unable to facilitate a study because of staffing resources and the other from lack of eligible candidates. Visits were made to three schools by the author to present the study and discuss what would be required. At this stage, a further school withdrew as they felt their students did not meet the criteria (none with any concerning sexual behaviours). This left two schools in initial agreement to participate, however at the first time point for data collection, one school stopped responding to contact from the author and this was taken as an indication of no longer wishing or being able to participate.

Therefore the study acquired all participants from one school, spread across two year groups. Following initial consultation with the teacher and primary point of contact for the school, it was decided that an opt-out procedure would be followed regarding permission from the parents (as this was considered to be most appropriate by the teacher). All students participating in the study were over 16 years old and deemed to have capacity by the teacher (and confirmed by the author), however as the students did have learning or developmental disabilities and the study was being carried out on school premises as part of their education programme, parental consent was also sought. The parents and students were initially approached by their Personal, Health and Social Education (PHSE) teacher (the school contact for the Study and Senior Leader for Specialist Support and Intervention) about the study being undertaken as part of their child's regular class, equipped with the information sheets provided (see Appendix 5). No parents approached voiced any concern or opted their child out of the study therefore, the author attended the school to introduce herself and answer any questions from the students about the study. Following further



agreement by the students, data collection was started. At the end of the group and following the post-intervention measures the teacher re-confirmed consent by the parents for their child's data to be included in the study. This was done by an opt-out letter (or email depending on parent's preference of school communication) reminding the parents of the nature of the study and the information collected, and subsequently followed up face to face at the Parent-Teacher evening or by telephone call (depending on attendance) (including in Appendix 5 – Revised Ethical Review Checklist August 2019). All parents agreed and a record of calls/conversations with parents was kept by the teacher.

The school facilitator completed the AQ-Adolescent (AQA) and demographic/historical information forms prior to the first data collection timepoint and completed the Strengths and Difficulties Questionnaire (SDQ) for students at each subsequent time point. The empathy measures were completed during one class session for each group for each of the three time points. As many of the students required support to complete the forms, each measure was read aloud by the teacher or author and the students filled them in individually, assisted by support staff where required. Students were free to decline to complete the measures if they so wished, and on occasion this occurred (see analysis and discussion for further details). Students completed the WASI individually with the author.

Following completion of the study participants were provided given debriefed by the author. This included a presentation to each of the groups outlining the purpose of the study and its findings (Appendix 5), and a study pack summarising the course and work completed throughout the intervention. Each student also received a report containing their scores from the measures and assessments undertaken within the study, along with an explanation and feedback from the group facilitators (Appendix 5).

### **7.2.5 Intervention**

The empathy intervention used in the study was a single module from the Keep Safe programme (ySOTSEC-ID & Be Safe, 2017; Malovic et al., 2018). The benefits of peer-helping approaches was highlighted in Chapter Six (Interview Study) e.g. EQUIP (Gibbs et al., 1993), and Keep Safe is a year-long six module treatment group for children and young people with intellectual or developmental disabilities who display risky or harmful sexual

behaviours. The Keep Safe intervention is a youth adaptation of the SOTSEC-ID programme (see Chapter Six, Interview Study) which encompasses the same modular design and CBT approach, but with developmentally appropriate content (see Appendix 5 for content outline and structure of adult and youth programmes). The literature review has demonstrated a number of benefits of empathy interventions in schools and highlighted positive outcomes of CBT in individuals with intellectual disabilities and those with ASD (e.g. Vereenoghe & Langdon, 2013, Weston et al., 2016, also see Chapter Six, Interview Study), therefore the six week Keep Safe empathy module (Keep Safe: Empathy) was deemed appropriate for this study.

Keep Safe: Empathy is designed to increase recognition and understanding of feelings (own and others) and places emphasis on the consequences of actions that do not consider or disregard, others' feelings. Respect, and why and how we apologise are also covered. As such, the module was chosen because Keep Safe (ySOTSEC & Be Safe, 2017; Malovic et al., 2018) is designed specifically for children and young people with intellectual and developmental disabilities, and the empathy component is a discrete unit that could be utilised for the purposes of the current study.

Some aspects of the content were amended due to the time available and needs of the group (for example, removal/or explanation of references to material from other modules in the programme). Additionally, the emphasis on sexual examples was reduced (as these were not primarily behaviours of focus of the group) and other behaviours were included such as aggression, bullying, conflict and situations where general empathy is required e.g. seeing someone who is sad. An outline of the six-week intervention is given in Appendix 5.

The intervention was run separately for each year group and took place within the student's usual timetable and Physical Health Social and Emotional (PHSE) class to ensure minimal disruption to their education programme. Sessions were facilitated by the PHSE teacher and author, with assistance from regular support staff each week. Due to the differing levels of ability across the year groups the sessions differed slightly in the quantity of material covered but not the content e.g. the Year 12 group discussed 3-4 examples whereas the year 13 only covered 1 or 2. Visual aids were used and group discussion was promoted with the author noting comments and ideas on a white board. Writing activities

were kept to a minimum due to differing abilities and time constraints. A photograph was taken of the white board at the end of each session and included in a workbook given to the students at the end of the study along with a certificate, their scores on the measures and general information about the research and its findings (See Appendix 5).

#### **7.2.6 Data Preparation and Analysis**

The study objective was to pilot an empathy module adapted for adolescents with intellectual and developmental disabilities. As such, and due to the small sample size and sampling method, what follows is a preliminary exploration of any trends in the small data set. On initial, visual examination of the study measures, as perhaps would be expected, it was evident the data were not normally distributed (see Appendix 5), therefore non-parametric analyses were utilised, and a narrative reflection of the intervention incorporating views of the author and feedback from the teacher and students is provided.

Sixteen participants were recruited in the study, however only 13 complete sets of data were collected, analyses where  $n < 16$ , are identified in the tables. Incomplete datasets were the result of students occasionally declining to complete the measures.

Attendance to the classes was good, with 56% of participants attending all sessions, and 88% attending over 80% (5 out of 6 sessions). Only one student attended less than half of the sessions (a typical pattern for this individual and rather than being specific to the intervention). As mentioned previously, although all students had consented to complete the intervention and the required assessments, on the day of data collection the students were free to decline if they so wished however were still able to continue to attend the remainder of the programme. A handful of students for various reasons (i.e. mental health, outright declining) did not complete all the outcomes measures (the SDQ was completed by the school facilitator at all time points) and the study collected 12 complete sets of assessments (75% of sample). Due to the small sample size and the study being a feasibility trial, all participants (where measures were available) were included in the statistical exploration.

## 7.3 Results

### 7.3.1 Sample Characteristics

As said above, due to the small sample size lack of normal distribution in the data non-parametric statistical tests were employed. Mean IQ and AQ-A scores are given in Table 20, and Mann-Whitney U tests showed, as regards IQ, an almost significant difference in IQ between those with ASD and those without, with the former having a median score of 82.00 and the latter a median of 50.50 ( $U=34.5$ ,  $z=1.931$ ,  $p=0.51$ ,  $r=.14$ ).

There were more pupils with ASD in the year 12 group ( $n=7$  vs.  $n=2$ ) with 77.8% of participants with a diagnosis compared to 22.2% in year 13 ( $\chi^2=2.049(1)$ ,  $p=.302$ <sup>50</sup>). However the AQ-A scores for year 13 were higher than those in year 12 (31.00 compared to 26.00, respectively), but not significantly so ( $U=39.0$ ,  $z=.983$ ,  $p=.368$ ,  $r=0.02$ ). Surprisingly, the median AQ-A scores were the same for those with and without ASD (Median=28.00  $U=39.0$ ,  $z=.983$ ,  $p=.368$ ,  $r=0.02$ ), and for male and female participants (Median=28.00  $U=33.5$ ,  $z=.684$ ,  $p=.510$ ,  $r=0.04$ ).

An overall difference of ability was present between the two year groups, with the year 12 scores being higher (median=82.00) than year 13 (median=60.00). However the difference was not significant ( $U=6.5$ ,  $z=-.177$ ,  $p=.076$ ,  $r=-0.14$ ), and can be explained by the higher number of participants with ASD in the year 12 group. Table 20: Intelligence and Autism Quotient Adolescent (AQ-A) Scores.

**Table 20: Intelligence and Autism Quotient-Adolescent (AQ-A) Scores**

	All % (n)	ASD % (n)	No % ASD (n)
	100 (16)	56.3 (9)	43.8 (7)
<i>FSIQ mean (sd)</i> <sup>51</sup>	75.52 (16.93)	84.71 (11.12)	65 (16.98)
<i>AQ score mean (sd)</i>	24.88 (8.74)	25.56 (7.96)	24.0 (10.23)

<sup>50</sup> Fisher's Exact Test

<sup>51</sup> N=13

**Table 21: Outcome Measures by Time**

Measure	Baseline					Pre-Intervention					Post-Intervention				p*	
	N	Mean (SD)	Mean Rank	Median	Range	N	Mean (SD)	Mean Rank	Median	Range	N	Mean (SD)	Mean Rank	Median		Range
Interpersonal Reactivity Index 18 Items (IRI-18) (all participants) Total Score	15	47.13 (15.50)	1.73	43	28-68	15	52.20 (15.79)	2.27	53	26-75	15	50.53 (17.34)	2.00	55	26-72	.344
Interpersonal Reactivity Index 12 Items (IRI-12) (all participants) Total Score**	15	31.47 (10.58)	1.50	30	17-46	15	36.67 (10.27)	2.47	37	18-52	15	34.80 (11.18)	2.03	36	16-47	<b>.025</b>
Socio-Emotion Eliciting Stories (SAM) Total Score**	14	12.00 (2.03)	1.93	12.50	9-14	14	11.75 (2.56)	2.11	12.50	6-15	14	11.43 (2.86)	1.96	12.50	5-15	.847
Victim Empathy Vignettes (VE) Total Score**	13	23.92 (2.98)	1.88	24.00	16-28	13	23.54 (2.99)	1.69	24.00	17-27	13	25.23 (1.92)	2.42	26.00	22-28	.127
Strengths & Difficulties Questionnaire (SDQ) Total Score***	16	12.81 (5.59)	2.38	12.00	5-25	16	11.50 (4.03)	1.91	10.50	6-18	16	10.69 (3.03)	1.72	10.00	6-17	.115

\*Related samples Friedman's ANOVA of ranked scores.

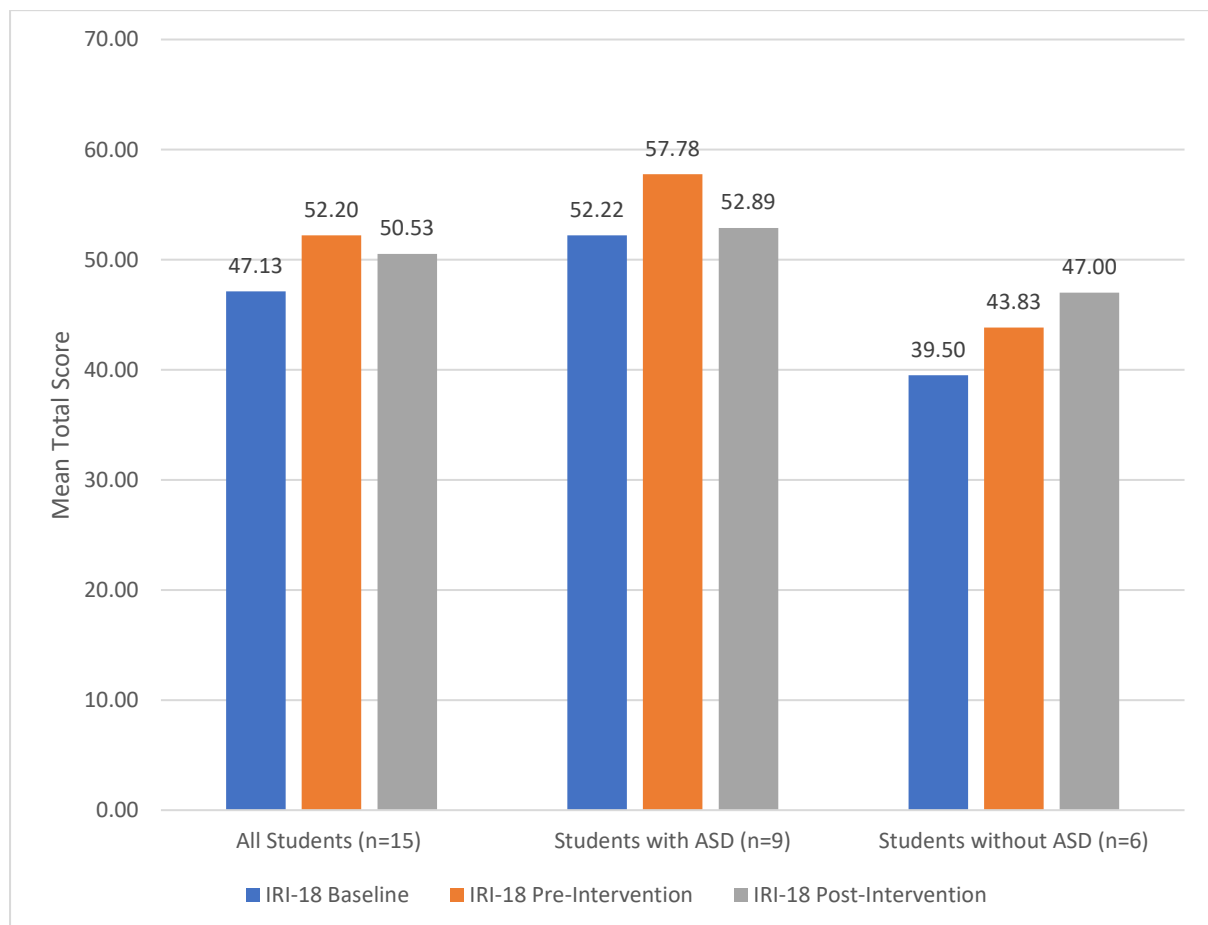
\*\*Higher scores on empathy measures suggestive of higher levels of empathy

\*\*\*Higher scores on SDQ indicate higher levels of behavioural problems.

### 7.3.2 Empathy Measures and SDQ

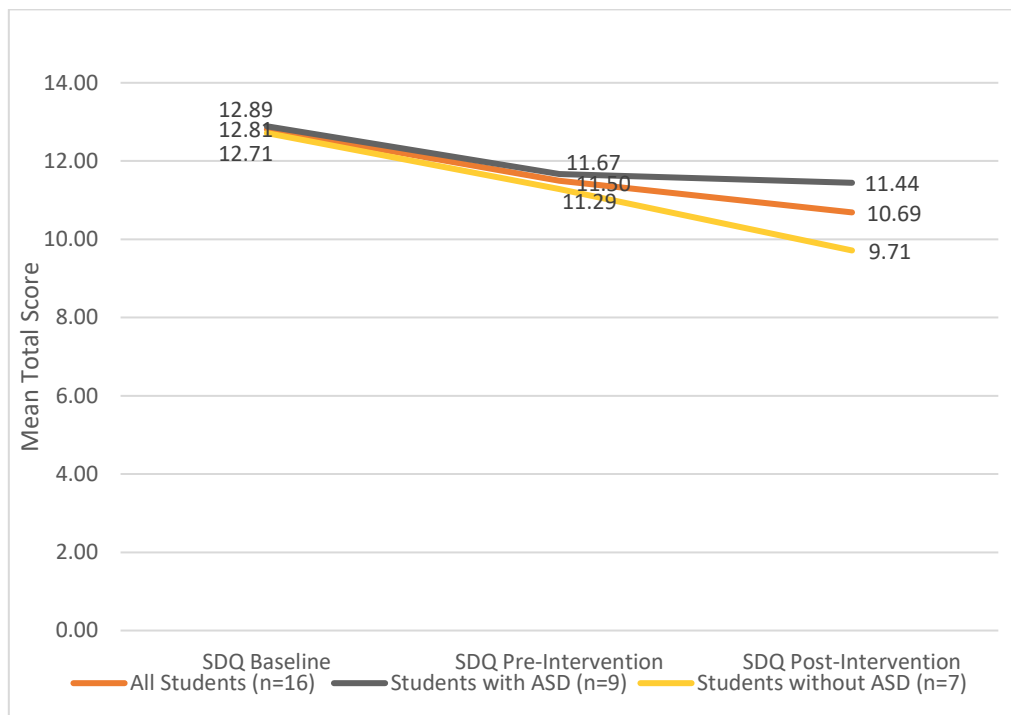
Friedman's ANOVAs (1937) were used to explore the empathy measures and the SDQ across the three time points (at baseline, after a six-week control period (pre-intervention), and at post-intervention) for all participants (Table 21 : Outcome Measures by Time). The adapted Interpersonal Reactivity Index (Garton & Gringot, 2005) has a twelve (IRI-12) and eighteen item scoring paradigm (IRI-18). Both have been used in analysing the results. No significant changes were present in the 18-item Interpersonal Reactivity Index (IRI-18) (Figure 28), SAM stories or Victim Stories, and any increases in empathy scores (suggesting improvements) were minimal (IRI-18:  $\chi^2(2)=2.13$ ,  $p=.344$ ; SAM Stories:  $\chi^2(2)=.33$ ,  $p=.846$ ; VE:  $\chi^2(2)=4.12$ ,  $p=.127$ ) (Figures 28-40 and Table 21) .

**Figure 28: 18-Item Adapted Interpersonal Reactivity Index (IRI-18) – i**



Decreases in SDQ scores were present for the entire sample (suggesting improvement), however again, these were small and non-significant ( $\chi^2(2)=4.333$ ,  $p=.115$ ). The decreases were also spread across the time points rather than necessarily being attributable to the intervention (Table 21), Wilcoxon tests for ranked data showed neither the decrease between time 1 and 2 ( $T=19.00$ ,  $z=-1.58$ ,  $p=.115$ ,  $r=-0.09$ ) or times 2 and 3 to be significant ( $T=31.00$ ,  $z=-1.02$ ,  $p=.309$ ,  $r=-0.06$ ).

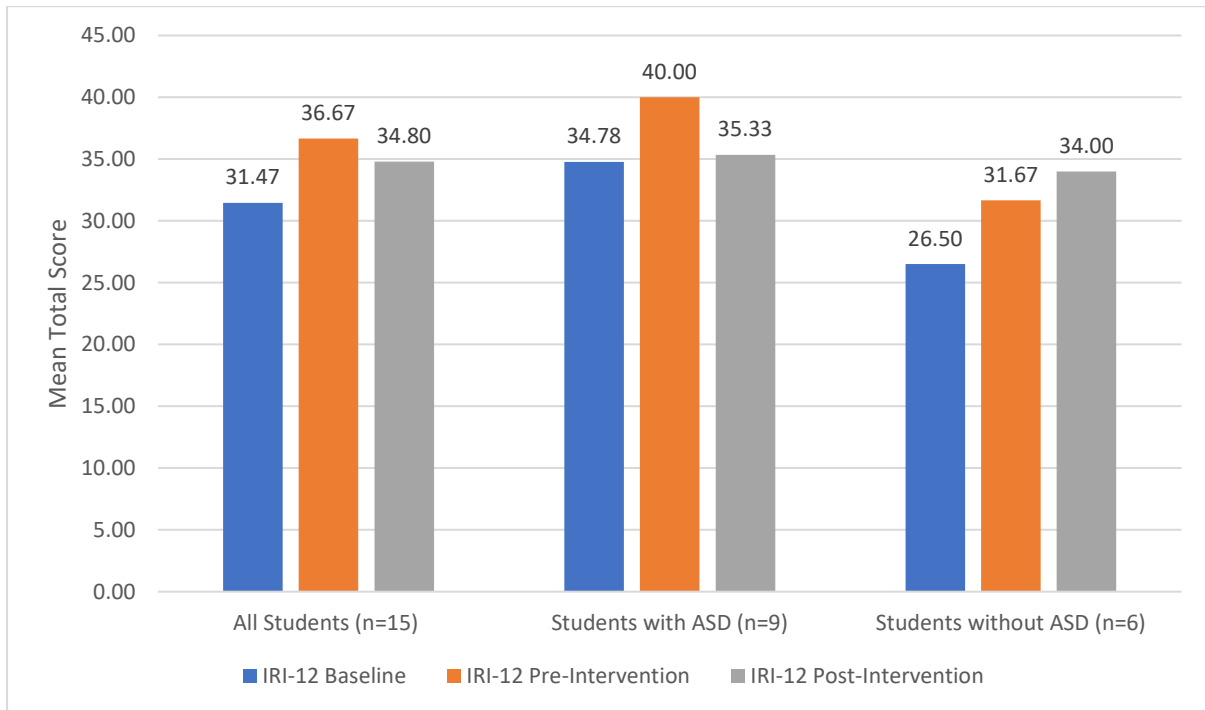
**Figure 29: Strength & Difficulties Questionnaire (SDQ) (Goodman, 1997)**



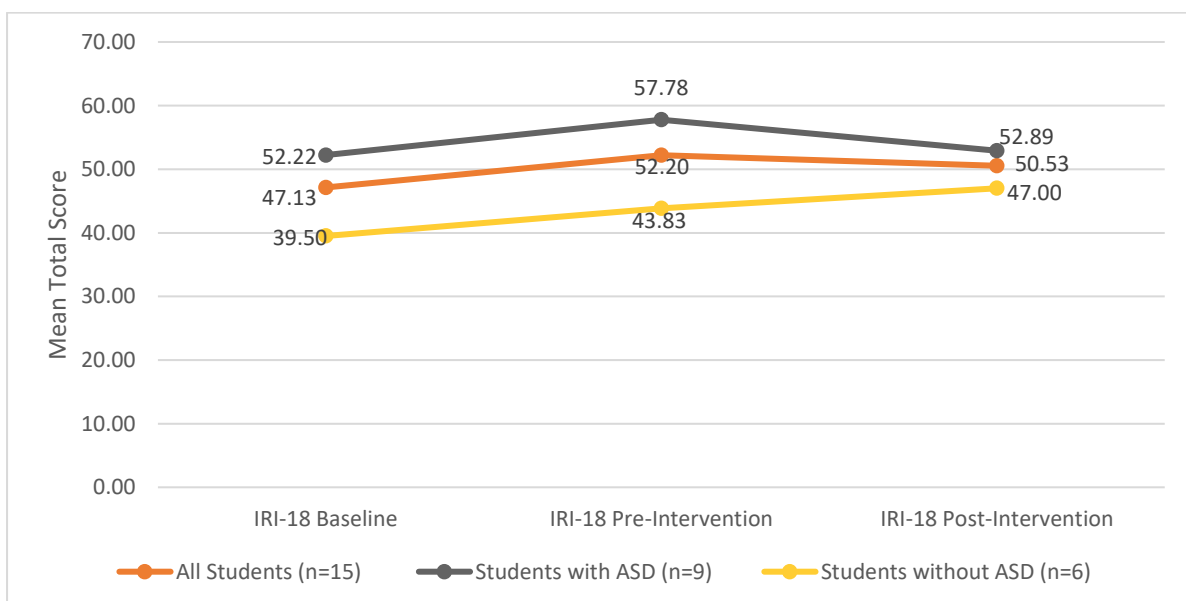
The 12-item Interpersonal Reactivity Index (IRI-12) (Figure 29) showed a significant difference (IRI-12:  $\chi^2(2)=7.404$ ,  $p=.025$ ), with an increase in scores between baseline and pre-intervention ( $T=88.50$ ,  $z=3.017$ ,  $p=.003$ ,  $r=-0.2$ ). This finding is attributable to three students whose scores increased following the 6-week control period and prior to the intervention starting (increases of 24, 20 and 17 compared to a mean difference of 5.20,  $SD=6.19$ ). Two of these students had a diagnosis of ASD and the other did not. The increases in scores were not retained and returned to baseline score levels post-intervention. Whilst post-intervention scores remain higher than at baseline on the IRI-12 for the entire sample, Wilcoxon tests for ranked data show the increase between time 1 and 3 to be non-significant ( $T=81.00$ ,  $z=1.197$ ,  $p=.231$ ,  $r=-0.7$ ), and any increase could be

attributed to improvements (as measured by the IRI) at time 2, rather than the result of the intervention at time 3. Excluding the three above mentioned students from the analysis renders changes in the IRI-12 across all time points to non-significant ( $\chi^2(2)=3.24, p=.1.97$ ) (Table 21: Outcome Measures by Time).

**Figure 30: 12-Item Adapted Interpersonal Reactivity Index (IRI-12) – i**

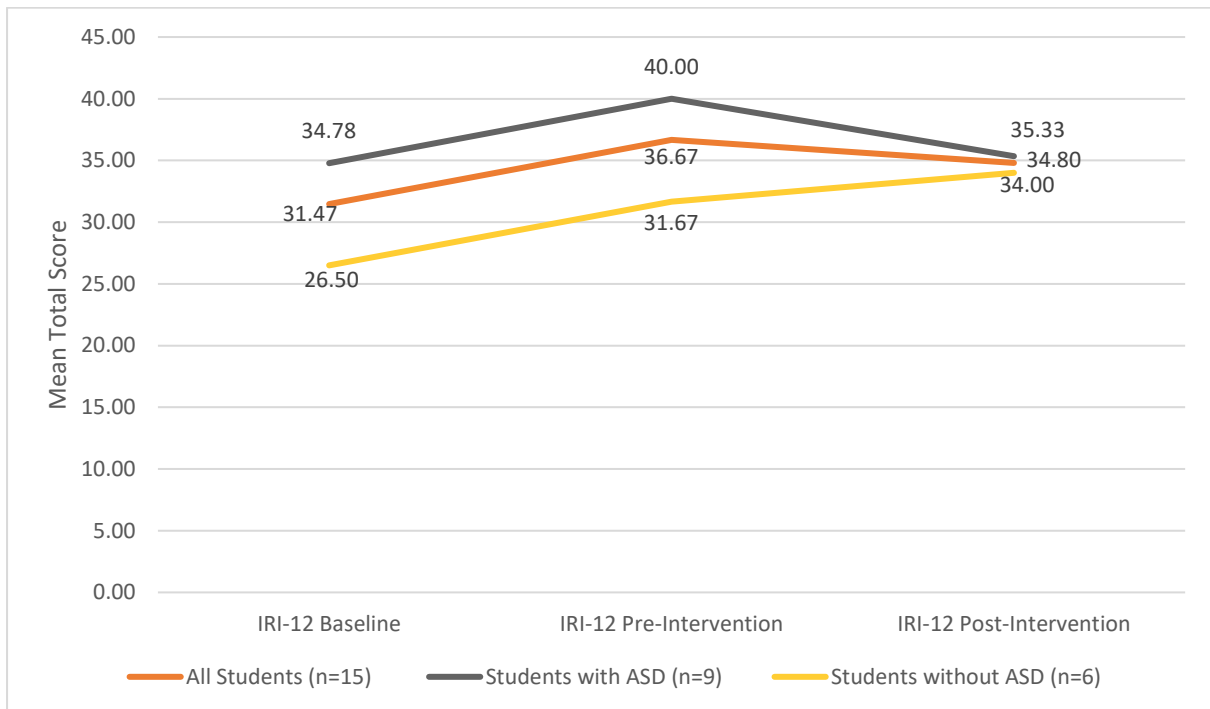


**Figure 31: 18-Item Adapted Interpersonal Reactivity Index (IRI-18) – ii**

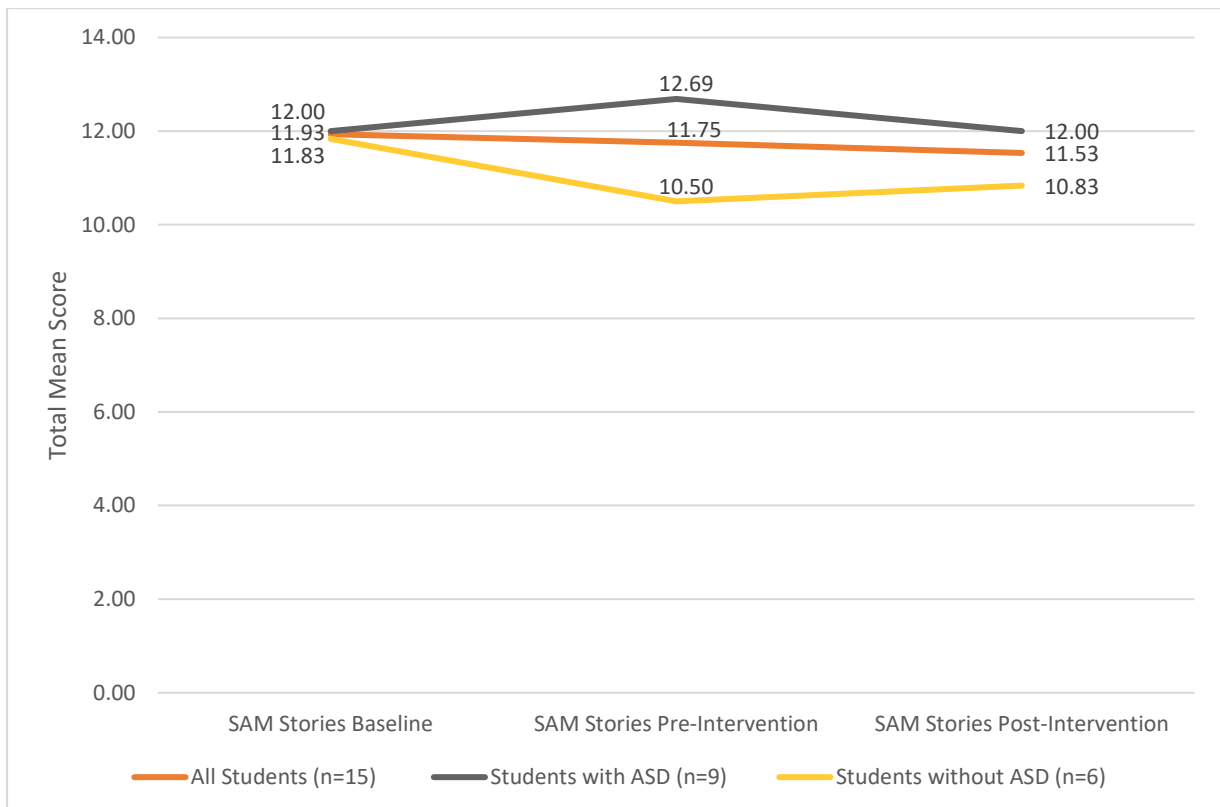




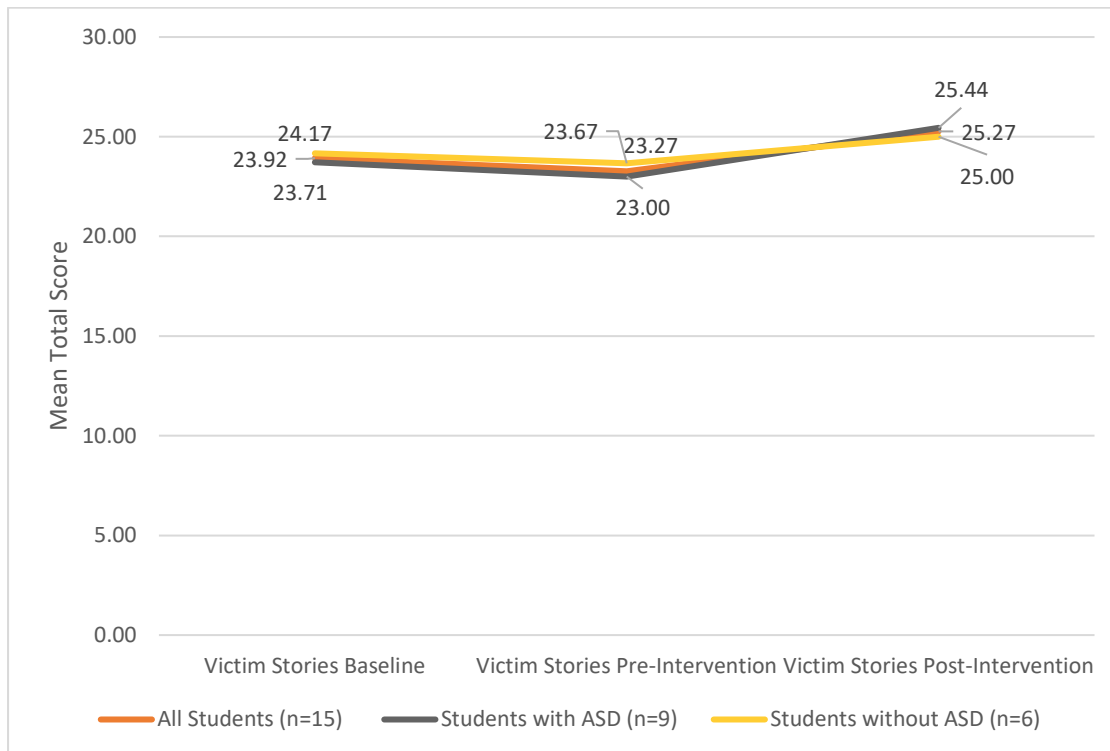
**Figure 32: 12-Item Adapted Interpersonal Reactivity Index (IRI-12) – ii**



**Figure 33: Socio-Emotion Eliciting Stories (SAM Stories)**



**Figure 34: Victim Empathy Stories**



### 7.3.3 ASD Group vs No ASD Group

Kruskal-Wallis and Mann Whitney-U tests were used to explore between-group differences at baseline, pre-, and post-intervention (See Tables 22 and 23).

For the most part, the ASD group had higher scores than the No ASD group across the empathy measures (Tables 22 and 23). None of these differences reached significance. The ASD group showed more fluctuations on their performance on the measures (with a higher number of increases and decreases over the three time points). The No-ASD group data tended to trend in the right direction, particularly on the IRI (12 or 18 item versions), with higher scores on the measures following the intervention (except for the victim empathy measure) as shown in the previous figures (Figures 28-33). The majority of these changes were minimal (mostly  $\leq \pm 1$ ) and could be attributable to performance on the day.

**Baseline:** The ASD group had higher baseline scores on the two general empathy measures (suggesting more empathy) but lower scores on the victim empathy measure (Tables 22 and 23), and lower on the SDQ (indicating less emotional and/or behaviour problems), in

comparison to participants without ASD. None of these differences reached significance (Baseline: IRI-18:  $\chi^2(1)=2.206$ ,  $p=.137$ , IRI-12:  $\chi^2(1)=2.051$ ,  $p=.152$ ; SAM Stories:  $\chi^2(1)=0.0$ ,  $p=.952$ ; VE:  $\chi^2(1)=0.0$ ,  $p=.942$ ; SDQ:  $\chi^2(1)=138$ ,  $p=.939$ ).

*Pre-Intervention:* There was no significant difference in scores between the ASD and no ASD group immediately prior to the intervention, for either the 18 or 12 item versions (IRI-18:  $\chi^2(1)=3.15$ ,  $p=.081$ ; IRI-12:  $\chi^2(1)=2.54$ ,  $p=.12$ ), however the ASD group did have higher scores than the No-ASD group (as at baseline) as illustrated in Tables 22 and 23. Increases from baseline to pre-intervention on the IRI-12 were shown by Mann-Whitney U tests to be significant for both the ASD group ( $U=34.00$ ,  $z=2.252$ ,  $p=.024$ ,  $r=.25$ ) and No-ASD group ( $U=15.00$ ,  $z=2.023$ ,  $p=.043$ ,  $r=.34$ ). However, as discussed above, this difference is attributable to three students with large increases in score at this time point. The difference in scores between baseline and pre-intervention on the IRI-18 did not reach significance for either group (see Tables 22 and 23).

The participants with ASD showed little or no change ( $\leq \pm 1$ ) in the other measures of empathy prior to the intervention, and the scores of participants without ASD remained stable between time 1 and 2 or showed very slight variation ( $\leq \pm 1$ ) (Tables 22 and 23).

**Table 22: Outcome Measures – ASD Group**

Measure	Baseline					Pre- Intervention					Post-Intervention					p* (Baseline to Pre-intervention)	p* (Pre- to Post-intervention)	p* (Baseline to Post-intervention)
	N	Mean (SD)	Median	Mean Rank	Range	N	Mean (SD)	Median	Mean Rank	Range	N	Mean (SD)	Median	Mean Rank	Range			
Interpersonal Reactivity Index 18 Items Scale (IRI-18) Total Score**	9	52.22 (15.57)	57	10.06	29-68	9	57.78 (16.51)	58	9.67	29-75	9	52.89 (19.25)	64	9.39	26-72	.129	.137	.859
Interpersonal Reactivity Index 12-Item Scale (IRI-12) Total Score**	9	34.78 (10.22)	37	10.00	21-46	9	40.00 (10.44)	43	9.50	23-52	9	35.33 (12.46)	43	8.94	16-46	<b>.031</b>	.109	.836
Socio-Emotion Eliciting Stories (SAM) Total Score**	9	12.00 (1.84)	12	8.06	9-14	8	12.69 (1.58)	13	8.81	10-15	9	12.00 (2.00)	13	8.28	8-14	.438	.469	1.0
Victim Empathy Vignettes (VE) Total Score**	7	23.71 (4.03)	24	7.07	16-28	9	23.00 (1.94)	23	9.25	20-26	9	25.44 (1.94)	26	8.28	22-29	.875	<b>.008</b>	.422
Strengths & Difficulties Questionnaire (SDQ) Total Score***	9	12.89 (6.77)	12.00	8.11	5-25	9	11.67 (4.77)	10.00	8.39	6-18	9	11.44 (2.07)	12.00	10.11	9-15			

\*Wilcoxon signed rank test

\*\* Higher scores on empathy measures suggestive of higher levels of empathy

\*\*\* Higher scores on SDQ indicate higher levels of behavioural problems.

**Table 23: Outcome Measures – No ASD Group**

Measure	Baseline					Pre- Intervention					Post-Intervention					p* (Baseline to Pre-intervention)	p* (Pre- to Post-intervention)	p* (Baseline to Post-intervention)
	N	Mean (SD)	Median	Mean Rank	Range	N	Mean (SD)	Median	Mean Rank	Range	N	Mean (SD)	Median	Mean Rank	Range			
Interpersonal Reactivity Index 18 Items Scale (IRI-18) Total Score**	7	41.57 (13.05)	39	10.06	28-63	6	43.83 (11.05)	46.50	9.67	26-58	7	42.86 (17.52)	39	9.39	18-68	.129	.152	.883
Interpersonal Reactivity Index 12-Item Scale (IRI-12) Total Score**	7	27.86 (9.87)	27	10.00	17-44	6	31.67 (8.41)	32.50	9.50	18-44	7	30.57 (12.87)	29	8.94	10-47	.063	.563	.359
Socio-Emotion Eliciting Stories (SAM) Total Score**	6	11.83 (2.32)	12.50	7.92	9-14	6	10.50 (3.21)	10	5.75	6-15	6	10.83 (3.82)	11	7.58	7.13	.5	.875	.5
Victim Empathy Vignettes (VE) Total Score**	6	24.17 (1.17)	24	6.92	23-26	6	23.67 (4.18)	25.50	9.25	17-27	6	25.00 (2.76)	25	7.58	22-28	.938	.375	.688
Strengths & Difficulties Questionnaire (SDQ) Total Score***	7	12.71 (4.11)	12.00	9.00	9-21	7	11.29 (3.20)	11.00	8.64	7-17	7	9.71 (3.90)	8.00	6.43	6-17			

\*Wilcoxon signed rank test

\*\*Higher scores on empathy measures suggestive of higher levels of empathy

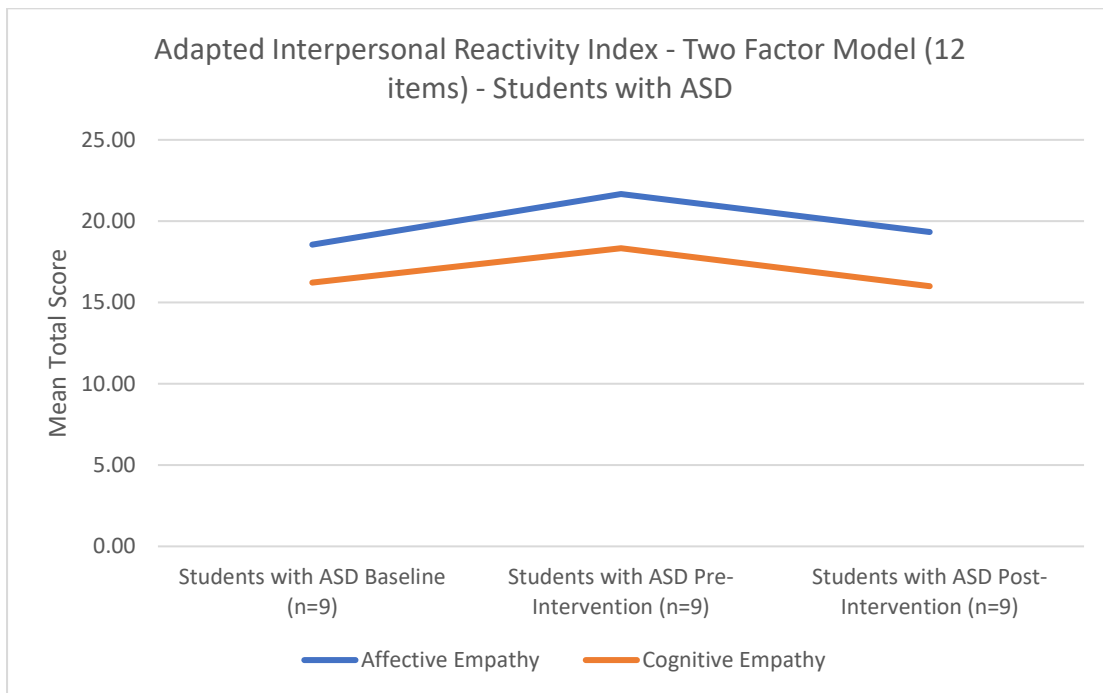
\*\*\*Higher scores on SDQ indicate higher levels of behavioural problems.

Post-Intervention: Following the empathy intervention, the ASD group showed a significant increase on the victim empathy measure post-intervention (pre-intervention M=23.0, SD=1.94; post-intervention M=25.44, SD=1.94,  $p=0.008$ ). This finding should be interpreted with caution as, despite using non-parametric tests, the small sample size ( $n=9$ ) is likely to account for the significance and trends in victim empathy are unclear due to the minimal changes in score. There was little to no change on all other empathy measures ( $\leq \pm 1$ ) compared to pre-intervention (Tables 22 and 23). The ASD group also showed a slight decrease on in SDQ score (from a mean of 12.89, SD=6.77 to 11.44, SD=2.07), signifying less emotional or behavioural problems, however Wilcoxon tests showed this difference was not significant in relation to pre-intervention ( $T=17.00$ ,  $z=-.140$ ,  $p=.888$ ,  $r=-.02$ ) or baseline scores ( $T=12.00$ ,  $z=-.340$ ,  $p=.734$ ,  $r=-.04$ ).

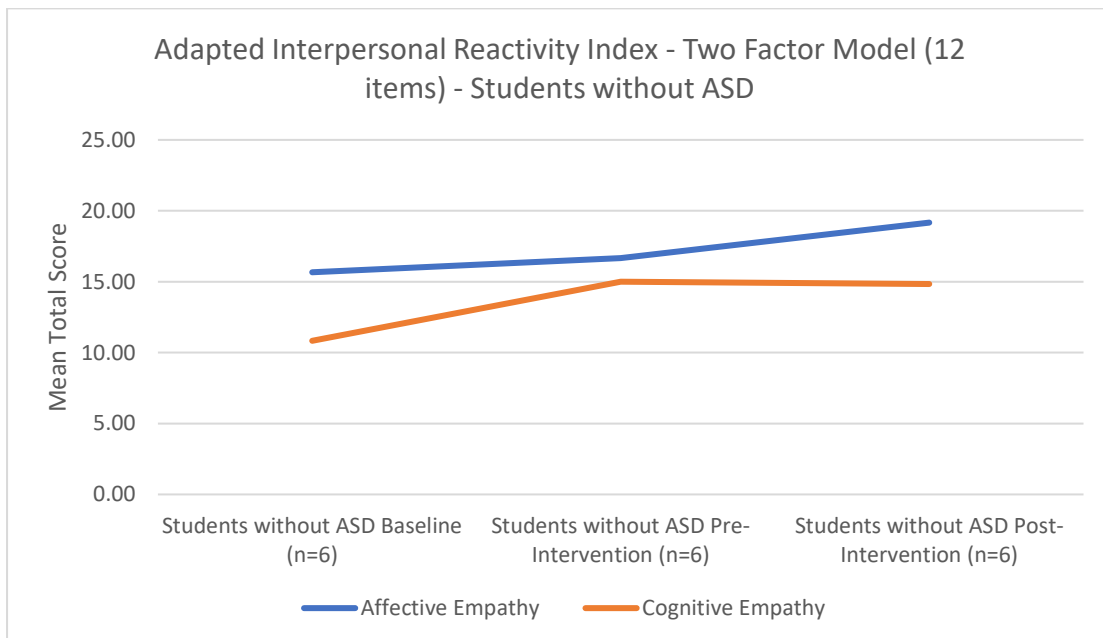
The No-ASD group showed similar results between times 2 and 3 on the victim empathy measure and SAM stories to the ASD group (all changes  $\leq \pm 1$ ), however did show minor increases on the IRI post intervention (in comparison to baseline), and a slight decrease on the SDQ which are possibly indicative of improvements (Tables 22 and 23). Wilcoxon comparisons showed the decrease in SDQ score between time 1 and time 3 to be significant ( $T=0.00$ ,  $z=-2.375$ ,  $p=.018$ ,  $r=-.34$ ), however the changes in IRI-18 across all three time points were not (baseline to pre-intervention  $T=16.00$ ,  $z=1.156$ ,  $p=.248$ ,  $r=.19$ ; baseline to post-intervention  $T=19.00$ ,  $z=.845$ ,  $p=.398$ ,  $r=.14$ ; pre-intervention to post-interventions  $T=12.00$ ,  $z=-.314$ ,  $p=.753$ ,  $r=.05$ ).

The findings from the empathy measure subscales and SDQ are displayed pictorially below. It was felt that whilst some trends and differences are displayed, the sample size is too small and items too few to hold any explanatory power and justify further statistical analysis. The trends will be incorporated in the overall findings in the Discussion.

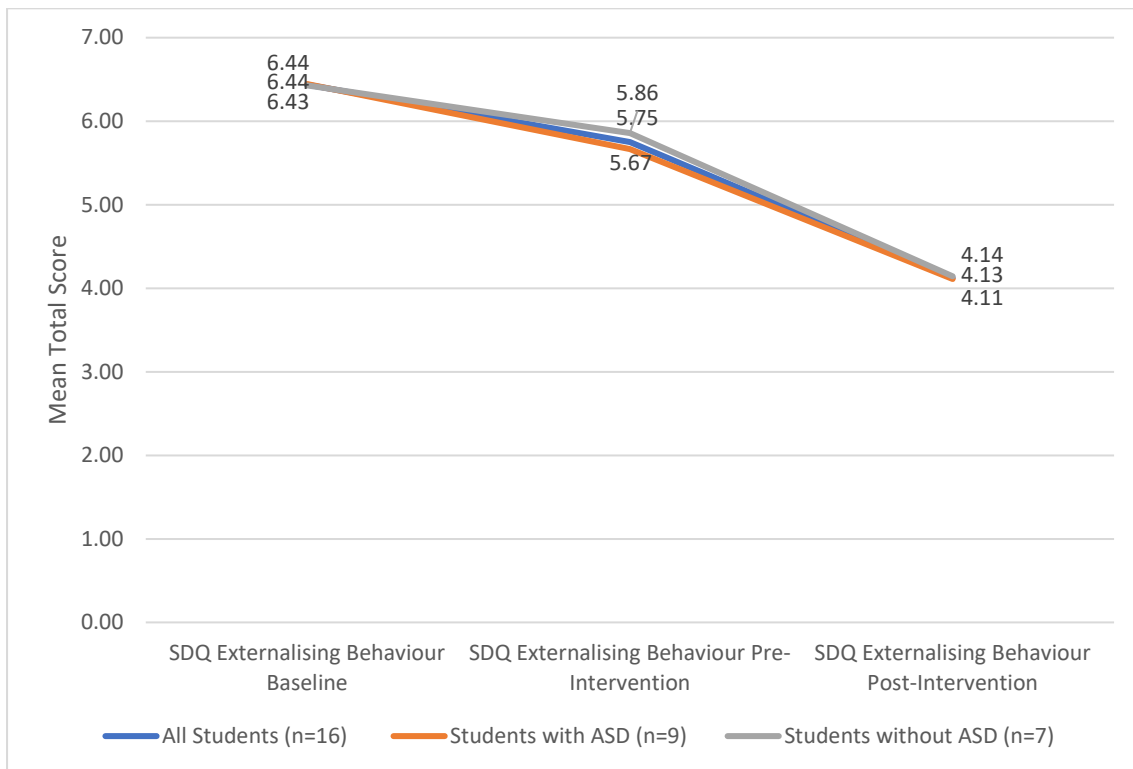
**Figure 35: 12-Item Adapted Interpersonal Reactivity Index (IRI-12) - Two Factor Model (12 items) – ASD Group**



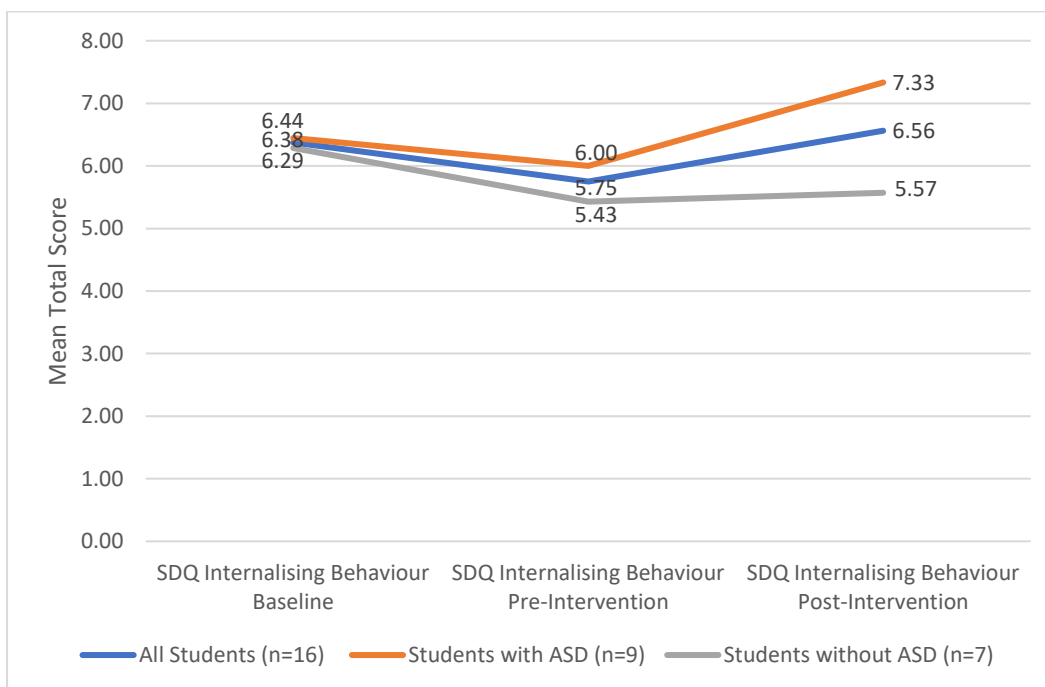
**Figure 36: 12-Item Adapted Interpersonal Reactivity Index (IRI-12) - Two Factor Model (12 items) – No ASD Group**



**Figure 37: Strength & Difficulties Questionnaire (SDQ) – Externalising Behaviour Subscale (Goodman, 1997)**

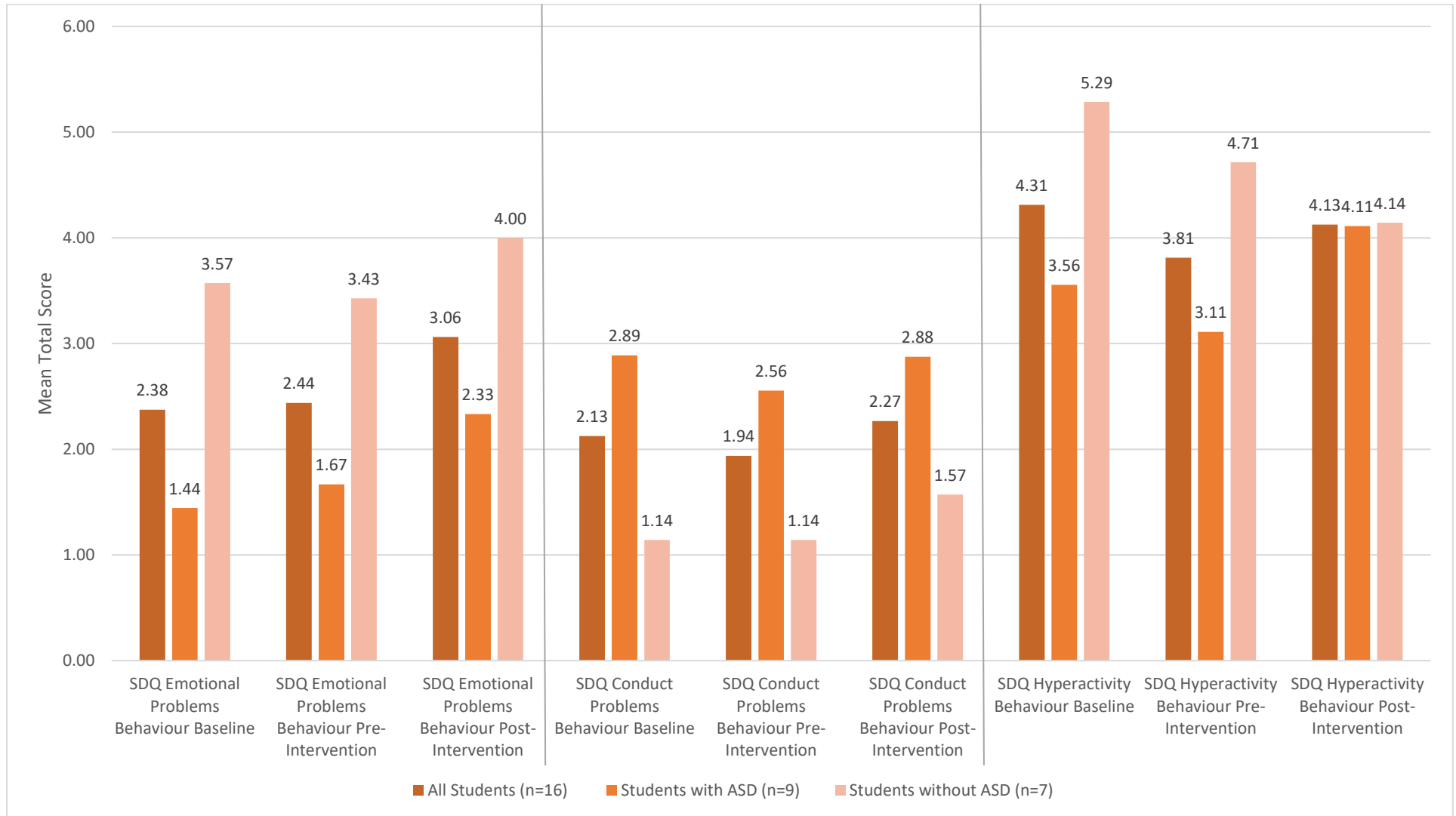


**Figure 38: Strength & Difficulties Questionnaire (SDQ) – Internalising Behaviour Subscale (Goodman, 1997)**

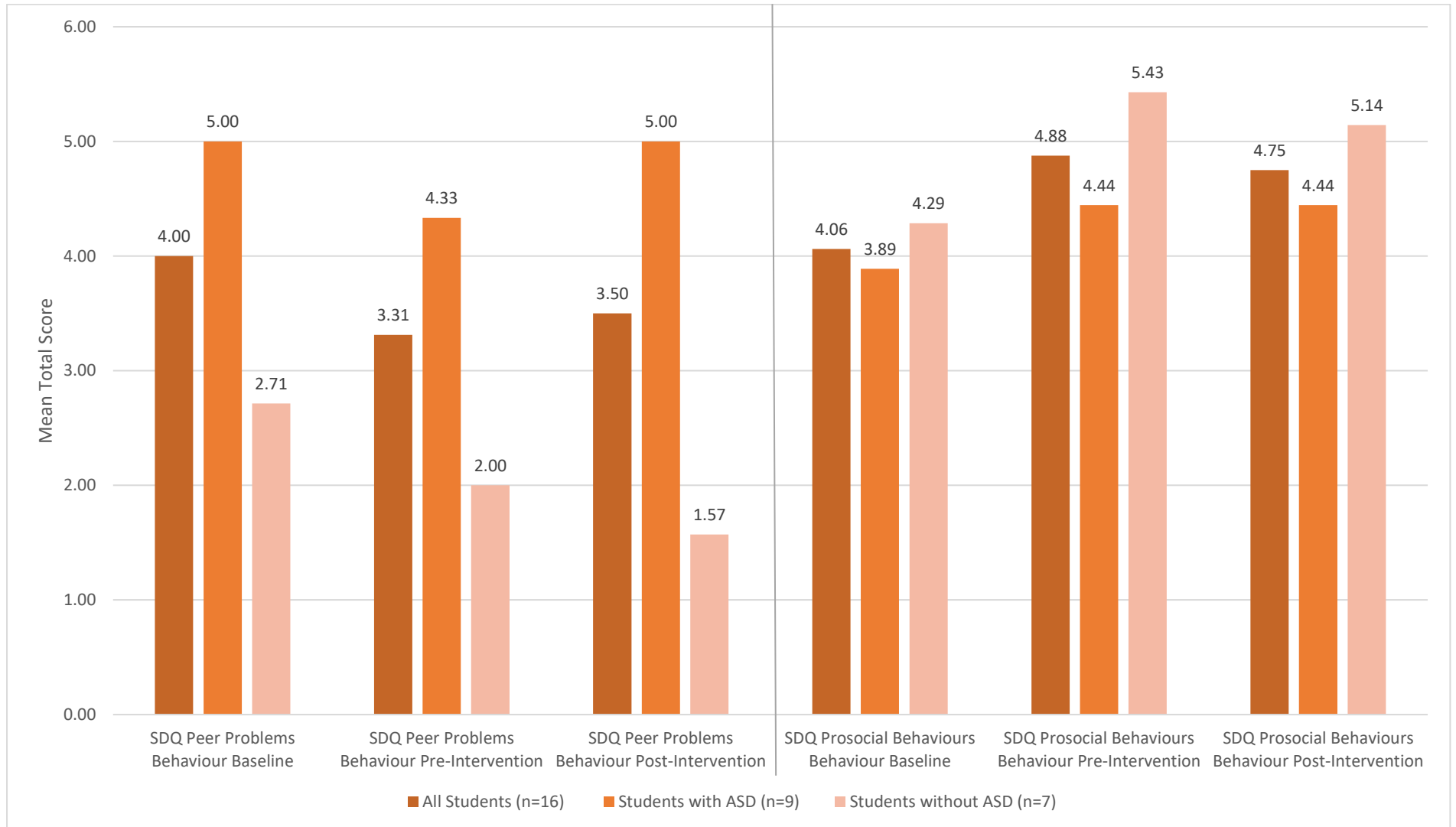




**Figure 39: Strength and Difficulties Questionnaire (SDQ) (Goodman, 1997) – All Subscales i**



**Figure 40: Strength and Difficulties Questionnaire (SDQ) (Goodman, 1997) – All Subscales ii**



### 7.3.4 Individual Performance

Due to the small sample size and variability in scores, any suggestions regarding trends in the data must be tentative. Changes were minimal, (mostly,  $\leq \pm 2$ ) which could easily be accounted for by individual differences in completing the measures at the different time points. There also appears to be a factor impacting test performance following the six-week control period with several of the ASD participant scores increasing between baseline and pre-intervention (suggesting increases in empathy). Therefore, to examine the data solely in relation to the intervention, individual pre- and post-intervention scores are included in Table 24.

Although Wilcoxon tests showed no significant differences for either group following the intervention (as shown in Tables 22 and 23: ASD Group and Process Measures and No ASD Group and Process Measures), the variability in changes across the participants is illustrated, with generally more improvements, and or/stability, being shown in the No ASD group (Table 23). Individual performance on measures in the ASD group fluctuated more widely, with a higher number of participants showing decreases in scores on the different empathy measures. This could be suggestive of more heterogeneity within the ASD group or less empathic stability. This and other potential factors impacting the results are covered in the Discussion.

**Table 24: Pre- and Post- Empathy Intervention Outcome Measures – ASD Group**

Participant***	FSIQ	IRI-18* (General Empathy)		IRI-12* (Affective & Cognitive Empathy)		SAM Stories* (Affective Empathy)		Victim Vignettes* (Victim Empathy)		Strengths and Difficulties Questionnaire (SDQ)***	
		Pre-Group	Post-Group	Pre-Group	Post-Group	Pre-Group	Post-Group	Pre-Group	Post-Group	Pre-Group	Post-Group
Steven	94	53	28	43	22	10	10	24	<b>26 (+2)<sup>ϕ</sup></b>	8	9
Omar	69	29	26	23	16	13	8	23	<b>29 (+6)</b>	7	9
Jerome	84	69	64	47	43	14	11	25	<b>26 (+1)</b>	6	13
Anita	85	58	55	40	36	13	13	20	<b>22 (+2)</b>	8	12
Neil	81	58	<b>69 (+11)</b>	37	<b>45 (+8)</b>	14	12	24	<b>26 (+2)</b>	17	<b>13 (-4)</b>
Jason	103	69	<b>55 (+3)</b>	44	<b>46 (+2)</b>	12	<b>13 (+1)</b>	26	26	15	<b>12 (-3)</b>
Craig	<i>Missing</i>	74	66	52	44	<i>Missing</i>	13	22	<b>26 (+4)</b>	18	<b>10 (-8)</b>
Alice	<i>Missing</i>	35	30	24	20	11	<b>14 (+3)</b>	21	<b>24 (+3)</b>	10	10
Alan	77	75	66	50	46	14.5	14	22	<b>26 (+4)</b>	16	<b>15 (-1)</b>
<b>% indicating improvements</b>		<b>22.2%</b>		<b>22.2%</b>		<b>22.2%</b>		<b>11.1%</b>		<b>44.4%</b>	

\*Higher scores on empathy measures suggestive of higher levels of empathy

\*\*Higher scores on SDQ indicate higher levels of behavioural problems.

\*\*\*Not participant's real names

ϕ Scores in **bold** indicate improvements in empathy or behaviour.

**Table 25: Pre- and Post- Empathy Intervention Outcome Measures – No ASD Group**

Participant ***	FSIQ	IRI-18* (General Empathy)		IRI-12* (Affective & Cognitive Empathy)		SAM Stories* (Affective Empathy)		Victim Vignettes* (Victim Empathy)		Strengths and Difficulties Questionnaire (SDQ) **	
		Pre-Group	Post-Group	Pre-Group	Post-Group	Pre-Group	Post-Group	Pre-Group	Post-Group	Pre-Group	Post-Group
Ian	90	37	<b>41 (+4)</b> $\phi$	29	<b>34 (+5)</b>	9	9	27	24	8	9
Saleem	57	26	<b>34 (+8)</b>	18	<b>23 (+6)</b>	9	5	25	<b>28 (+3)</b>	7	9
Jessie	61	<i>Missing</i>	18	<i>Missing</i>	10	<i>Missing</i>	<i>Missing</i>	<i>Missing</i>	<i>Missing</i>	6	13
Simon	45	45	<b>68 (+23)</b>	32	<b>45 (+13)</b>	13	<b>14 (+1)</b>	26	26	8	12
Jade	81	58	<b>64 (+6)</b>	44	<b>47 (+3)</b>	15	15	27	<b>28 (+1)</b>	17	<b>13 (-4)</b>
Phoebe	<i>Missing</i>	49	39	33	29	6	<b>9 (+3)</b>	20	<b>22 (+2)</b>	15	<b>12 (-3)</b>
Frank	56	48	36	34	26	11	<b>13 (+2)</b>	17	<b>22 (+5)</b>	18	<b>10 (-8)</b>
<b>% indicating improvements</b>			<b>57.1%</b>		<b>57.1%</b>		<b>50%</b>		<b>66.7%</b>		<b>40%</b>

\*Higher scores on empathy measures suggestive of higher levels of empathy

\*\*Higher scores on SDQ indicate higher levels of behavioural problems.

\*\*\*Not participant's real names

$\phi$  Scores in **bold** indicate improvements in empathy or behaviour.

### 7.3.5 Narrative Reflection

Keep Safe: Empathy was successfully piloted as a standalone unit for adolescents with intellectual and developmental disabilities. Engagement from the students was high, as noted by the author, co-facilitator and support staff.

*"[There was a] high level of engagement from the vast majority of pupils. It is proof the pupils felt that the content and materials were accessible, relevant and important."*

Senior Leader and Co-facilitator.

*"The level of debate was good."*

Year 12 Support Staff.

The SDQ included an additional section to incorporate qualitative data on empathy and social behaviour throughout the study, including a comments section regarding student's behaviour following the group. A sample of these comments are displayed below, with the full data set included in Appendix 5. All names have been changed to preserve student identities.

*"Simon engaged well with the concepts and could, I feel, express this new understanding - this is not something that could routinely be said about most of the lessons he attends."*

Senior Leader and Co-facilitator, Year 13 Student.

*"Jason is now more aware of how his behaviours from the past may be perceived from a less subjective viewpoint."*

Senior Leader and Co-facilitator, Year 12 Student.

*"Anita is really exploring her adolescent independence and responsibilities, so she was very keen to engage in this course."*

Senior Leader and Co-facilitator, Year 12 Student

As with all treatment and education classes, there will be situations where a group is not optimal or appropriate for a student, for various reasons, and there were instances of this in the study:

*“Really hard to say, given Saleem's (anxiety driven) lack of visible engagement.”*

Senior Leader and Co-facilitator, Year 12 Student

*“Jessie found it difficult to engage due to the timing of the session - he is routinely highly anxious on a Monday morning”*

Senior Leader and Co-facilitator, Year 12 Student

There are also instances where, despite positive engagement and utilisation of some prosocial aspects of the group, students continue to engage in challenging, sexual behaviours, as illustrated in the comments below (all were included on the post-group section for comments on the SDQ):

*“I feel the quantity of debate and Alan’s ability to engage was proof of his learning ... he has used some of the concepts learned to frame some of his behaviour ... (but) Alan's inappropriate touching of other people has got worse.”*

Senior Leader and Co-facilitator, Year 13 Student

The Keep Safe Facilitator Review (Appendix 5) was completed by the two facilitators, which rated each student’s level of concentration, comprehension and participation out of 10. Scores were generally high or very high (above 8) for both groups, with only a couple of students scoring below 5. These were students whose level of engagement is typically low and unfortunately the intervention sessions were unable to attract or retain their attention (See Appendix 5).

Feedback from students was also generally positive. As said, this was acquired from students by the school facilitator without the author present. A couple of individuals found the group enjoyable and but felt it hadn’t helped them (in relation to empathy), whereas other comments from students felt it had been of benefit.

*“Useful because it helped me learn about doing the right thing”*

*“Not helped but been enjoyable.”*

*“Useful because helps have a better understanding about emotions.”*

*“Helped me to understand the way you learn about other people. Useful PHSE.”*

*“Helped me to understand others, added to my social skills”*

*“Learned about our empathy and sympathy. It's good to learn about their feelings.”*

The significant difference in IQ scores between the two year groups provided the opportunity to explore the materials across a range of cognitive abilities. The six-week pilot demonstrated the structure and content of the core material was both appropriate and suitable for those with moderate and mild or borderline intellectual disabilities, as well as for those with ASD (with and without an intellectual disability). As would be expected, a slower pace and therefore fewer examples in each session were necessary for those in the moderate intellectual disabilities range, however both groups demonstrated a clear need for prompts, particularly visual aids, in addition to repetition in order to ensure continuity of the programme and progress from week to week.

The author and co-facilitator both felt a longer timeframe would have been beneficial to enable further repetition of the material (rather than for additional content), however this is perhaps a consequence of the module being completed outside the Keep Safe Programme where some of the material would have been introduced in previous modules.

*“Occasionally I felt that the course would have been better with a slower overall pace – perhaps a ten week rather than six-week course would have been appropriate given our pupil's needs for overlearning.”*

Senior Leader and Co-facilitator.



## 7.4 Discussion

The findings from the study demonstrate that Keep Safe: Empathy can be successfully used as a stand-alone group for children and young people with intellectual and developmental disabilities, including ASD.

Qualitative feedback from the group highlighted the strengths of the programme and allowed for reflection upon subtle or more nuanced changes not necessarily captured by standardised assessments of empathy (bearing in mind this was not the purpose of the study).

As a feasibility trial for the use of an empathy intervention for children and adolescents with intellectual and developmental disabilities, the study was not designed to assess the effectiveness of the programme but its implementation as a standalone unit. However, the trends observed regarding empathy, both from the measures and facilitator feedback, provide some interesting comparisons to existing literature and the Interview Study (Chapter Six).

There was no significant difference in empathy found between students with ASD and those without. In fact the students with ASD actually scored higher overall on measures of empathy. This is in contrast to studies which have reported the opposite pattern, with individuals without ASD typically scoring higher (displaying more empathy) than those with (Baron-Cohen et al., 2004). This difference may be accounted for by differences in cognitive ability and the fact that the no-ASD comparison sample had intellectual disabilities and thus may have struggled with the cognitive aspects of perspective taking or the language required to express their emotions. It should perhaps also be considered that a number of the No-ASD group scored highly on the AQ-A (Baron-Cohen et al., 2006) and may have had an undiagnosed ASD.

Both the qualitative feedback and the small amount of quantitative data illustrated differences in cognitive and affective empathy between the ASD and No-ASD groups. For example, those without ASD displayed increases in affective empathy on the IRI and during the class, both facilitators reported more overt indicators of empathy (emotional resonance) in individuals without ASD. For the students with ASD, improvements on the victim

empathy score and better understanding/articulation of the concepts of empathy and empathic responding were prominent yet, similarly to reports in the clinical data from the interview study, displays of emotional empathy were less so than students in the no ASD group (or were atypical in presentation and not observed by the facilitators).

The qualitative data, marginally supported by the empathy measures, suggest that empathy is complex in individuals with ASD. For example, competency to perspective take, recognise the right answer for the social convention does not necessarily translate into an empathic response. For those students displaying risky sexual behaviours, their empathy scores were some of the highest in the study at baseline, pre-intervention and post-intervention yet they continued to express anti-social or risky thoughts and behaviours during and after the intervention. Although a different severity of behaviour, this is akin to findings in the interview study and results from the SOTSEC-ID (2010), whereby some offenders with ASD continued to display offending behaviours during and subsequent to treatment. As such, cognitive empathy without an associated affective response for the 'other' does not appear to moderate behaviour. Extreme caution must be advised in generalising these findings as only three individuals in the sample displayed risky sexual behaviours, however the pattern does echo findings from the Interview study in a non-forensic, non-clinical sample.

Whilst not clearly reflected in the assessments due to the ceiling effect of scores, anecdotal evidence and observations from the facilitators noted that both students with ASD and those without struggled with the victim empathy stories. The students were quicker, and appeared clearer in their answers for the verbal aggression vignettes in relation to blame on the victim's part, in comparison to those regarding sexual behaviours, where there were more questions, discussion and 'unsure' answers prior to selecting their response on the question sheet. As such there may have been an element of social desirability in answering i.e. not feeling confident to assert a potentially socially deviant response in expressing the opinion that a victim is to blame by encouraging the perpetrator.

Alternatively, it may be that the students struggled to understand the nuances of more subtle social relationships through lack of social experience or limitations in cognitive functioning (although the two are not mutually exclusive). Furthermore, if a harmful action is not as evident as physical aggression it may not be recognised as problematic or anti-

social and thus not evoke empathic distress or create cognitive dissonance. This may be akin to the men from the interview study, although for the students (including those without ASD) a lack of empathic responding may stem from social inexperience or difficulties recognising less subtle cues of distress rather than anti-social cognitions.

#### **7.4.1 Strengths and Weaknesses**

The current research was a small feasibility study to trial a short, adapted empathy intervention for adolescents with intellectual and developmental disabilities. As such, the design was not methodologically robust in that it utilised a small purposive sample and was a baseline, pre- and post-intervention design with little systematic control and no manipulation of variables. Part of the study design was to explore any potential differences in empathy between participants with ASD and those without, therefore the groups were not randomly allocated, nor were they for gender or school year. There also appeared to be possible contamination between groups due to the presence of autistic symptomatology in the No ASD group, with some students (without a reported diagnosis of ASD) scoring high on the Autism Quotient-Adolescent (Baron-Cohen et al., 2006). The AQ-A is a screening measure and not a diagnostic assessment and given the possible decrease in specificity of the AQ instruments when used with those without a borderline-average IQ range of at least  $\geq 70$  as suggested by Baron-Cohen et al. (2006), these high scores may be a reflection of a suboptimal screening measure for this participant group. Unfortunately, the three students who scored above the AQ-A threshold for ASD declined further assessment and given the high rates of ASD in intellectual disabilities as discussed in Chapter Two (Autism Spectrum Disorders) it is highly possible that participants in the No ASD group may have undiagnosed ASD.

The study was not designed to assess effectiveness of the group however did include the use of self-report empathy measures. As illustrated in the literature review, the concept of empathy refers to a process and an outcome, both of which are multi-dimensional and dynamic. What became apparent during the study was the complexity of assessing such an ambiguous, loosely defined convoluted construct with self-report measures with this population. The communication difficulties and cognitive dysfunction associated with

intellectual and developmental disabilities created challenges in administration and interpretation of findings despite using adapted measures.

Garton & Gringot's (2005) adaptations to the Interpersonal Reactivity Index were for non-intellectually disabled children and many of the students in the current study (mean age = 16.56; SD: 0.96) still appeared to struggle to understand what was being asked. It was not possible to determine if the difficulties lay in the examples used, the complexity of the language or the student's cognitive abilities to grasp the concepts, however any subsequent study would need to consider an alternative tool or make further revisions to the Interpersonal Reactivity Index to ensure reliability and increase validity in assessing empathy.

The adapted Interpersonal Reactivity Index 18 item questionnaire (Garton & Gringot, 2005) was used to collect data in this study, however both the 12 and 18 item scoring paradigms were used for analysis. The 12 and 18 item scores resulted in similar outcomes regarding the two-factor construct of empathy (cognitive and affective), and as such may provide support (whilst bearing in mind the sample size of the study) for the use of a shorter, twelve item version to make less demands on children and young people.

The students also displayed trouble switching between the SAM stories where they were asked to report own feelings and Victim stories where asked how they think the other person might feel. Future research should therefore include additional time or break in between tasks to allow for re-orientation to the activity.

Using Keep Safe: Empathy and the short time frame for the study may have impacted on the findings of the self-report measures. For example, in addition to increasing familiarity with the material and potentially influencing behaviour change, a longer group may have aided comprehension and accuracy in completion of the self-report measures (i.e. the course might not have increased empathy but may have increased student's ability to reflect on and report whether they believe they display it). For example, some students showed clear, visible signs of affective empathy e.g. sadness when the puppy in the socio-emotion eliciting (SAM) story dies and as such an observer would have been likely to rate them a 1 (a sad response) based on their physical and verbal behaviour, however the students struggled to

reflect this and reported '3' of the Self-Assessment Mannequin valence scale (with 1 being sad and 5 being good), suggesting poor self-awareness of emotions.

The sample came from a single school and thus how the group would run or the material be received in a different setting is not known. Furthermore, not all students attended all six of the sessions nor completed all measures limiting the strengths of conclusions drawn from the findings. Completing the measures as a group (although each student wrote<sup>52</sup> their answers individually) may also have influenced the responses given.

A clear strength of the study was the consistency of staff and availability of two school classes. This allowed for many of the processes typically undergone during the group forming, storming and norming stages (Tuckman, 1977) to have been established prior to the introduction of the material. It produced a cohesive group environment and familiarity with peers and staff, perhaps enabling a better level of engagement and interaction than would have been possible in an unfamiliar group. Previous meetings and discussion between the students and the researcher on three occasions also permitted some familiarity and rapport to have been developed before the group started. The regularity of school staff and facilitators improved competence and knowledge of the material with the potential to increase fidelity to the treatment programme and facilitate discussion.

The variability in IQ, mental health difficulties and presence or absence of ASD across the two classes (Year 12 and 13) demonstrated the versatility of the material for a variety of student presentations and learning needs, in boys and girls. Sexual offending or harmful behaviours are predominantly carried out by males and therefore, very little data regarding treatments (adapted for otherwise) exists in relation to use with female perpetrators (Ashfield et al., 2013; Pflugradt et al., 2018). Although none of the females within the current study displayed harmful sexual behaviours and the number were very few, this small data set does suggest that the material from this treatment component would be suitable for girls with intellectual and developmental disabilities who display harmful sexual behaviours. More research is needed including larger samples, particularly, females and those who display harmful or risky sexual behaviours.

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<sup>52</sup> Or were supported to write.

## **7.5 Conclusion**

The level of engagement by the majority of students and their subsequent feedback, illustrated the relevance and appropriateness of material to the target population. It was also indicative that the students enjoyed the group, with a number stating this overtly and that they found it useful. This coupled with the facilitator and staff feedback, and some trends in the quantitative measures, suggest that an empathy group such as this may be beneficial to populations of non-forensic or clinical adolescents with intellectual and developmental disabilities. What is needed is a much larger study and further refinement of measures of empathy to capture difficulties or atypical profile in individuals with ASD, particularly being able to distinguish between those with anti-social behaviours and those not.

## **8 CHAPTER EIGHT: DISCUSSION AND CONCLUSIONS**

### **8.1 Summary of Findings**

This PhD sought to explore the use of adapted sex offender treatment programmes for individuals with ASD. In the first instance, the existing literature on sexual offending, ASD (including a systematic review of current treatment for autistic offenders) and relevant social policy and practice were reviewed. Following this, three studies were undertaken to: (i) investigate the prevalence of harmful sexual behaviours in adolescents with ASD, (ii) explore opinions of clinicians and service users regarding the use of adapted sex offender treatment programmes for offenders with ASD and, (iii) examine the feasibility of a six week empathy course for adolescents with intellectual and developmental disabilities, some of whom displayed harmful sexual behaviours.

The Prevalence Study (Chapter Five) illustrated the complexity and lack of clarity in the processes identifying children and young people with ASD who display harmful sexual behaviours. As discussed in Chapter Four (Social Policy), support for those under 18 years old who display such behaviours can come from a confusing variety of services under different organisations and governing bodies (Figure 10: Pathways of children and young people who display harmful sexual behaviours, page 116), making it challenging to ascertain how many individuals require help and where they are. The call for integrated services is not new and has been highlighted repeatedly in previous reports and investigations (Children's Commissioner, 2017, 2019; Criminal Justice Joint Inspection, 2013), yet despite legislation (e.g. the Children and Families Act, 2014) and statutory guidance, including the development of NICE Guidelines for Children and Young People who display harmful or abusive sexual behaviours (2016), the findings suggest continued inconsistencies in service provision and practice for children and young people, particularly those with intellectual disabilities or ASD.

The difficulties in identifying prevalence of autism among children and young people who display harmful sexual behaviour are likely to stem from multiple factors, some of which may be suggested in the survey data. These factors include the sexual nature of the behaviours and the diagnosis of ASD itself.

As discussed in the Introduction, Chapter One (Sexual Offending) and Chapter Four (Social Policy), abusive sexual acts and sexual offending are defined as *behaviour* and not a mental disorder or condition (although they may be considered the concomitant of one).

Therefore, depending on the service eligibility criteria and/or co-morbid mental health condition, a child or young person who displays concerning sexual behaviours can be referred to health, social care or youth justice services. The survey responses highlighted that children displaying harmful sexual behaviours access services across sectors, from small voluntary organisations to larger healthcare inpatient units and Youth Offending Teams. In Chapter One (Sexual Offending), generalist or specialist theories of sexual offending were reviewed, and whilst for adults the debate continues as to whether sexual offenders are a certain typology of offender, the consensus regarding children was that sexual behaviours are usually part of a larger repertoire of offending or anti-social behaviours, and that juvenile sex offenders have more in common with other juvenile delinquents than adult sex offenders (Leversee, 2010).

The Autism Act (2009) and Autism Strategy updates (2014, 2019), along with the Children and Families Act (2014) and Clinical Guidelines from the National Institute for Clinical Excellence (NICE) are there to ensure individuals with ASD do not 'fall through service gaps' and receive appropriate assessment and treatment (CG 128, NICE, 2017; CG170, NICE, 2013; CG142, NICE, 2016). However, only half of the services supporting children and young people with harmful sexual behaviours represented in the survey assessed for ASD (or intellectual disability), with many respondents unsure as to how many, if any, of their service users had an ASD. Whilst the services reported offering a range of treatment options e.g. individual or group cognitive behavioural therapy, family therapy or dialectic behavioural therapy, none provided autism-specific adaptations, and very few offered programmes adapted for intellectual disabilities, which would be anticipated to be necessary due to the higher prevalence rates of ASD reported in intellectual disability populations (LaMalfa et al., 2004; Bryson et al., 2008).

The challenges in identifying those with ASD who display harmful sexual behaviours, as well as the difficulties in accessing services can also be said of adults with ASD who sexually offend or display abusive sexual behaviours. However, whilst access to services appears more straightforward for adults, as discussed in Chapter Four (Social Policy) and illustrated

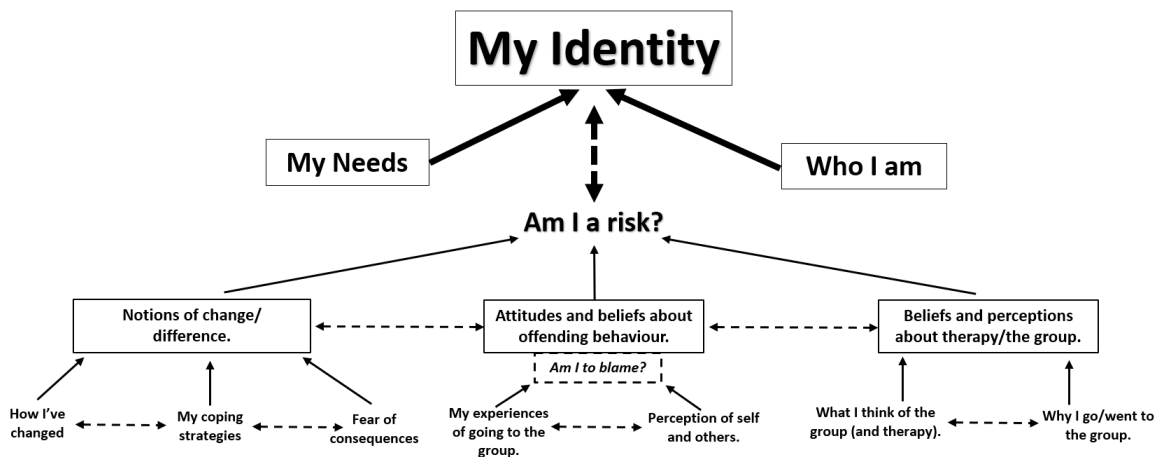


in Figure 9: Pathways for offenders with intellectual and developmental disabilities (page 108), attaining appropriate and effective treatment seemed less easy, and was explored in the Interview Study (Chapter Six).

The Interview Study (Chapter Six) sought the views and experiences of men with ASD who had completed an adapted sex offender treatment programme, along with the opinions and accounts of clinicians who had facilitated the treatment groups. Grounded theory was used for each set of interviews (service users and clinicians) to develop a model of perceptions of sexual risk following completion of adapted sex offender treatments (Figures 41 and 42 Men's Construction of their Identity, including sexual risk, following treatment, and Clinician's Formulation of Sexual Risk Following Treatment, below). Both models relate treatment outcomes to 'risk' i.e. whether the individual was perceived, or perceived themselves, at risk of re-offending sexually, and include some similar elements in how this risk was constructed and assessed or gauged (i.e. perceptions of blame or denial, notions of behavioural change or difference including coping strategies, etc.). However, the core difference between the two models was the person's outcome of those assessments i.e. level of risk, and the importance placed on the treatment.

Thirteen semi-structured interviews with service users emphasised the importance of perceived improvements in quality of life in the men's views of whether they viewed treatment as 'effective' or 'worth doing'. These improvements were often defined in terms of freedoms e.g. being discharged from detention under the Mental Health Act, use of social media, etc. For others these took the form of opportunities to establish pro-social roles and identities such as being married, acting as a 'mentor' or providing advice to other men in the treatment group, or paid employment and being a patient representative/ambassador. These 'improvements' coupled with the expressed wishes or identified 'needs' of the men provide support for use of Strengths-based treatment approaches such as the Good Lives Model (Ward & Brown 2004; Ward & Marshall, 2004) as the 'social goods' in pursuit by the men are common across societies and cultures in those without ASD and non-offenders.

**Figure 41: Men’s Construction of their Identity, including Sexual Risk Following Treatment**



As the Model depicts, the men’s perception of their own sexual risk to others fell within a framework of how they constructed their Identity, which was egocentric and focused on the men’s own wants and needs (as highlighted above), with ‘effectiveness’ or utility of treatment rarely related to reducing the individual’s risk of harm to others.

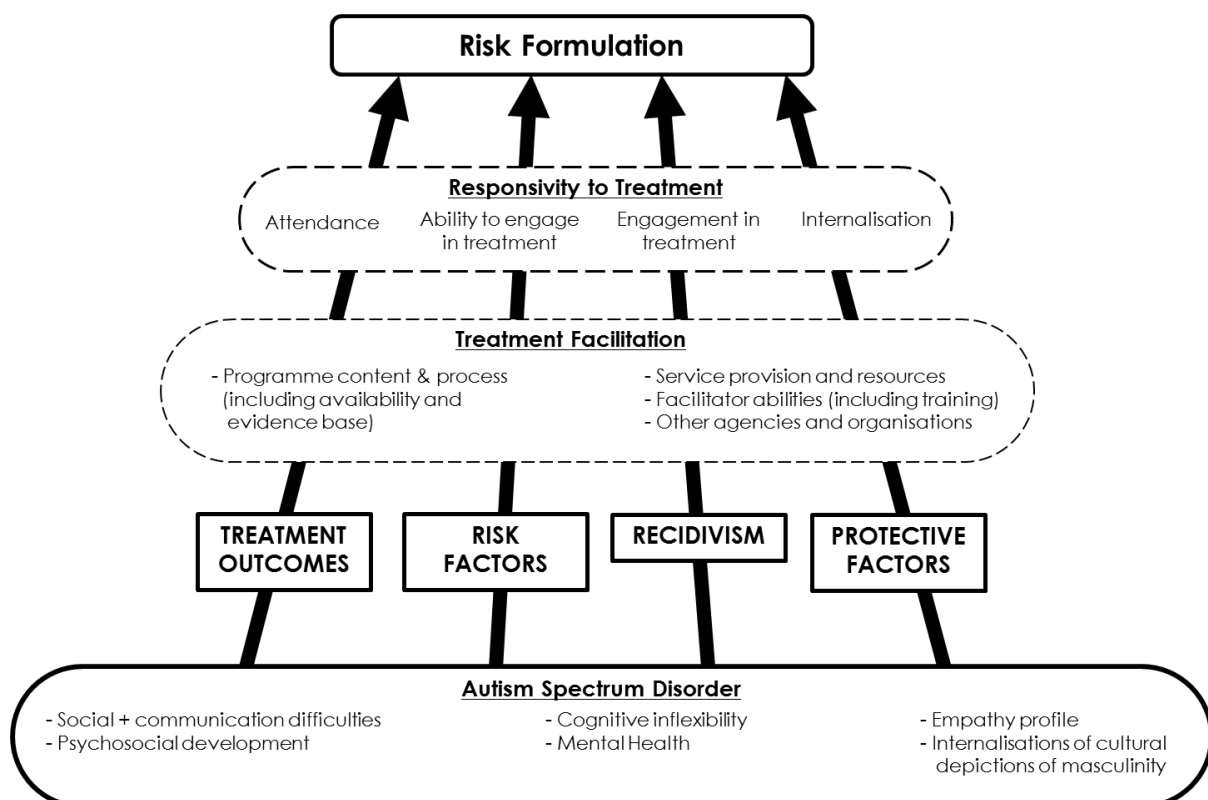
Such egocentricity may be expected within a sample of autistic offenders due to the low empathy profiles associated with both offending (as an act defined by violating the rights of others) and ASD. However the persistent displays of ego-centricity in men with ASD *following treatment* were highlighted in the Clinician interviews.

The emphasis on ‘self’ and absence of consideration for others, including the victim, was framed in terms of the men’s empathy and was a core feature in the clinical narratives regarding treatment for offenders with ASD. As identified in Chapters Two and Seven (Autism Spectrum Disorders and Empathy Intervention Study), empathy is a complex construct for both object and process i.e. someone can have empathy and show empathy (Davis, 2000; Smith, 2009), with further distinctions between different types of empathy such cognitive and affective empathy (Hoffman, 1981, 2000), and victim or general empathy (Marshall et al., 2001; Whittaker et al., 2006). The limited displays of empathy in offenders with ASD, particularly affective empathy, created challenges for the clinicians when formulating risk, in terms of determining if the absence was a consequence of poor empathy development (due to the developmental disorder), or the intentional violation of other’s rights due to anti-social personality traits or attitudes, and, of course, if or what, was the cumulative effect. The men themselves appeared unaware or unconcerned to their

difficulties with empathy. Further exploration of empathy in individuals with ASD was therefore undertaken in a non-forensic sample in Chapter Seven (Empathy Intervention Study) (see below).

In addition to the empathy profile, the Clinicians' formulation of risk of re-offending, as depicted in the model (Figure below) suggested the diagnosis of ASD (bottom of the model) impacted upon the four factors (subthemes within the model) which were used to assess risk. For example, social interaction and communication styles, cognitive flexibility, psychosocial development and internalisations of cultural narratives were all felt to be affected by the diagnosis of ASD. How these aspects may influence or relate to one another is discussed under Theoretical Implications (Section 8.2), however the developed model highlights the potential impact of the clinical features of ASD on achieving positive treatment outcomes and affecting perceptions (and formulation) of risk of re-offending.

**Figure 42: Clinician's Formulation of Sexual Risk Following Treatment**



The Interview Study showed that despite the challenges with some components of the treatment programme (i.e. empathy and addressing cognitive distortions) adapted sex offender treatment programmes were considered of benefit to men with ASD. In contrast

to some of the existing case studies (e.g. Murphy et al., 2010a) a number of those interviewed reported positive outcomes related to the group delivery of treatment including developing social networks and benefitting from the use of a peer-helping approach. Furthermore, the increased opportunities for monitoring of the men's behaviours and inter-agency liaison were also noted. The clinicians interviewed acknowledged that offenders with ASD required more repetition of the programme content and that '*negative consequences for self*' appeared a stronger motivator against recidivism than concern of harming others (which has been noted in the literature e.g. Higgs & Carter, 2015). However, the consensus given (through the 'Treatment Facilitation' and 'Responsivity to Treatment' components of the model, Figure 42: Clinician's Formulation of Sexual Risk Following Treatment), was that adapted sex offender treatment programmes are, for the most part, appropriate and have some level of effectiveness, particularly in the face of a lack of alternative options.

As empathy emerged as a core feature from the Interview Study, a final piece of empirical research was undertaken to explore empathy in a non-forensic sample of individuals with ASD. The Empathy Intervention Study (Chapter Seven) tested the feasibility of using an adapted empathy course for adolescents with intellectual and developmental disabilities, including ASD. Qualitative feedback illustrated a positive reception to the course and its content by both staff and students (with and without ASD). The small amount of quantitative data that was collected illustrated some interesting trends in empathy profiles between those with ASD and those without (regardless of co-morbid intellectual disability), with students with ASD displaying a higher level of empathy pre- and post-intervention than those without, which is in contrast to existing research e.g. Baron-Cohen et al. (2009), Mathersul et al. (2013). This is likely to have been related to intelligence and cognitive functioning (with the autistic students having a higher IQ than those without ASD, a median 82.00 compared to 50.50;  $U=34.5$ ,  $z=1.931$ ,  $p=0.51$ ,  $r=.14$ ). Similarly to the Interview Study, the facilitator feedback suggested higher levels of understanding or cognitive empathy (putting yourself in another's shoes), than affective empathy in the students with ASD. Additionally, although non-significant, the students without ASD showed a small trend indicating improvements on the Interpersonal Reactivity Index measure of empathy (both using the 12 and 18 item scoring methods) following the intervention (baseline to pre-

intervention  $T=16.00$ ,  $z=1.156$ ,  $p=.248$ ,  $r=.19$ ; baseline to post-intervention  $T=19.00$ ,  $z=.845$ ,  $p=.398$ ,  $r=.14$ ; pre-intervention to post-interventions  $T=12.00$ ,  $z=-.314$ ,  $p=.753$ ,  $r=.05$ ), whereas the students with ASD showed little to no change between baseline and post-intervention ( $\leq \pm 1$ )<sup>53</sup>. As a feasibility study, the trial of the empathy course was considered successful, however it also further highlighted the difficulties in assessing empathy, particularly in a sample with impairments or atypicalities in social and cognitive functioning. The students showed some difficulties with the measures used to assess empathy, even those that had been adapted for children and/or individuals with intellectual and developmental disabilities. This is perhaps due to levels of self-awareness of emotions or difficulties in switching between 'self' and 'other' e.g. own response to situations as in the socio-emotion eliciting (SAM) stories, or beliefs about others responses/behaviour in situations (the victim empathy vignettes). This highlights the necessity for measures and assessment for those with ASD and those with intellectual and developmental disabilities. As argued in Chapter Seven (Empathy Intervention Study), understanding and defining empathy is not merely a philosophical or semantic exercise. Empathy as a process is seen to influence or underlie behaviour (e.g. showing empathy or not, when committing a sexual offence), and as such empathy as a trait, can shape judgements or attributions of behaviour (e.g. judicial attitudes towards offenders who have no empathy for their victims, Sundby, 2003).

Understanding deficits or difficulties in displays of empathic behaviours by individuals with ASD in offending and non-offending populations, therefore appears to be a necessary part in the assessment and formulation of an individual's needs, and is key to providing treatment, as stipulated in the ASD specific social policy and statutory guidance mentioned previously.

## **8.2 Theoretical Implications**

The findings from the PhD have implications for a number of the theories discussed in the literature review concerning sexual offending and ASD. These shall be considered in turn

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<sup>53</sup> Excluding the two participants who scores increased significantly following the control period and returned to baseline at post-intervention – See Chapter 7.

before any clinical implications are considered, including treatment and practice (and related theories), in addition to social policy and legislation.

### **8.2.1 Criminological Theories of Offending and Autism Spectrum Disorders**

As discussed in the literature review and summary of findings above, there are on-going discussions as to whether sexual offending is a 'specialism' and particular typology of offender requiring specialist treatment (Gannon et al., 2019), or whether it is simply a manifestation of the same underlying criminality displayed in all offenders (Durkheim, 1964; Gottfredson & Hirschi, 1990).

Findings from the Interview Study (Chapter Six) suggested support for generalist theories of offending, as the majority of the sample displayed other offending behaviours at some point, mostly aggression and/or violence but also including theft, arson, drug and alcohol offences and destruction of property. The background and histories of the sample in this study was similar to those reported by other researchers on sexual offenders with intellectual and developmental disabilities e.g. Lindsay et al., 2009; Wheeler et al., 2009. Generalist theories of crime, to recall, suggest poor impulse control and inability to delay gratification, and comments from the clinician interviews could be framed as supportive of this.

Evidence against this argument could come from examples where sexual offenders with ASD do not (or have not) displayed other types of offending or illegal behaviours, and the sexual deviancy is the sole form of anti-social behaviour. This is sometimes reported in child molesters and paedophiles in neurotypical populations and supports the argument for a specialist theory of sexual offending (Harris et al., 2009). This specialising could be indicative of impulse control in other emotional states, e.g. anger not leading to aggression and material desire not leading to theft, etc. Unfortunately, none of the service users within the Interview Study sample illustrated this presentation, and a sexually deviant 'special interest' or 'obsession' was not apparent. The offending profiles of the men in this study were more congruent with a generalist theory of crime and an overall poor level of impulse control.

The persistence of sexual offending or concerning sexual behaviours within the sample could create a challenge to generalist theories, as the clinicians reported that for some men, a reduction in incidents of violence and aggression but not sexual behaviours, suggesting it is 'different' or 'special'. This may be due to the known finding of most criminal behaviours desisting in later life (Blumstein & Cohen, 1987; Farrington, 1986), or perhaps the 'consequences' the men had faced for other offences had a larger negative impact on their life i.e. within the sample the men had more convictions for non-sexual behaviours than sexual (also see 8.2. Clinical Implications). Rule adherence as a protective factor was implicated in the findings, in that negative consequences for self were framed within a paradigm of 'breaking the rules', therefore the continued display of risky or concerning behaviours in a high number of the men indicates a 'choice' in which rules are followed rather than a potentially autistic penchant for rule following per se. Alternatively, the men may 'choose' the rules they follow and do so with an autistic-style predilection. Some clinicians alluded to sexual offending as a form of compulsion rather than lack of impulse control alone, however the difficulties the men faced in accessing and understanding their own behaviours created barriers to the clinician's understanding and subsequent formulations, and further research would need to be taken to explore this.

The models developed from the Interview Study provided support for Agnew's early development of Strain theory whereby illegal or maladaptive means were used to attain socially desirable goods (Agnew, 1985) (also discussed in Clinical Implications). However, support for his later revisions can also be seen in the data. To recall, Agnew's later theory proposed that criminogenic strain was a consequence of being unable to escape negative events and conditions as opposed to attempting to gain socially desirable goods (Agnew, 2006). There was some support for this from existing research on offending in ASD, for example with Murphy (2010) referring to the "dysfunctional and restricted coping strategies" (p44) to regulate negative emotions. The clinicians and the service users both reported instances of negative events occurring at the time of the offending or displays of behaviour. These included deterioration in mental health, relationships breaking down and stress within the family, and as such the sexual offending may have been utilised as a maladaptive coping strategy. Lindsay's (2005) model applying current theories of sexual offending to the treatment of offenders with mild intellectual disability highlighted the

potential relationships between poor quality of life, stemming from disengagement with society and low self-esteem, and sexual offending, perhaps providing further support as poor quality of life would be anticipated to correlate with higher instances, or perceptions of, negative events and/or conditions.

## **8.2.2 Sexual Offending Theories and Autism Spectrum Disorders**

The qualitative data gathered in the Interview Study, clearly illustrated support for many of the single factor theories of sexual offending, identified in Chapter One (Sexual Offending), and applied to ASD in Chapter Two (Autism Spectrum Disorders). The most evident, and one which was the premise for the Empathy Intervention Study, is the single factor theory of empathy deficits however this will be considered in the final part of this section as it has implications for the Theories of Autism and Empathy (Section 8.2.1).

One of the Multi-factorial theories of sexual offending considered in Chapters One and Two (Sexual Offending and Autism Spectrum Disorders) that sought to explain sexual offending in its entirety was Marshall and Barbaree's Integrated Model (1990). To recall, Marshall and Barbaree's theory proposed poor development of self-regulation skills (from developmental experiences and biological processes) resulting in psychological vulnerabilities which, when coupled with the right set of circumstances (base of the model), culminated in sexual offending. Marshall and Barbaree proposed that development of self-regulation may be inhibited by aversive childhood events (e.g. parental rejection or loss, sexual and physical abuse or neglect, etc.). Self-regulation not only includes impulse control and emotion regulation, but more fundamental self- and bodily awareness, such as being able to distinguish between aggressive and sexual urges, the distinction between which may be further distorted by maladaptive coping strategies such as the use of sexual release (masturbation) to manage negative emotions (Marshall & Barbaree, 1990).

The Interview Study reported a number of service users to have experienced aversive childhood events, including feelings of parental rejection, neglect and histories of physical and sexual abuse, as is repeatedly found with populations of sexual offenders particularly in intellectual and developmental disability samples (Craig & Lindsay, 2010). The findings from this PhD can provide no new information regarding the abused-to-abuser cycle, however they do support Marshall and Barbaree's assertions regarding the possible role of aversive

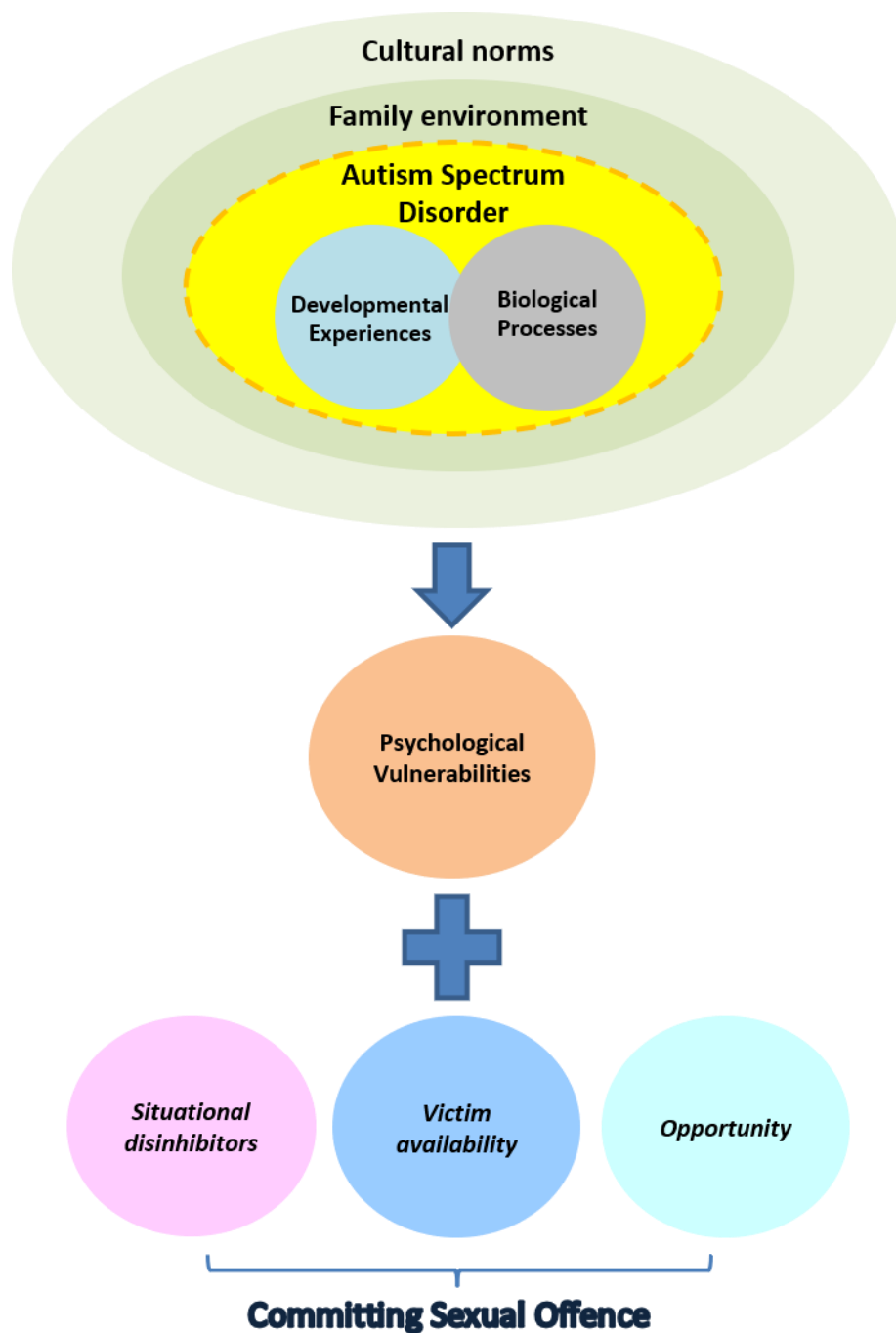


childhood events in developmental stages and potentially, an underlying factor in sexual offending.

Where this PhD can extend the Integrated Theory further is in its application to offenders with ASD (Figure 43). For instance, an ASD will likely impact the development of self-regulation on a biological and experiential level, regardless of aversive childhood events. The potential differences in brain structure and functioning identified in Chapter Seven (Empathy Intervention Study), and their possible influence on information processing, are said to affect emotion recognition and regulation, interpretation of social scripts and understanding other's intentions, self-awareness (including self-other distinction) and learning (Garrigan et al., 2016), potentially culminating the socio-affective functioning difficulties associated with ASD. Suggested differences in the processing of sensory information could fall within the 'Biological Processes' component of the model, and due to their influence on self-regulation and social-affective functioning, shape the individual's 'Developmental Experiences', potentially contributing to the development or maintenance of psychological vulnerabilities as identified in the model.

The criticisms directed at Marshall and Barbaree's model, also hold here, in that the model does not account for the failure to distinguish between aggressive and sexual urges. Additionally, there were reports of socio-affective difficulties within the non-forensic sample of the Empathy Intervention Study, therefore ASD cannot be said (and is not being argued) to account for sexual offending in itself. However, the findings from the Interview Study may suggest that ASD can act as an additional or alternative vulnerability factor (to aversive childhood events) in the development of psychological vulnerabilities within the Integrated Model of Sexual Offending.

Figure 43: Marshall and Barbaree (1990) Integrated Theory and Autism Spectrum Disorders



Socio-affective functioning difficulties, problems with self-regulation, poor impulse control and responding to criminogenic Strain all incorporate a lack of consideration for others. The single factor theory of empathy deficits (e.g. Ward et al., 2000) appears very much applicable to sexual offenders with ASD, with the Interview Study suggesting low displays of

empathy in the service users. This was particularly notable in the case of affective empathy, with some of the clinicians suggesting there were fewer displays of emotionally empathic behaviour in those with ASD than in sexual offenders with intellectual disabilities alone.

Unfortunately, this PhD was unable to address any of the challenges in understanding the role of empathy (or its absence) in sexual offending, such as whether its presence is a protective factor against re-offending. The different aspects of empathy i.e. victim and general empathy, and cognitive and affective empathy were demonstrated, indicating the same nuances are found within offenders with ASD. For example, there were reports that some of the service users displayed empathy towards individuals other than their victims, and the men were able to show a clear understanding of mentally 'putting oneself in another's shoes'. However, despite these skills, what could be called 'empathic abilities', attitudes consistent with offending remained, perhaps suggestive of cognitive distortions around their behaviour towards the victim rather than necessarily a global or pure empathy deficit. What has not been answered by this PhD, or existing research is, how far, if at all, empathy, particularly the affective component, plays a part in pro-social behaviours and protection against offending.

One of the key themes in the Interview study, and raised in the literature review, is whether a lack of regard or concern for others is the consequence of anti-social tendencies or autistic difficulties (or both). The autistic empathy profile described for the offenders within the interview study, suggested particular difficulties or absences of affective empathy and victim empathy. Interestingly a similar profile was noted in the Empathy Intervention Study with fewer displays of affective empathy in students with ASD compared to students without ASD. These findings have potential implications for theories relating to Autism.

### **8.2.3 Theories of Autism Spectrum Disorders**

Kanner (1943) described autism as an "*inability to relate*", and the findings from the Interview and Empathy Intervention Studies illustrated difficulties engaging with others in offenders and non-offenders with ASD. A key component of this difficulty appeared to stem from presentations of, or absence of, empathic behaviours and this finding is in line with the Empathy-Imbalance theory of autism (Smith, 2009). Smith's theory proposed that the social impairments present in ASD stem from an imbalance, in this case deficit, of empathy.

Although the findings from the studies appear to support this theory, they do little to counter the criticisms of Smith's theory, including its inability to account for the remaining aspects of the cognitive and behavioural profile associated with ASD e.g. repetitive and restricted patterns of behaviours, sensory sensitivities and poor central coherence. The service users within the Interview Study could be said to have exemplified some difficulties with central coherence, potentially providing support for ASD theories of weak central coherence (e.g. Frith, 1989), however the examples given by the clinicians were not in relation to sexual offending attitudes and pro-criminal thinking patterns. As such, it is not possible to ascertain if this failure to integrate information and generalise to novel situations is a consequence of poor central coherence, and/or egocentricity, or the persistence of cognitive distortions due to a preference for these thought patterns or as a self-defence mechanism against shame (Marshall et al., 2009).

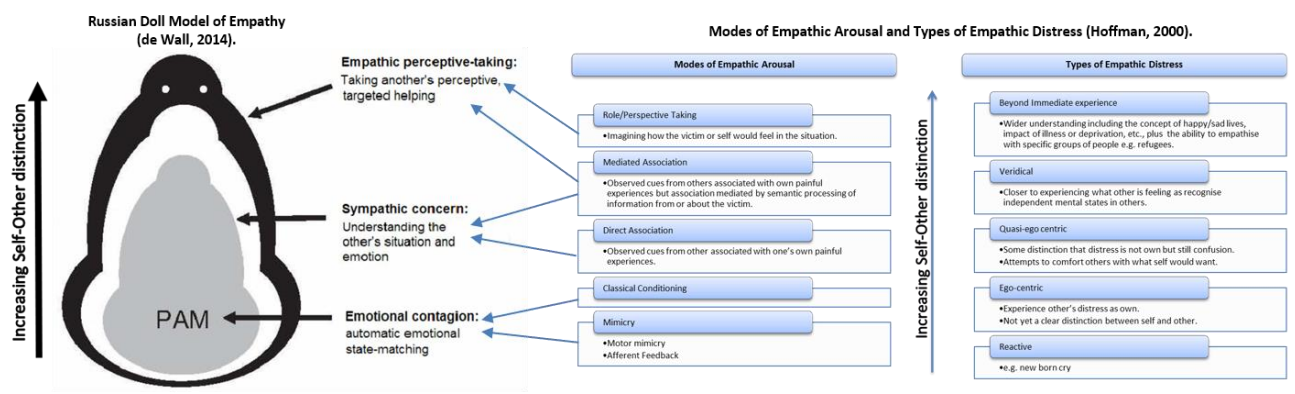
Exploration of Baron-Cohen's Empathising: Systemising theory could not be undertaken as the studies within the PhD did not investigate systemising abilities. Although difficulties in empathising were prevalent throughout the data, higher systemising abilities did not emerge as a theme within the interviews, nor were any comments made in the feedback from the Empathy Intervention Study. This may have been due to the repetitive or restrictive behaviours not being sexually deviant or problematic in nature, rather than not being present at all. Additionally, the co-morbidity of intellectual disability within the participants are likely to have been a confounding variable due to its impact on cognitive functioning and potential effect on systemising abilities. This in itself does not mean systemising abilities were not present or a strength in comparison to empathising skills in those with ASD, however further research including a measurement of systemising would need to be undertaken to explore this before being able to provide any support or contrasting evidence for the Empathising: Systemising Theory of Autism (Baron-Cohen et al. 2009).

As discussed in Chapter Seven (Empathy Intervention Study), developmental theories of empathy suggest that the initiation of empathy has a physical, unconscious initiation, which translates into the pro-social behaviours. To recall, Hoffman's model proposed cognitive empathy in terms of perspective taking and affective empathy as emotional resonance.

Each are displayed as a consequence of empathic distress (sympathetic distress and/or empathic anger). He identified five types of empathic distress, along with five modes of empathic arousal, right hand side of Figure 44).

De Waal's (2014) Russian Doll model (left hand side of the same Figure) although not distinguishing between cognitive or affective empathy (and viewing them as different layers of empathy), could incorporate Hoffman's five types and modes of empathic distress within the developmental process. For example the bottom physicalistic, autonomic and passive levels of Hoffman may map onto the 'perception-action mechanism of empathy' (PAM), the core of the 'Russian doll', and the higher levels, requiring more advanced, conscious, cognitive processes correlate with the outer layers of the doll.

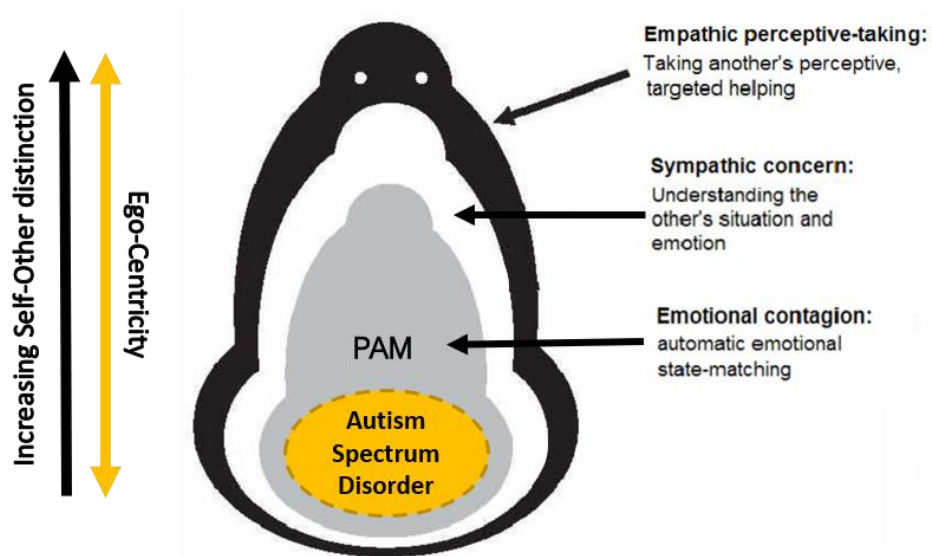
**Figure 44: Russian Doll Model of Empathy (De Waal, 2014) and Types and Modes of Empathic Arousal (Hoffman, 2000)**



De Waal's model (2014) is grounded in biology, arguing that neural representations of self and other are required for the successful development of empathy by allowing the 'mirroring' of bodily states and recognition of emotions in oneself and others. The Self to Other Model of Empathy (SOME) (Bird & Viding, 2014) discussed in Chapter Seven (Empathy Intervention Study), integrated cognitive and affective information processing systems, identifying the neural structures and cognitive processes involved i.e. understanding another's feeling and theory of mind (the temporoparietal junction and medial pre-frontal cortex, de-centration and emotion recognition) and the triggering of emotional mimicry (the somatosensory cortex, motor-mimicry, insular cortex and anterior-cingulate cortex) and mentally representing another's emotion and associating it with one's own emotional state (dorso-medial pre-frontal cortex, anterior cingulate cortex, interoception and perspective

taking) (Bird & Viding, 2014). This model, in line with De Waal, stresses the necessity of the self-to-other distinction. As identified in Chapter Seven (Empathy Intervention Study), the structures identified by Bird & Viding (2014) map onto Baron-Cohen's empathy circuit (Baron-Cohen, 2011) (discussed in Chapters Six (Interview Study) and Two (Autism Chapter)), possibly indicating that the atypicalities in the Empathy-Circuit seen in ASD could impact the 'perception-action mechanism of empathy' (PAM), and subsequent empathy development, potentially placing ASD within the Russian Doll model (Figure 45).

**Figure 45: ASD Adapted Russian Doll Model of Empathy (adapted from De Waal, 2014)**



De Waal (2014) argued that human adults have the potential to possess all emotional processes and social capacities necessary for empathy, whereas human infants and primates may only display the 'inner layers' (Hoffman's 'primitive' physicalistic types of empathic distress). Progression to the 'outer layers' is a consequence of increasing self-other distinction and development of more cognitively complex processes and capacities (Hoffman's more advanced types of empathic distress). This position could be said to be in contrast to the profile of higher displays of cognitive empathy compared to affective empathy reported in those with ASD in the Interview and Empathy Intervention Studies, if a lack of affective empathy is taken to imply the earlier 'layers' are underdeveloped. The clinicians in the Interview Study implied the men within the sample were able to distinguish between self and other yet displayed high levels of egocentricity after treatment.

Alternatively, the findings from the PhD studies could suggest that theory of mind and emotional resonance develop semi-independently, with the pairing of both resulting in decreased egocentricity and displays of pro-social behaviours. Deficits or differences in motor or emotional mimicry in individuals with ASD may impact the development of the PAM, yet still allow for the development of the higher cognitive process, and as such retain higher levels of egocentricity (as illustrated in the adapted Russian Doll model), and account for the higher levels of cognitive empathy reported in Chapters Six and Seven (Interview and Empathy Intervention Studies).

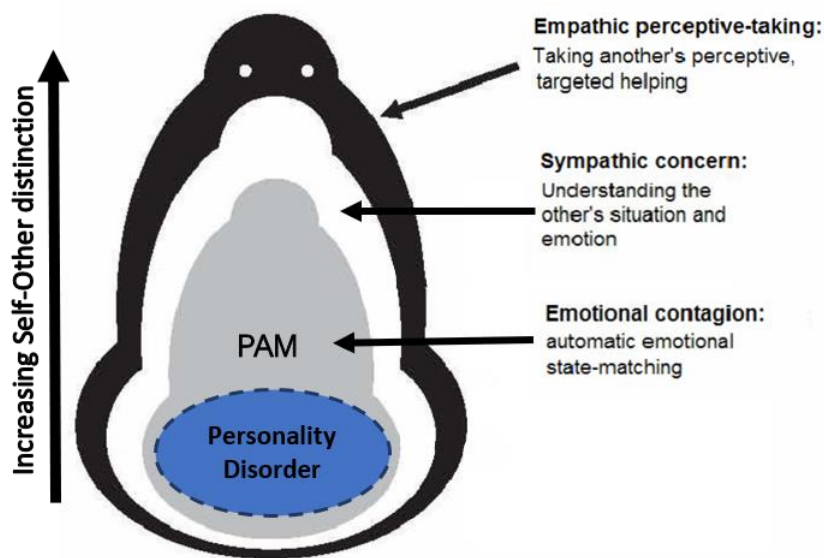
Alternatively, it may be, that difficulties in distinguishing self-from other in individuals with ASD actually creates over-sensitivity to the emotions of others and difficulties in de-centration result in extreme empathic distress (Moriguchi et al., 2009). As such, suppression of emotional resonance with others may be a self-defence mechanism. This may account for the development of both cognitive and affective empathy (and all layers within the Russian Doll model), however only result in displays of cognitive empathy rather than emotionally empathic behaviour in autistic individuals.

These hypotheses are tentative as the evidence from the PhD does not provide direct evidence for them and further research would need to be undertaken.

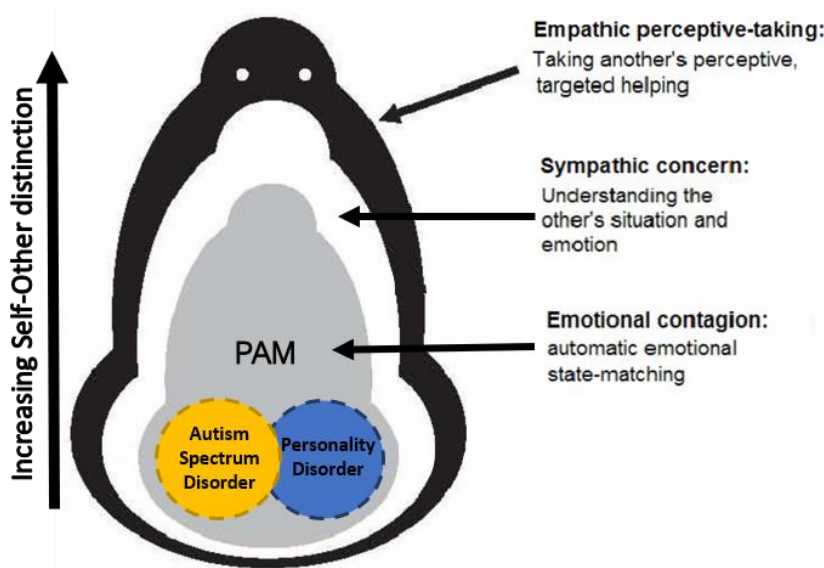
An additional caveat to the suggested adaptations of the De Wall's model and its application to empathy development in ASD and autistic sexual offenders, is the complication of a co-morbid diagnosis, or possible alternative diagnosis, of personality disorder. The question of a possible personality disorder for some of the services users, and any relation to empathy or subsequent impact on treatment, was a prominent theme in the interviews. As discussed in Chapter Two (Autism Spectrum Disorders) and Six (Interview Study), personality disorder is associated with poor treatment outcomes, however the importance of distinguishing it from ASD was illustrated by Griffin-Shelley who felt that an addiction treatment model would be better suited in their case of an adolescent with Asperger's Syndrome convicted of sexual offences, rather than treatment within a personality disorder service (Griffin-Shelley, 2010). Whilst personality disorder could fit within the model in a similar method to ASD (Figure 46 : Personality Disorder Adapted Russian Doll Model of Empathy) and related to in the development of the PAM and empathy, as said it would be further complicated by the

presence of both (Figure 47: ASD and Personality Disorder adapted Russian Doll Model of Empathy) as there is little research currently able to account for differences in the development of empathy profiles amongst those with ASD and those with anti-social personality disorders including psychopathic or callous-unemotional traits and again, further study would be need to be undertaken.

**Figure 46: Personality Disorder Adapted Russian Doll Model of Empathy (adapted from De Waal, 2014)**



**Figure 47: ASD and Personality Disorder adapted Russian Doll Model of Empathy (adapted from De Waal, 2014)**





## **8.3 Clinical Implications**

### **8.3.1 Sexual Offending Treatment**

The Risk-Need-Responsivity model for treatment suggests that treatment should be targeted to an individual's level of risk, meet their criminogenic treatment needs and facilitate responsivity to said treatment (Andrews & Bonta, 2003). Questions in the literature regarding appropriateness and effectiveness of current sex offending treatment programmes for individuals with ASD were the foundation for this PhD, and as discussed above, the three studies undertaken have begun addressing these questions, with some implications for clinical practice.

One of the key findings from the interview study that was contrary to suggestions in existing literature on ASD and offending (e.g. Higgs & Carter, 2015), was an apparent benefit in the group delivery of treatment. Additionally, qualitative feedback from the Empathy Intervention study (Chapter Seven) illustrated that the students with ASD actively engaged and interacted with each other and the session material. These findings support the use of groups and a peer-helping approach for individuals with ASD, despite difficulties or atypicalities in social communication, with practice implications reaching across forensic, mental health and educational arenas.

Of course, it was not the case that all service users interviewed benefitted from the group and a number of clinicians reported some men preferred individual as opposed to group therapy. However, in relation to sexual offending treatment and in line with Gannon et al.'s (2019) findings of decreased sexual recidivism following group (as opposed to individual or mixed) programmes, the putative assumption that offenders with ASD will all be unsuitable for group therapy due to social communication and interaction difficulties was not supported by the research in this PhD.

Implicit benefits were reported within the Interview Study as a consequence of treatment being 'in a group', these included improvements to social networks and increases in self-esteem and identity (in assuming pro-social roles). This echoes findings of the indirect or implicit benefits identified in the case series within the systematic review of Offending Treatment for Individuals with Autism (Chapter Three). How far these implicit benefits or

indirect outcomes impact desistence of offending is unknown, particularly as the majority of service users in the Interview Study continued to display concerning sexual behaviours, it does however provide support for the use of a strengths-based model of treatment, such as the Good Lives Model, in the clinical practice of treating autistic sexual offenders.

Further support for the use of the Good Lives Models was provided in that key social goods such as employment and romantic or sexual relationships were identified by both the men and the clinicians interviewed as protective factors against re-offending. Whilst is not within the remit of a sexual offending treatment programme to provide these for offenders, these elements could be incorporated into wider clinical practice and, to an extent, facilitated by care and support services (or at least not restricted). There is a long history of repression of sexuality and love in individuals with intellectual disabilities, including forced sterilisation and more subtle methods such as single beds in homes and gender-segregated units. It is therefore possible that repression of sexuality or lack of opportunity for love and/or sexual activity *may* have contributed to a sexual offence, however this is a tentative hypothesis as no direct data from the PhD evidences this. Support to develop and/or engage in healthy, consensual sexual relationships might impact levels of risk if, as identified in the Good Lives Model (Ward & Brown, 2004) and consistent with General Strain Theory (Agnew, 2006), the individual's needs are being met through legal, pro-social means. There are currently calls for the Care Quality Commission to include questions of love and sex in inspections (<https://petition.parliament.uk/petitions/234039>) and organisations such as Supported Loving are promoting the support of individuals with intellectual and developmental disabilities, including ASD, to develop romantic relationships and have sex lives should they so wish. It therefore stands to reason that support for this area of an autistic offender's life (those in the community) could be incorporated into a wider care and treatment plan.

A clear contrast, and possible conflict, in the data from the Interview Study was found in the difference between clinician and service users in perceptions of risk following treatment. This has implications for clinical practice in that there appears to be disjuncture or difference in therapeutic objectives and expectations of treatment outcomes between service user and therapist, they are in the same book but on different pages. The difference is unlikely to be specific to sexual offenders with ASD, and possibly contributed to by the 'popular penalist politics' discussed in Chapters One (Sexual Offending) and Four (Social

Policy), whereby public opinion and political agendas dictate practice and policy rather than evidence base.

As said previously, many of the themes used to construct risk were similar across the clinician and service user models, but how they were placed together and the importance given to each was different. The clinical features of ASD, such as cognitive rigidity, difficulties with emotion recognition and regulation as well as impairments in theory of mind may, exacerbate or contribute to this difference. For example, in their constructions of identity, the men did not perceive themselves as a risk to others, therefore treatment was viewed as something which should improve their lives (by gaining access to more freedoms such as discharge from detention under the Mental Health Act). For service users where this did not happen, the treatment was described as 'pointless' or 'not helpful'. By contrast, this focus on the offender's own wants and needs (in line with their 'identity'), and showing little reference to, or consideration for others, was viewed by the clinicians as displaying attitudes consistent with offending, little shift in cognitive distortions and a lack of empathy, therefore raising questions over the 'effectiveness' of treatment. Whether through ASD or anti-social tendencies, the findings indicate that the service user either fails to acknowledge, or cannot access, what the clinicians are attempting to address, as such both are left with the view that current treatment is suboptimal.

Empathy appears a key component in assessing risk of re-offending, both in the literature and in the Interview Study, and the profile of higher displays of cognitive empathy than affective empathy reported by the clinicians about sexual offenders with ASD, was repeated in a non-forensic sample (Chapters Seven). The pattern identified in this qualitative data is in contrast to the research identified in Chapters Two and Seven (Autism Spectrum Disorders and Empathy Intervention Study), where individuals with ASD were reported to display higher levels of affective empathy than cognitive empathy in comparison to individuals with psychopathy or displaying callous-unemotional traits (who displayed the opposite profiles) (Rogers et al., 2006; Baron-Cohen, 2008; Jones et al., 2010). The higher levels of cognitive empathy in the Empathy Intervention Study will likely have been impacted by higher cognitive functioning (as reflected in the difference in IQ between the ASD and No ASD groups within the study), however the suggested imbalance between

cognitive and affective empathy in the ASD group is congruent with the Empathising: Systemising Theory of ASD (Baron-Cohen et al., 2009).

Whether this apparent absence of affective empathy is a consequence of autism, anti-social attitudes or a combination of both, is unknown and such a gap in the knowledgebase should be recognised when treating of offenders with ASD. Although the findings in this study were in contrast to those whereby higher levels of emotional empathy were displayed in individuals with ASD, it is possible that bias from the size and sampling methods used in this PhD may have impacted the findings. As such individuals with ASD, including offenders, may only 'appear' to have lower levels of empathy perhaps due to atypical functioning in the processes that 'activate' empathy i.e. sensory processing of information and subsequent responding to empathic distress (Hoffman, 2000; Garrigan et al., 2016; Baron-Cohen et al, 2005, Baron-Cohen, 2009).

The findings regarding empathy in this PhD are tentative due to stemming from a small number of qualitative observations rather than standardised assessment. As a consequence the clinical implications are limited however, affective empathy appears pertinent in formulating risk and ascertaining internalisation of therapy particularly when presentations are absent or atypical. This clearly emphasises the need for a deeper understanding of the autistic empathy profile, as the manifestation of empathy, either in expressions of attitude or displays of emotional resonance, has been illustrated as integral in judgements of mental health (in relation to personality disorders and psychopathic traits), culpability, treatment needs and responsiveness to treatment, and risk of re-offending.

### **8.3.2 Social Policy and Legislation**

The potential impact of the clinical features of ASD on positive treatment outcomes for sexual offenders identified in this PhD holds a number of implications for clinical practice. These are not only in relation to the treatment needs of individuals with ASD who display sexually offending or harmful sexual behaviours, but also in the assessment and identification of those with ASD within sexual offending populations.

As has been alluded to, some of the complexity in meeting the treatment needs of autistic sexual offenders is potentially due to the number of theoretical disciplines and social arenas crossed, along with the variety of legislations and health and social care policies applicable

(as discussed in Chapter Four on Social Policy) (Figure 48). The Prevalence Survey and Interview Study showed that adolescents and adults with ASD find themselves placed within a variety of organisations or institutions with some going through the Criminal Justice System, and others a health or social care route.

**Figure 48: Sexual offending Treatment for Individuals with ASD.**



Offenders can move between the two (perhaps influenced by co-morbidity of intellectual disability), with some service users in the Interview Study being given a custodial sentence and subsequently transferred to hospital for treatment under the Mental Health Act, whilst others were diverted from the court system, potentially through Liaison and Diversion Services. Although there are clear pathways for adult sexual offenders, more so than children and adolescents, what determines which route the individual will take appears inconsistent and at times. For example, the offending histories of the men within the interview study were varied and non-sexual offences appeared to receive a higher conviction rate (or charges brought) than sexual offences. Whilst a small sample and therefore conclusions are limited, this did not appear to be related to the severity of the

offence e.g. a probation order for public indecency and no charges brought for rape, one participant received convictions for aggression and destruction to property but none related to a long history of sexually abusive acts against adults and children.

The older and more cognitively able service users within the sample did appear to have been remanded in custody at some point, however following an initial offence or once in the health or social care system, subsequent offences or illegal behaviours by service users appeared less likely to be referred to the Criminal Justice System. This may be due to developments in procedures and policies to safeguard the rights of vulnerable defendants, such as Liaison and Diversion Services however the Interview Study highlighted the impact such inconsistency can have in relation to understanding or perceptions of morality and experiencing negative outcomes e.g. a fine or social media restriction. Although there is conflicting evidence for punishment being a deterrent of criminal behaviour (e.g. Sparks, 1996), for those where increased emphasis on negative consequences for self appears to impact treatment outcomes, more so than concern for others, it may mean the risk of punishment (if delivered consistently), has the potential to act as a stronger motivator for desistance in comparison to non-autistic populations.

Further noted in the study was that such inconsistency in response to criminal behaviours i.e. being charged/brought to the attention of the police for one instance and not another, can create additional confusion in those who may already struggle to understand social etiquette and behaviour, or use an external frame of reference for social morality (e.g. the Police/the Law, religious principles etc.).

A sporadic response to harmful sexual behaviour may have begun in childhood, as some of the clinician interviews indicated, and potentially contributed to the development and maintenance of such behaviour. This highlights the known need for early identification and intervention and increased provision in services for assessment and diagnosis of ASD (and intellectual disability) in children who display harmful sexual behaviours (with the prevalence survey findings of only 56.7% of services assessing for ASD or intellectual disability). It is not possible from the data collected for this PhD to ascertain why early behaviours were not addressed, however it is likely the reasons identified in Chapter One (Sexual Offending), such as the denial of sexuality in children and young people, especially

those with intellectual or developmental disabilities or promiscuous, anti-social or pro-criminal home environments (e.g. Vizard et al, 2007; Ryan, 2010) to have been at play.

The Prevalence Survey (Chapter Five) and literature review (Chapters One to Four) identified that Cognitive Behavioural Treatment (CBT) for sexual offenders are available across criminal justice and health or social care services. Their use with offenders with ASD may vary, potentially due to a lack of assessment or identification of ASD, or because additional treatment needs such as those identified by the clinicians in Chapter Six (Interview Study), including repetition of material, concrete examples, emphasis on negative consequence for self or additional 'booster' sessions, are not known or unavailable. The lack of evidence-base supporting autism-specific treatment needs or adaptations, including questions of the impact of an autistic empathy profile (Chapters Six and Seven, Interview Study and Empathy Intervention Study), means only wide-reaching clinical guidance and social policy is currently provided, leaving clinicians with a dearth of avenues to source best practice for treating sexual offenders with ASD.

## **8.4 Future Research**

The findings from this PhD are encouraging and further research in this area is indicated in order to continue to improve service provision and meet the treatment needs of autistic sexual offenders. Potential future research from this PhD has been considered and has been devised into the following themes:

### **8.4.1 Identification and Assessment of ASD in Services**

The Prevalence Survey (Chapter Five) showed a clear need for better identification of service users with ASD and increased service provision for assessment of ASD and intellectual disability services for children and young people. A larger response to the prevalence survey, across all sectors and organisations supporting children and young people who display harmful sexual behaviours, would provide more information on the scope of treatment provision required for individuals with ASD, and where services have little or reduced provision for assessment, with the aim of rectifying this. A more in-depth survey could also provide information to some of the questions that were unanswerable within this PhD, such as what adaptations are being made to treatment programmes and what

assessments or screening measures are utilised to identify ASD or intellectual disabilities, however this would place more demand on the participants responding to the survey and may limit responses.

#### **8.4.2 The Autistic Empathy Profile.**

The body of research on empathy profiles in ASD was discussed in Chapter Seven (Empathy Intervention Study), and further research, outside of offending populations, could seek to investigate the development of such profiles, particularly in line with neuroscientific research on the neural structures and processes implicated in ASD and the development of socio-affective behaviours.

Additionally, comparing displays of empathic behaviour between children with and without ASD, and the potential roles of cognitive and affective empathy processes, could provide further understanding of the construct of empathy and how it manifests in pro-social behaviour. However, in order to achieve this, future research should also be undertaken in the development of empathy measures for adults and children with intellectual and developmental disabilities, including those with ASD.

#### **8.4.3 Treatment for adults and adolescents with ASD who display harmful sexual behaviours or sexually offend.**

Research under this theme could further investigate the use of adapted sex offender treatment programmes for autistic individuals, both adolescents and adults. The findings from this PhD indicated benefits to a small sample of adults, however a larger comparative trial, exploring different modes of treatment i.e. group therapy compared to individual therapy, or cognitive behavioural treatment compared to psychodynamic approaches, would help to further ascertain an optimal treatment model for individuals with ASD who sexually offend. Additionally, the suggestions for ASD specific adaptations made within the Interview Study should be explored and others identified in order to investigate their potential to improve treatment outcomes.

A larger study, ideally a randomised controlled trial, would explore effectiveness in a systematic and standardised method. For example, the measures used within the SOTSEC-



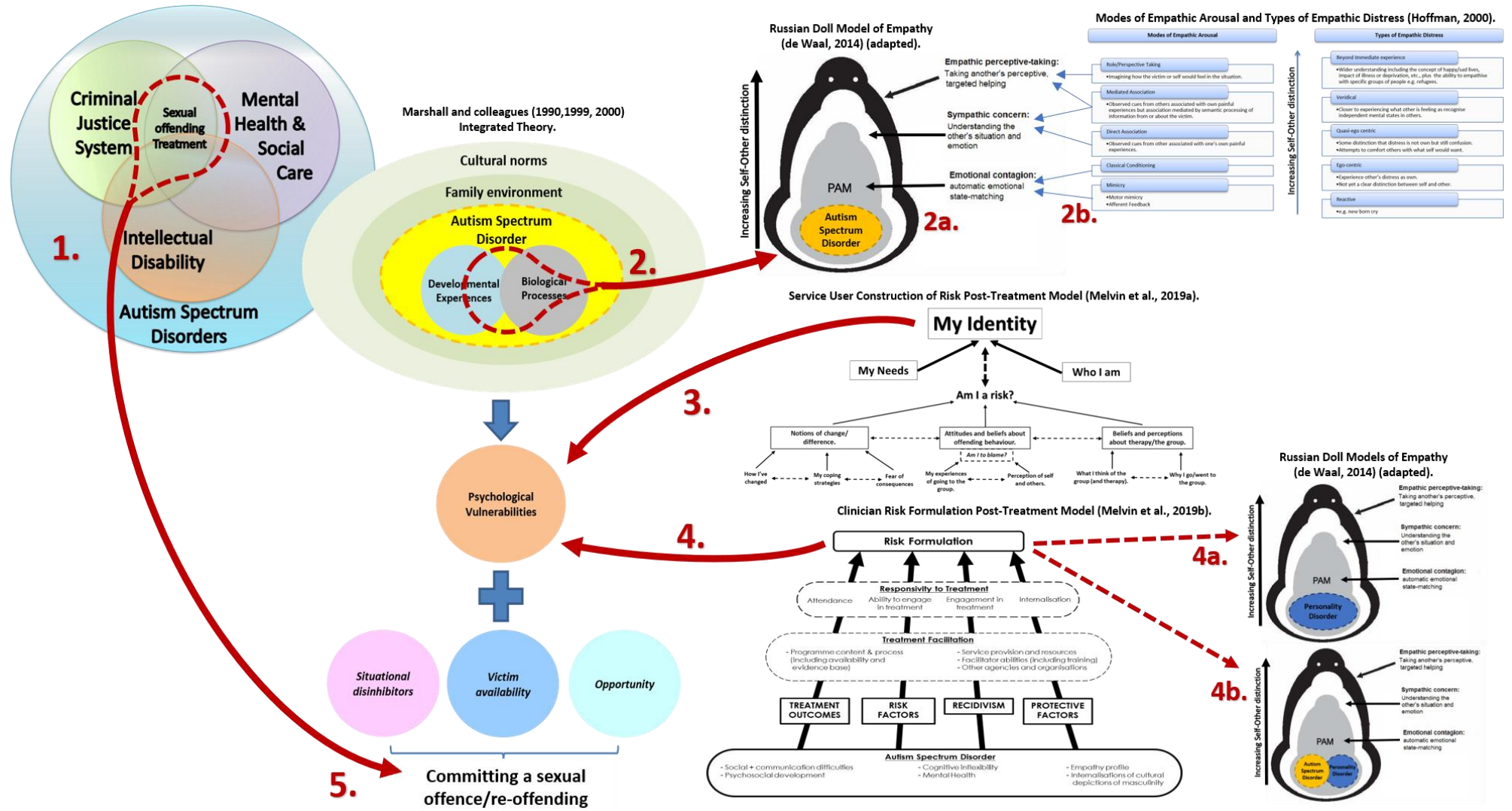
ID studies (SOTSEC-ID, 2010; Heaton & Murphy, 2013), assessing changes in cognitive distortions, sexual knowledge and empathy in addition to rates or instances of recidivism and re-offending following treatment. A randomised control trial in which treatment is withheld from a 'no treatment' ASD group would face the same ethical challenges as identified in sexual offender treatment research in Chapter One (Sexual Offending), however a controlled trial exploring those with ASD compared to no ASD (either with or without intellectual disabilities), could provide further support or refutation of hypotheses regarding the potential impact of ASD symptomatology on positive treatment outcomes for sexual offenders e.g. social naivety, sexually deviant 'special interests', and deficits in empathy.

A number of research avenues exploring empathy could be taken following this PhD. Perhaps one of the most pressing, is the need to investigate the potential role of empathy in facilitating desistance from offending. This may be of particular importance to autistic offenders with a co-morbid personality disorder if they indeed experience a cumulative or 'double-hit' effect, as suggested by Rogers et al. (2006). Additionally, comparisons of empathy within autistic populations i.e. offenders compared to non-offenders, sexual offenders compared to non-sexual offenders, etc., could also provide insight and application to offender treatment models.

## **8.5 Conclusions**

This PhD set out to explore the use of adapted sex offender treatment programmes for individuals with ASD. A comprehensive review of the literature, including a systematic review of the current evidence base on treatment of autistic offenders, along with three empirical studies have illustrated the complexities in meeting the treatment needs of this niche group of individuals (including early intervention), as well as highlighted the challenges in identifying said individuals. The findings from the studies within this PhD, and the existing literature, have been combined to illustrate these complexities faced by individuals with ASD who sexually offend and those who deliver treatment to them (Figure 49).

Figure 49: Sexual Offending Treatment for individuals with Autism



It has been argued that such complexity stems from the needs of the individuals themselves related to their ASD diagnosis, particularly in relation to difficulties with empathy, but also due to the number of social, clinical and political domains that individuals with ASD find themselves in.

Figure 49: Sexual Offending Treatment for individuals with Autism, illustrates this complexity in relation to the existing literature and the findings within this PhD.

To begin at Number **1**, sexual offending treatment for autistic offenders can fall within the Criminal Justice System or health and social care services. ASD can occur with an intellectual disability and without, as such, where an individual or offender (adult or adolescent) is placed depends on the multitude of pathways identified in Chapter Four (Social Policy) (Figures 9 and 10, pages 112 and 116). The Prevalence Survey highlighted insufficient provision of assessment and identification of ASD within service users with the implication of failure to identify treatment needs.

Treatment models for sexual offending consider the development of the behaviours, with psychological models, such as Marshall and Colleagues Integrated Model (1990, 1999, 2000). The Integrated Model of Sexual Offending (1999), Number **2** on the diagram, places the committing of a sexual offence (or re-offence) in the early development of the behaviours. These stem from cultural norms (as illustrated by the service users' internalisations of cultural depictions of masculinity in the Interview Study) and the family environment, within which the individual's developmental experiences take place, along with their developmental biological process e.g. puberty and sexual maturation. The PhD adapted the model to further place the developmental experiences and biological processes within an ASD, with potential differences in brain development and functioning and their subsequent impact on information processing and cognitive functioning affecting social development. The PhD has proposed that the impact of an ASD on empathy development appears of particular importance within the committing of sexual offences, and an ASD may impact the biological processing in Marshall's model by way of De Waal's Russian Doll model of Empathy, incorporating Hoffman's types and models of empathic distress and arousal (Numbers **2a** and **2b**).

The culture, family environment and developmental and biological experiences, as potentially shaped by ASD, in Marshall's model culminate in psychological vulnerabilities, such as using sex as a coping strategy for negative emotions or distorted sexual scripts. A number of possible vulnerabilities to sexual offending and re-offending were identified with the models developed from the Interview Study (Numbers **3.** and **4.**), with the clinicians also needing to differentiate between an alternative diagnosis of personality disorder (alternative to ASD), or a possible co-morbidity, with any further possible impact on positive treatment outcomes (Numbers **4a.** and **4b.**).

The Integrated model argues that such psychological vulnerabilities coupled with situational disinhibitors, victim availability and opportunity culminate in whether a sexual offence, or re-offence is committed (Number **5.**), and it is the reduction of these offences which is the primary objective of sexual offending treatment in social, clinical and political arenas (Number **1.**).

Whilst the PhD was unable to draw any firm conclusions regarding risk of re-offending following the use of adapted sex offender treatment programmes with individuals with ASD a number of clear benefits were highlighted. These included positive outcomes in the use of group therapy, with offenders and non-offenders with ASD, such as the opportunity to develop pro-social roles and identities, and for sexual offenders, the chance for increased monitoring and repetition of material. Although some challenges appeared distinct to a diagnosis of ASD, inclusion within adapted or mainstream groups (where appropriate) appeared to be promoted over the idea of ASD only groups, however inclusion would be dependent on a need for further adaptations and support.

## References

- Abel, G. G., & Blanchard, E. B. (1974). The role of fantasy in the treatment of sexual deviation. *Archives of General Psychiatry*, 30, 467-475.
- Abel, G. G., Becker, J. V., & Cunningham-Rathner, J. (1984). Complications, consent, and cognitions in sex between children and adults. *International Journal of Law and Psychiatry*, 7(1), 89-103. doi:10.1016/0160-2527(84)90008-6
- Abel, G. G., Blanchard, E. B., & Becker, J. V. (1978). An integrated treatment program for rapists. In R. Rada (Ed.), *Clinical aspects of the rapist* (pp. 161-214). New York: Grune & Stratton.
- Abel, G. G., Levis, D., & Clancy, J. (1970). Aversion therapy applied to taped sequences of deviant behaviour in exhibitionism and other sexual deviations: A preliminary report. *Journal of Behaviour Therapy and Experimental Psychiatry*, 1, 58-66.
- Abel, G. G., Osborn, C. A., & Twigg, D. A. (1993). *Sexual assault through the life span: Adult offenders with juvenile histories*. (pp. 104-117). New York, NY, US: Guilford Press.
- Abend, G. (2008). The meaning of 'theory'. *Sociological theory*, 26(2), 173-199.
- Achenbach, T. M., Becker, A., Dopfner, M., Heiervang, E., Roessner, V., Steinhausen, H. C., et al. (2008). Multicultural assessment of child and adolescent psychopathology with ASEBA and SDQ instruments: research findings, applications, and future directions. *Journal of Child Psychology and Psychiatry*, 49(3), 251– 275.
- Ackerman, A. R., & Sacks, M. (2012). Can general strain theory be used to explain recidivism among registered sex offenders? *Journal of Criminal Justice*, 40(3), 187-193.
- Agaibi, C. E., & Wilson, J. P. (2005). Trauma, PTSD, and resilience: A review of the literature. *Trauma, Violence, & Abuse*, 6(3), 195-216. doi:10.1177/1524838005277438
- Aggarwal, S., & Angus, B. (2015). Misdiagnosis versus missed diagnosis: Diagnosing autism spectrum disorder in adolescents. *Australasian Psychiatry*, 23(2), 120-123. doi:10.1177/1039856214568214

- Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology*, 30(1), 47-88.
- Agnew, R. (2006). General strain theory: Current status and directions for further research. *Taking Stock: The Status of Criminological Theory*, 15, 101-123.
- Agnew, R. (2013). When criminal coping is likely: An extension of general strain theory. *Deviant Behavior*, 34(8), 653-670. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2013-13696-004&site=ehost-live>
- Ainsworth, M. S. (1979). Infant–mother attachment. *American Psychologist*, 34(10), 932-937. doi:10.1037/0003-066X.34.10.932
- Akers, R. L., Krohn, M. D., Lanza-Kaduce, L., & Radosevich, M. (1995). Social learning and deviant behavior: A specific test of a general theory. *Contemporary masters in criminology* (pp. 187-214) Springer.
- Alexander R. T., Hiremath A., Chester V., Green F. N., Gunaratna I. J. & Hoare S. (2011) Evaluation of treatment outcomes from a medium secure unit for people with intellectual disability. *Advances in Mental Health and Intellectual Disabilities* 5, 22–32.
- Alexander, M. A. (1999). Sexual offender treatment efficacy revisited. *Sex Abuse*, 11(2), 101-116. doi:10.1177/107906329901100202
- Alexander, R., Hiremath, A., Chester, V., Green, F., Gunaratna, I. and Hoare, S. (2011), "Evaluation of treatment outcomes from a medium secure unit for people with intellectual disability", *Advances in Mental Health and Intellectual Disabilities*, Vol. 5 No. 1, pp. 22-32. <https://doi.org/10.5042/amhid.2011.0013>
- Alexander, R., Langdon, P. E., Chester, V., Barnoux, M., Gunaratna, I., & Hoare, S. (2016). Heterogeneity within autism spectrum disorder in forensic mental health: the introduction of typologies. *Advances in Autism*, 2(4), 201-209.

- Allely, C. (2016) Experiences of prison inmates with autism spectrum disorders and the knowledge and understanding of the spectrum amongst prison staff: A review. *Journal of Intellectual Disabilities & Offending Behaviour*, 6(2), 55-67.  
doi:10.1108/JIDOB-06-2015-0014
- Allely, C. S., Wilson, P., Minnis, H., Thompson, L., Yaksic, E., & Gillberg, C. (2017). Violence is rare in autism: When it does occur, is it sometimes extreme? *The Journal of Psychology*, 151(1), 49-68. doi:10.1080/00223980.2016.1175998
- Allen, D., Evans, C., Hider, A., Hawkins, S., Peckett, H., & Morgan, H. (2008). Offending behaviour in adults with asperger syndrome. *Journal of Autism and Developmental Disorders*, 38(4), 748-758. doi:10.1007/s10803-007-0442-9
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders: DSM-IV-TR*. Washington, DC: American Psychiatric Association.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5*. Washington, D.C: American Psychiatric Association.
- Amodio, D. M., & Frith, C. D. (2006). Meeting of minds: the medial frontal cortex and social cognition. *Nature reviews neuroscience*, 7(4), 268.
- Anckarster, H., Nilsson, T., Saury, J., Rastam, M., & Gillberg, C. (2008). Autism spectrum disorders in institutionalized subjects. *Nordic Journal of Psychiatry*, 62(2), 160-167.  
Retrieved from  
<http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2008-07325-011&site=ehost-live>
- Anderson, C. A., & Bushman, B. J. (2001). Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal, and prosocial behavior: A meta-analytic review of the scientific literature. *Psychol Sci*, 12(5), 353-359. doi:10.1111/1467-9280.00366
- Anderson, T., McClintock, A. S., Himawan, L., Song, X., & Patterson, C. L. (2016). A prospective study of therapist facilitative interpersonal skills as a predictor of

treatment outcome. *Journal of Consulting and Clinical Psychology*, 84(1), 57-66.  
doi:10.1037/ccp0000060

Anderson, T., Ogles, B. M., Patterson, C. L., Lambert, M. J., & Vermeersch, D. A. (2009).  
Therapist effects: Facilitative interpersonal skills as a predictor of therapist success.  
*Journal of Clinical Psychology*, 65(7), 755-768.

Andrews, D. A. (2010). In Bonta J. (Ed.), *The psychology of criminal conduct* (Fifth edition.  
ed.). Albany, N.Y.]: Albany, N.Y., Lexis Nexis/Anderson Pub.

Andrews, D. A., Bonta, J., & Wormith, J. S. (2011). The risk-need-responsivity (RNR) model:  
Does adding the good lives model contribute to effective crime prevention? *Criminal  
Justice and Behaviour*, 38(7), 735-755.

Araji, S., & Finkelhor, D. (1985). Explanations of pedophilia: Review of empirical research. .  
*Bulletin of the American Academy of Psychiatry and the Law.*, 13(1), 17-37.

Ashburner, J., Ziviani, J., & Rodger, S. (2008). Sensory processing and classroom emotional,  
behavioral, and educational outcomes in children with autism spectrum disorder.  
*American journal of occupational therapy*, 62(5), 564-573.

Ashfield, S., Brotherston, S., Eldridge, H., & Elliott, I. (2013). Female sexual offenders: The  
need for a gender-responsive approach. *Legal and ethical aspects sex offender of  
treatment and management*, 321-338.

Aspinwall, L. G., & Staudinger, U. M. (2003). A psychology of human strengths: Fundamental  
questions and future directions for a positive psychology. *American Psychological  
Association*.

Atkinson, P., Coffey, A., & Delamont, S. (2003). Key themes in qualitative research:  
Continuities and changes. Rowman Altamira.

Attree, P., Morris, S., Payne, S., Vaughan, S., & Hinder, S. (2011). Exploring the influence of  
service user involvement on health and social care services for cancer. *Health  
Expectations*, 14(1), 48-58. doi:10.1111/j.1369-7625.2010.00620.x



- Attwood, T. (2006). Autism and asperger syndrome: Preparing for adulthood, 2nd edn. *Journal of Child Psychology & Psychiatry*, 47(2), 223-224. doi:10.1111/j.1469-7610.2006.00452.x
- Attwood, T. (2007). *The complete guide to Asperger's Syndrome*. London; Philadelphia: Jessica Kingsley Publishers.
- Auden, G. (1911). Feeble-mindedness and juvenile crime. *Journal of Criminal Law and Criminology*, 228(2).
- Ayland, L. and West, B. (2006), "The good way model: a strengths-based approach for working with young people, especially those with intellectual difficulties, who have sexually abusive behaviour", *Journal of Sexual Aggression*, Vol. 12 No. 2, pp. 189-201.
- Baddeley, A., & Wilson, B. (1988). Frontal amnesia and the dysexecutive syndrome. *Brain and cognition*, 7(2), 212-230.
- Baio, J. (2012). Prevalence of Autism Spectrum Disorders: Autism and Developmental Disabilities Monitoring Network, 14 Sites, United States, 2008. *Morbidity and Mortality Weekly Report. Surveillance Summaries*. Volume 61, Number 3. Centre for Disease Control and Prevention.
- Baird, G., Simonoff, E., Pickles, A., Chandler, S., Loucas, T., Meldrum, D., & Charman, T. (2006). Prevalence of disorders of the autism spectrum in a population cohort of children in South Thames: The special needs and autism project (SNAP). *The Lancet*, 368(9531), 210-215.
- Baker, A. E., Lane, A., Angley, M. T., & Young, R. L. (2008). The relationship between sensory processing patterns and behavioural responsiveness in autistic disorder: A pilot study. *Journal of autism and developmental disorders*, 38(5), 867-875.
- Baker, D. L. (2011). *The politics of neurodiversity: Why public policy matters*. Boulder, CO: Lynne Rienner.

- Baker, E., & Beech, A. R. (2004). Dissociation and variability of adult attachment dimensions and early maladaptive schemas in sexual and violent offenders. *Journal of Interpersonal Violence, 19*(10), 1119-1136. doi:10.1177/0886260504269091
- Baker, E., Beech, A., & Tyson, M. (2006). Attachment disorganization and its relevance to sexual offending. *Journal of Family Violence, 21*(3), 221-231.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review, 84*(2), 191-215. doi:10.1037/0033-295X.84.2.191
- Barbaree, H., E., & Marshall, W., L. (Eds.). (2006). *The juvenile sex offender (Second Edition ed.)*. New York: The Guilford Press.
- Barneveld, P. S., Pieterse, J., de Sonnevile, L., van Rijn, S., Lahuis, B., van Engeland, H., & Swaab, H. (2011). Overlap of autistic and schizotypal traits in adolescents with autism spectrum disorders. *Schizophrenia research, 126*(1-3), 231-236.
- Baron-Cohen, S. (1988). An assessment of violence in a young man with asperger's syndrome. *Journal of Child Psychology and Psychiatry, 29*(3), 351-360. doi:10.1111/j.1469-7610.1988.tb00723.x
- Baron-Cohen, S. (1988). An assessment of violence in a young man with asperger's syndrome. *Journal of Child Psychology and Psychiatry, 29*(3), 351-360. doi:10.1111/j.1469-7610.1988.tb00723.x
- Baron-Cohen, S. (1989). The autistic child's theory of mind: A case of specific developmental delay. *Journal of Child Psychology and Psychiatry, 30*(2), 285-297. doi:10.1111/j.1469-7610.1989.tb00241.x
- Baron-Cohen, S. (2002). The extreme male brain theory of autism. *Trends in cognitive sciences, 6*(6), 248-254.
- Baron-Cohen, S. (2008). *Autism and Asperger syndrome*. Oxford University Press.
- Baron-Cohen, S. (2009). Autism: The Empathizing–Systemizing (E-S) theory. *Annals of the New York Academy of Sciences, 1156*, 68-80. doi:10.1111/j.1749-6632.2009.04467.x

- Baron-Cohen, S. (2010). Empathizing, systemizing, and the extreme male brain theory of autism. In *Progress in brain research* (Vol. 186, pp. 167-175). Elsevier.
- Baron-Cohen, S. (2011). *Zero degrees of empathy: A new theory of human cruelty*. Penguin uk.
- Baron-Cohen, S., Knickmeyer, R. C., & Belmonte, M. K. (2005). Sex differences in the brain: implications for explaining autism. *Science*, 310(5749), 819-823.
- Baron-Cohen, S., Leslie, A. M., & Frith, U. (1985). Does the autistic child have a “theory of mind”? *Cognition*, 21(1), 37-46.
- Baron-Cohen, S., Ring, H. A., Bullmore, E. T., Wheelwright, S., Ashwin, C., & Williams, S. C. (2000). The amygdala theory of autism. *Neuroscience and Biobehavioural Reviews*, 24(3), 355-364. doi:S0149-7634(00)00011-7 [pii]
- Baron-Cohen, S., Scott, F. J., Allison, C., Williams, J., Bolton, P., Matthews, F. E., & Brayne, C. (2009). Prevalence of autism-spectrum conditions: UK school-based population study. *The British Journal of Psychiatry*, 194(6), 500-509.
- Baron-Cohen, S., Wheelwright, S., Skinner, R., Martin, J., & Clubley, E. (2001) The autism-spectrum quotient (AQ): Evidence from Asperger Syndrome/high-functioning autism, males and females, scientists and mathematicians. *Journal of Autism and Developmental Disorders*, 31(1), 5-17. doi:10.1023/A:1005653411471
- Barry-Walsh, J., & Mullen, P. E. (2004). Forensic aspects of asperger's syndrome. *Journal of Forensic Psychiatry & Psychology*, 15(1), 96-107. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=cja&AN=12275757&site=ehost-live>
- Bauman, M., & Kemper, T. L. (1985). Histoanatomic observations of the brain in early infantile autism. *Neurology*, 35(6), 866-866.

- Beail, N. (2017}). Psychological therapies and people who have ID: A report from the royal college of psychiatrists and british psychological society. *Advances in Mental Health and Intellectual Disabilities*, 11(1), 24-26. doi:{10.1108/AMHID-09-2016-0021
- Bear, D., Freeman, R., & Greenberg, M. (1984). Behavioural alterations in patients with temporal lobe epilepsy. In D. Blumer (Ed.), *Psychiatric aspects of epilepsy* (). Washington: American Psychiatric Press.
- Beauregard, E., Lussier, P., & Proulx, J. (2004). An exploration of developmental factors related to deviant sexual preferences among adult rapists. *Sexual Abuse: A Journal of Research and Treatment*, (16), 151-161.
- Beck, A. T., Rush, A. J., Shaw, B., & Emery, G. *Cognitive therapy of depression*. New York: Guilford Press, 1979.
- Becker, J. V. (1998). What we know about the characteristics and treatment of adolescents who have committed sexual offenses. *Child Maltreat*, 3(4), 317-329. doi:10.1177/1077559598003004004
- Becker, J. V., Abel, G. G., Blanchard, E. B., Murphy, W. D., & Coleman, E. (1978). Evaluating social skills of sexual aggressives. *Criminal Justice and Behavior*, 5, 357-367.
- Beckett, R., & Fisher, D., (1994) Victim Empathy Measure. In Beech, A., Fisher, D., & Fordham, A. S. (1994). *Community based treatment for sex offenders: An evaluation of seven treatment programmes*. R. Beckett (Ed.). Home Office Publication
- Berument, S. K., Rutter, M., Lord, C., Pickles, A., & Bailey, A. (1999). Autism screening questionnaire: Diagnostic validity. *British Journal of Psychiatry*, 175(5), 444-451. doi:10.1192/bjp.175.5.444
- Beutler, L. E., Malik, M., Alimohamed, S., Harwood, T. M., Talebi, H., Noble, S., & Wong, E. (2004). Therapist effects. *Bergin and Garfield's handbook of psychotherapy and behavior change*, 5, 227-306.

- Beutler, L.E., Malik, M., Alimohamed, S., Harwood, T.M., Talebi, H., Noble, S., et al. (2004). Therapist variables. In M.J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behavior change* (pp. 227–306). New York: Wiley
- Biddle, L., Cooper, J., Owen-Smith, A., Klineberg, E., Bennewith, O., Hawton, K., ... & Gunnell, D. (2013). Qualitative interviewing with vulnerable populations: individuals' experiences of participating in suicide and self-harm based research. *Journal of affective disorders*, 145(3), 356-362.
- Bird, G., Silani, G., Brindley, R., White, S., Frith, U., Singer, T. (2010) Empathic brain responses in insula are modulated by levels of alexithymia but not autism, *Brain*, 133:5, pp1515–1525, <https://doi.org/10.1093/brain/awq060>
- Bird, G., & Viding, E. (2014). The self to other model of empathy: providing a new framework for understanding empathy impairments in psychopathy, autism, and alexithymia. *Neuroscience & Biobehavioral Reviews*, 47, 520-532.
- Birgden, Astrid, and Heather Cucolo. "The treatment of sex offenders: Evidence, ethics, and human rights." *Sexual Abuse* 23.3 (2011): 295-313.
- Bishop, D. V., & Norbury, C. F. (2002). Exploring the borderlands of autistic disorder and specific language impairment: a study using standardised diagnostic instruments. *Journal of child Psychology and Psychiatry*, 43(7), 917-929.
- Bishop, S., Gahagan, S., & Lord, C. (2007). Re-examining the core features of autism: a comparison of autism spectrum disorder and fetal alcohol spectrum disorder. *Journal of Child Psychology and Psychiatry*, 48(11), 1111-1121.
- Blagden, N., Winder, B., & Hames, C. (2016). "They treat us like human Beings" — Experiencing a therapeutic sex offenders prison: Impact on prisoners and staff and implications for treatment. *International Journal of Offender Therapy Comparative Criminology*, 60(4), 371-396. 10.1177/0306624X14553227 Retrieved from <https://doi.org/10.1177/0306624X14553227>

- Blair, J., Sellars, C., Strickland, I., Clark, F., Williams, A., Smith, M., et al. (1996). Theory of mind in the psychopath. *Journal of Forensic Psychiatry*, 7(1), 15-25.  
doi:10.1080/09585189608409914
- Blanchard, R., Watson, M. S., Choy, A., Dickey, R., Klassen, P., Kuban, M., et al. (1999). Pedophiles: Mental retardation, maternal age, and sexual orientation. *Archives of Sexual Behaviour*, 28(2), 111-127. doi:10.1023/A:1018754004962
- Blatt, G. J. (2012). The neuropathology of autism. *Scientifica*, 2012, 703675.  
doi:10.6064/2012/703675 [doi]
- Bogaert, A. F. (2001). Handedness, criminality, and sexual offending. *Neuropsychologia*, 39(5), 465-469. doi:[http://dx.doi.org.chain.kent.ac.uk/10.1016/S0028-3932\(00\)00134-2](http://dx.doi.org.chain.kent.ac.uk/10.1016/S0028-3932(00)00134-2)
- Bogdashina, O. (2003). Sensory perceptual issues in autism and asperger syndrome: different sensory experiences-different perceptual worlds. Jessica Kingsley Publishers.
- Bolton, P., MacDonald, H., Pickles, A., Rios, P., Goode, S., Crowson, M., Bailey, A. and Rutter, M., (1994). A case-control family history study of autism. *Journal of child Psychology and Psychiatry*, 35(5), pp.877-900.
- Bonta, J., & Andrews, D. A. (1988). *The psychology of criminal conduct* Routledge.
- Bonta, J., & Andrews, D. A. (2007). Risk-need-responsivity model for offender assessment and rehabilitation. *Rehabilitation*, 6(1), 1-22.
- Bonta, J., & Andrews, D. A. (2016). *The psychology of criminal conduct* Routledge.
- Borduin, C. M., Henggeler, S. W., Blaske, D. M., & Stein, R. J. (1990). Multisystemic treatment of adolescent sexual offenders. *International journal of offender therapy and comparative criminology*, 34(2), 105-113.
- Boucher, J., (2008) Memory in autism: Theory and evidence. In Boucher J., Bowler D. (Eds.). Cambridge: Cambridge University Press. doi:10.1017/CBO9780511490101.

- Bourke, J., de Klerk, N., Smith, T., & Leonard, H. (2016). Population-Based Prevalence of Intellectual Disability and Autism Spectrum Disorders in Western Australia: A Comparison With Previous Estimates. *Medicine*, 95(21), e3737. doi:10.1097/MD.0000000000003737
- Bradley, M. M., & Lang, P. J. (1994). Measuring emotion: the self-assessment manikin and the semantic differential. *Journal of behaviour therapy and experimental psychiatry*, 25(1), 49-59.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Bretherton, I. (1992). The origins of attachment theory: John bowlby and mary ainsworth. *Developmental Psychology*, 28(5), 759-775.
- British Psychological Society (2006) Assessment of capacity in adults: interim guidance for psychologists, British Psychological Society Professional Practice Board, Assessment of Capacity Guidelines Group
- Brodkin, E. S., McDougle, C. J., Naylor, S. T., Cohen, D. J., & Price, L. H. (1997). Clomipramine in adults with pervasive developmental disorders: A prospective open-label investigation. *Journal of Child and Adolescent Psychopharmacology*, 7(2), 109-121. doi:10.1089/cap.1997.7.109
- Brooks, W. T., & Benson, B. A. (2013). The validity of the social communication questionnaire in adults with intellectual disability. *Research in Autism Spectrum Disorders*, 7(2), 247-255. doi:10.1016/j.rasd.2012.10.002
- Brown, S. L., & Forth, A. E. (1997). Psychopathy and sexual assault: Static risk factors, emotional precursors, and rapist subtypes. *Journal of Consulting and Clinical Psychology*, 65(5), 848-857. doi:10.1037/0022-006X.65.5.848
- Browne, A., & Finkelhor, D. (1986). Impact of child sexual abuse: A review of the research. *Psychological Bulletin*, 99(1), 66-77. doi:10.1037/0033-2909.99.1.66

- Browne, K., & McManus, M. (2008). Adolescents with intellectual disability and family sexual abuse. In L. Craig, K. Browne & A. Beech (Eds.), *Assessing risk in sex offenders with intellectual disabilities: A practitioner's guide* (). New York, NY, US: John Wiley & Sons Ltd. doi:10.1002/9780470773208
- Broxholme, S. L., & Lindsay, W. R. (2003). Development and preliminary evaluation of a questionnaire on cognitions related to sex offending for use with individuals who have mild intellectual disabilities. *Journal of Intellectual Disability Research*, 47(6), 472-482. doi:10.1046/j.1365-2788.2003.00510.x
- Brożek, J., A, E., Alonso-Coello, P., Lang, D., Jaeschke, R., Williams, J. & . Bousquet, J. (2009). Grading quality of evidence and strength of recommendations in clinical practice guidelines. *Allergy*, 64(5), 669-677.
- Brugha T, Cooper, S.A., McManus S, Purdon S, Smith J, Scott FJ, Spiers, N., & Tyrer, F (2012) Estimating the Prevalence of Autism Spectrum Conditions in Adults: Extending the 2007 Adult Psychiatric Morbidity Survey. England. The NHS Information Centre for health and Social Care, 2009.
- Bryant, A., & Charmaz, K. (2007). *The sage handbook of grounded theory* Sage.
- Bryson, S. E., Bradley, E. A., Thompson, A., & Wainwright, A. (2008). Prevalence of autism among adolescents with intellectual disabilities. *Canadian Journal of Psychiatry*, 53(7), 449-459. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=33625654&site=ehost-live>
- Bumby, K. (2000). Empathy inhibition, intimacy deficits, and attachment difficulties in sex offenders. In D. Laws S. M. Hudson & T. Ward (Eds.), *Remaking relapse prevention with sex offenders: A sourcebook* (pp. 143-166). Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781452224954.n8
- Bumby, K. M. (2019). *Remaking relapse prevention with sex offenders: A sourcebook*; pages 143-166. (). Thousand Oaks; Thousand Oaks, California: SAGE Publications, Inc. doi:10.4135/9781452224954



- Burk, L. R., & Burkhart, B. R. (2003). Disorganized attachment as a diathesis for sexual deviance: Developmental experience and the motivation for sexual offending  
doi:[https://doi.org/10.1016/S1359-1789\(02\)00076-9](https://doi.org/10.1016/S1359-1789(02)00076-9)
- Butler, S. M., & Seto, M. C. (2002). Distinguishing two types of adolescent sex offenders. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41(1), 83-90.
- Caparulo, F. (1991). Identifying the developmentally disabled sex offenders. *Sexuality and Disability*, 9(4), 311-322. doi:10.1007/BF01102019
- Carson, D., Lindsay, W. R., Holland, A. J., Taylor, J. L., O'Brien, G., Wheeler, J. R., . . . Johnston, S. (2014). Sex offenders with intellectual disability referred to levels of community and secure provision: Comparison and prediction of pathway. *Legal & Criminological Psychology*, 19(2), 373-384. 10.1111/lcrp.12005 Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=102183857&site=ehost-live>
- Carson, D., Lindsay, W. R., O'Brien, G., Holland, A. J., Taylor, J. L., Wheeler, J. R., et al. (2010). Referrals into services for offenders with intellectual disabilities: Variables predicting community or secure provision. *Criminal Behaviour and Mental Health*, 20(1), 39-50. doi:10.1002/cbm.755
- Case, S., & Haines, K. (2015). Children first, offenders second: The centrality of engagement in positive youth justice. *The Howard Journal of Criminal Justice*, 54(2), 157-175.
- Centre for Sex Offender Management (CSOM). (2008a). Key roles of law enforcement in sex
- Chakrabarti, B., Bullmore, E., & Baron-Cohen, S. (2006). Empathizing with basic emotions: common and discrete neural substrates. *Social neuroscience*, 1(3-4), 364-384.
- Chan, L. G., & Saluja, B. (2011). *Sexual offending and improvement in autistic characteristics after acquired brain injury: A case report* Sage Publications, Ltd.  
doi:10.3109/00048674.2011.589371

- Chaplin, E., Paschos, D., O'Hara, J., McCarthy, J., Holt, G., Bouras, N., et al. (2010). Mental ill-health and care pathways in adults with intellectual disability across different residential types. *Research in Developmental Disabilities*, 31(2), 458-463. doi:10.1016/j.ridd.2009.10.015
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative research*. Sage Publications Ltd, London.
- Charmaz, K. (2008). *Constructing grounded theory a practical guide through qualitative analysis*. London: London : SAGE.
- Charmaz, K. (2014). *Constructing grounded theory*. Sage Publications Ltd, London.
- Chen, Y. Y., Chen, C., & Hung, D. L. (2016). Assessment of psychiatric disorders among sex offenders: Prevalence and associations with criminal history. *Criminal Behaviour and Mental Health*, 26(1), 30-37. doi:10.1002/cbm.1926
- Children and Young Person's Act (1933) <https://www.legislation.gov.uk/ukpga/Geo5/23-24/12/contents>
- Children's Rights Alliance for England (2014). *Children with Special Education Needs and Disabilities. State of Children's Rights in England*. Children's Rights Alliance, London. UK.
- Christopher, F. S., Owens, L. A., & Stecker, H. L. (1993). Exploring the darkside of courtship: A test of a model of male premarital sexual aggressiveness. *Journal of Marriage and Family*, 55(2), 469.
- Chromy, S. (2007). Sexually abused children who exhibit sexual behavior problems: Victimization characteristics. *Brief Treatment & Crisis Intervention*, 7(1)
- Church, R. M. (1959). Emotional reactions of rats to the pain of others. *Journal of comparative and physiological psychology*, 52(2), 132.
- Clarke, A. E. (2003). Situational analyses: Grounded theory mapping after the postmodern turn. *Symbolic interaction*, 26(4), 553-576.

- Cleary, S. (2004). Sex offenders and self-control: Explaining sexual violence LFB Scholarly Publishing.
- Cleckley, H. (1982). *The mask of sanity* (revised edition). St. Louis, USA: Mosby.
- Cleckley, H. M. (1951). The mask of sanity. *Postgraduate Medicine*, 9(3), 193-197.  
doi:10.1080/00325481.1951.11694097
- Clipson, C. R. (2004). Practical considerations in the interview and evaluation of sexual offenders. *Journal of Child Sexual Abuse*, 12(3-4), 127-173.
- Cohen, G. & Harvey, J. (2016) The use of psychological interventions for adult male sex offenders with a learning disability: a systematic review. *Journal of Sexual Aggression*, 22:2, 206-223.
- Cohen, J. (1986). Research on criminal careers: Individual frequency rates and offense seriousness. *Criminal Careers and "career Criminals*, 1, 292-418.
- Cohen, M., Seghorn, T., & Calmas, W. (1969). Sociometric study of the sex offender. *Journal of Abnormal Psychology*, 74(2), 249.
- Concato, J., Peduzzi, P., Huang, G. D., O'Leary, T. J., & Kupersmith, J. (2010). Comparative effectiveness research. *Journal of Investigative Medicine*, 58(6), 764-769.
- Connolly, M. (2004). Developmental trajectories and sexual offending: An analysis of the pathways model. *Qualitative Social Work*, 3(1), 39-59.  
doi:10.1177/1473325004041131
- Constantino, J. N., & Charman, T. (2012). Gender bias, female resilience, and the sex ratio in autism. *Journal of the American Academy of Child & Adolescent Psychiatry*, 51(8), 756-758. doi:10.1016/j.jaac.2012.05.017
- Cooper A. J., Sandhu S., Losztyn S. & Cernovsky Z. (1992) A double-blind placebo controlled trial of medroxyprogesterone acetate and cyproterone acetate with seven pedophiles. *Canadian Journal of Psychiatry*. 37, 687–93.

- Corbin, J. & Strauss, A. L. (2014). *Basics of qualitative research*. Sage Publications Ltd, London.
- Cordess, C. (1996). Breaking and entering in phantasy and fact. *Psychosis: understanding and treatment*, 133-147.
- Coren, S., Porac, C., & Duncan, P. (1981). Lateral preference behaviors in preschool children and young adults. *Child Development*, 52(2), 443-450. doi:10.2307/1129160
- Corsello, C., Hus, V., Pickles, A., Risi, S., Cook Jr, E. H., Leventhal, B. L., & Lord, C. (2007). Between a ROC and a hard place: decision making and making decisions about using the SCQ. *Journal of Child Psychology and Psychiatry*, 48(9), 932-940.
- Cortoni, F., Babchishin, K. M., & Rat, C. (2017). The proportion of sexual offenders who are female is higher than thought: A meta-analysis. *Criminal Justice and Behaviour*, 44(2), 145-162. doi:10.1177/0093854816658923
- Coskun, M., & Mukaddes, N. M. (2008). Mirtazapine treatment in a subject with autistic disorder and fetishism. *Journal of Child and Adolescent Psychopharmacology*, 18(2), 206-209. doi:10.1089/cap.2007.0014 [doi]
- Coskun, M., Karakoc, S., Kircelli, F., & Mukaddes, N. M. (2009). Effectiveness of mirtazapine in the treatment of inappropriate sexual behaviors in individuals with autistic disorder. *Journal of Child and Adolescent Psychopharmacology*, 19(2), 203-206. doi:10.1089/cap.2008.020 [doi]
- Cossins, A. (2000). *Masculinities, sexualities, and child sexual abuse* Martinus Nijhoff Publishers.
- Courchesne, E., Pierce, K., Schumann, C. M., Redcay, E., Buckwalter, J. A., Kennedy, D. P., & Morgan, J. (2007). Mapping early brain development in autism. *Neuron*, 56(2), 399-413.
- Courtney, J., & Rose, J. (2004). The effectiveness of treatment for male sex offenders with learning disabilities: A review of the literature.

- Cowburn, M. (1996). The black male sex offender in prison: Images and issues. *Journal of Sexual Aggression*, 2(2), 122-142. doi:10.1080/13552609608413262
- Craig, L. A., Stringer, I., & Moss, T. (2006). Treating sexual offenders with learning disabilities in the community: A critical review. *International Journal of Offender Therapy and Comparative Criminology*, 50(4), 369-390.
- Craig, L. A., Stringer, I., & Sanders, C. E. (2012). Treating sexual offenders with intellectual limitations in the community. *The British Journal of Forensic Practice*, 14(1), 5-20.
- Craig, L., Browne, K., & Beech, A. (2008). *Assessing risk in sex offenders with intellectual disabilities: A practitioner's guide*. New York, NY, US: John Wiley & Sons Ltd. doi:10.1002/9780470773208
- Craig, L. & Lindsay, W.R., & Browne, K. D. (2010). *Assessment and treatment of sexual offenders with intellectual disabilities: a handbook*. Wiley-Blackwell, Chichester, UK.
- Craissati, J., McClurg, G., & Browne, K. (2002). Characteristics of perpetrators of child sexual abuse who have been sexually victimized as children. *Sexual Abuse: A Journal of Research and Treatment*, 14(3), 221-235. doi:10.1023/A:1015318408395
- Crane, L., Maras, K. L., Hawken, T., Mulcahy, S., & Memon, A. (2016). Experiences of autism spectrum disorder and policing in England and Wales: Surveying police and the autism community. *Journal of Autism and Developmental Disorders*, 46(6), 2028-2041. doi:10.1007/s10803-016-2729-1
- Creaby-Attwood, A., & Allely, C. S. (2017). A psycho-legal perspective on sexual offending in individuals with Autism Spectrum Disorder. *International journal of law and psychiatry*, 55, 72-80.
- Criminal Justice Joint Inspection, (CJJI) (2013). *Examining multi-agency responses to children and young people who sexually offend. A joint inspection of the effectiveness of multi-agency work with children and young people in England and Wales who have committed sexual offences and were supervised in the community. A joint inspection by HMI probation, care and social services inspectorate Wales, care quality*

commission, Estyn, healthcare inspectorate Wales, HMI constabulary, HMI prisons and ofsted. No. 978-1-84099-586-2). Wales, UK: HM Inspectorate of Probation.

Criminal Law Amendment Act (1867) <https://www.legislation.gov.uk/ukpga/Vict/30-31/35/contents>

Crits-Christoph, P., & Mintz, J. (1991). Implications of therapist effects for the design and analysis of comparative studies of psychotherapies. *Journal of Consulting and Clinical Psychology*, 59(1), 20-26.

Crits-Christoph, P., Baranackie, K., Kurcias, J., Beck, A., Carroll, K., Perry, K., ... & Gallagher, D. (1991). Meta-analysis of therapist effects in psychotherapy outcome studies. *Psychotherapy research*, 1(2), 81-91.

Damasio, A. R., & Maurer, R. G. (1978). A neurological model for childhood autism. *Archives of neurology*, 35(12), 777-786.

Davis, G. E., & Leitenberg, H. (1987). Adolescent sex offenders. *Psychological Bulletin*, 101(3), 417-427. <http://dx.doi.org/10.1037/0033-2909.101.3.417>

Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalogue of Selected Documents in Psychology*, 1980, 10.

Davis, M. H. (1983). The effects of dispositional empathy on emotional reactions and helping: A multidimensional approach. *Journal of Personality*, 51(2), 167-184. doi:10.1111/j.1467-6494.1983.tb00860.x

Davis, M. H. (2018). *Empathy: A social psychological approach*. Routledge.

Davis, O. L., Yeager, E. A., & Foster, S. J. (Eds.). (2001). *Historical empathy and perspective taking in the social studies*. Rowman & Littlefield.

de la Cuesta, G. (2010). A selective review of offending behaviour in individuals with autism spectrum disorders. *Jnl Learn Disabil Offen Behav*, 1(2), 47-58. doi:10.5042/jldob.2010.0419

- De Vignemont, F., & Singer, T. (2006). The empathic brain: how, when and why?. *Trends in cognitive sciences*, 10(10), 435-441.
- De Waal, F. B., & Aureli, F. (1996). Consolation, reconciliation, and a possible cognitive difference between macaques and chimpanzees. *Reaching into thought: The minds of the great apes*, 80-110.
- De Waal, F., (2014) *Empathy in Primates and Other Mammals* in Decety, J. E. (Ed.) (2011). *Empathy: From bench to bedside*. MIT Press. London, UK (pp87-106).
- Decety, J. E. (Ed.) (2011). *Empathy: From bench to bedside*. MIT Press. London, UK.
- Decety, J. E., & Ickes, W. E. (2009). *The social neuroscience of empathy*. MIT Press. London, UK.
- Deepmala, & Agrawal, M. (2014). Use of propranolol for hypersexual behavior in an adolescent with autism. *Annals of Pharmacotherapy*, 48(10), 1385-1388.  
doi:10.1177/1060028014S41630
- Dein, K., & Woodbury-Smith, M. (2010). Asperger syndrome and criminal behaviour. *Advances in Psychiatric Treatment*, 16(1), 37-43. Retrieved from <http://apt.rcpsych.org/content/16/1/37.abstract>
- De Lisi, M. (2011). How general is general strain theory? *Journal of Criminal Justice*, 39(1), 1-2. doi:<http://dx.doi.org.chain.kent.ac.uk/10.1016/j.jcrimjus.2010.12.003>
- Dennis, J. A., Khan, O., Ferriter, M., Huband, N., Powney, M. J., & Duggan, C. (2012). Psychological interventions for adults who have sexually offended or are at risk of offending. *Cochrane Database of Systematic Reviews*, (12), N.PAG-N.PAG 1p. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=108024044&site=ehost-live>

Dennison, S., & Leclerc, B. (2011). Developmental factors in adolescent child sexual offenders: A comparison of nonrepeat and repeat sexual offenders. *Criminal Justice and Behavior*, 38(11), 1089-1102. doi:10.1177/0093854811417076

Dent, M., Peto, L., Griffin, M., & Hindley, N. (2013). Community Forensic Child and Adolescent Mental Health Services (FCAMHS): A Map of Current National Provision and a Proposed Service Model for the Future.

Department of Health & Social Care (2018) Think Autism strategy governance refresh.  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/696667/think-autism-strategy-governance-refresh.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/696667/think-autism-strategy-governance-refresh.pdf)

Department of Health (2010) "Fulfilling and rewarding lives" The strategy for adults with autism in England.  
[http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/@dh/@en/@ps/documents/digitalasset/dh\\_113405.pdf](http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_113405.pdf)

Department of Health (2014) "Think Autism. Fulfilling and Rewarding Lives, the strategy for adults with autism in England: an update"  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/299866/Autism\\_Strategy.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/299866/Autism_Strategy.pdf)

Department of Health (2015) Codes of Practice: Mental Health Act 1983.  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/435512/MHA\\_Code\\_of\\_Practice.PDF](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/435512/MHA_Code_of_Practice.PDF)

Department of Health (2015) Statutory guidance for Local Authorities and NHS organisations to support implementation of the Adult Autism Strategy.  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/422338/autism-guidance.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/422338/autism-guidance.pdf)

Derks, O., Heinrich, M., Brooks, W., Sterkenburg, P., McCarthy, J., Underwood, L., et al. (2017). The social communication questionnaire for adults with intellectual disability: Scq-aid. *Autism Research*, doi:10.1002/aur.1795



- Dewinter, J., De Graaf, H., & Begeer, S. (2017). Sexual orientation, gender identity, and romantic relationships in adolescents and adults with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 47(9), 2927-2934.
- Dhossche, D. (1998). Brief report: catatonia in autistic disorders. *Journal of autism and developmental disorders*, 28(4), 329-331.
- Dijkers, M. (2013) Introducing GRADE: a systematic approach to rating evidence in systematic reviews and to guideline development. *KT Update*, Vol. 1, No. 5 - August 2013 [<http://www.ktdrr.org/products/update/v1n5/>]
- Dispenza, F., Brown, C., & Chastain, T. E. (2016). Minority stress across the career-lifespan trajectory. *Journal of Career Development*, 43(2), 103-115.
- Dobbinson, S. (2016). Conversation with an adult with features of autism spectrum disorder in secure forensic care. In *The Palgrave Handbook of Adult Mental Health* (pp. 441-458). Palgrave Macmillan, London.
- Douglas, K. S., Hart, S. D., Webster, C. D., Belfrage, H., Guy, L. S., & Wilson, C. M. (2014). Historical-clinical-risk management-20, version 3 (HCR-20V3): development and overview. *International Journal of Forensic Mental Health*, 13(2), 93-108.
- Doyle, D. M. (2004). The differences between sex offending and challenging behaviour in people with an intellectual disability. *Journal of Intellectual and Developmental Disability*, 29(2), 107-118. doi:10.1080/13668250410001709467
- Duggan, C., & Dennis, J. (2014). The place of evidence in the treatment of sex offenders. *Criminal Behaviour and Mental Health*, 24(3), 153-162. doi:10.1002/cbm.1904
- Dunsieth Jr., N. W., Nelson, E. B., Brusman-Lovins, L., Holcomb, J. L., Beckman, D., Welge, J. A., et al. (2004). Psychiatric and legal features of 113 men convicted of sexual offenses. *The Journal of Clinical Psychiatry*, 65(3), 293-300. doi:10.4088/JCP.v65n0302

- Durkheim, D. (2009). The normal and the pathological. In T. Newburn (Ed.), *Key readings in criminology*. (pp. 162-165). Cullompton, UK: Willan Publishing.
- Duwe, G. (2014). The development, validity, and reliability of the Minnesota screening tool assessing recidivism risk (MnSTARR). *Criminal Justice Policy Review*, 25(5), 579-613.
- Duwe, G., & Kim, K. (2018). The Neglected "R" in the Risk-Needs-Responsivity Model: A New Approach for Assessing Responsivity to Correctional Interventions. *Justice Evaluation Journal*, 1(2), 130-150.
- Dworzynski, K., Ronald, A., Bolton, P., & Happé, F. (2012) How different are girls and boys above and below the diagnostic threshold for autism spectrum disorders? *Journal of the American Academy of Child & Adolescent Psychiatry*, 51(8), 788-797.  
doi:10.1016/j.jaac.2012.05.018
- Dziobek, I., Rogers, K., Fleck, S., Bahnemann, M., Heekeren, H. R., Wolf, O. T., & Convit, A. (2008). Dissociation of cognitive and emotional empathy in adults with Asperger syndrome using the Multifaceted Empathy Test (MET). *Journal of autism and developmental disorders*, 38(3), 464-473.
- Eastvold, A., Suchy, Y., & Strassberg, D. (2011). Executive function profiles of pedophilic and nonpedophilic child molesters. *Journal of the International Neuropsychological Society*, 17(2), 295-307. doi:10.1017/S1355617710001669
- Eatough, V., & Smith, J. (2006). I was like a wild wild person: Understanding feelings of anger using interpretative phenomenological analysis. *British Journal of Psychology*, 97(4), 483-498.
- Emerson, E. (2005). Use of the Strengths and Difficulties Questionnaire to assess the mental health needs of children and adolescents with intellectual disabilities. *Journal of Intellectual and Developmental Disability*, 30(1), 14-23.
- Emerson, E., & Bromley, J. (1995). The form and function of challenging behaviours. *Journal of Intellectual Disability Research*, 39(5), 388-398. doi:10.1111/j.1365-2788.1995.tb00543.x

- Erooga, M., & Masson, H. C. (2006). Children and young people who sexually abuse others : Current developments and practice responses (Second edition. ed.). London: Routledge.
- Esan, F., Chester, V., Gunaratna, I. J., Hoare, S., & Alexander, R. T. (2015). The clinical, forensic and treatment outcome factors of patients with autism spectrum disorder treated in a forensic intellectual disability service. *Journal of Applied Research in Intellectual Disabilities*, 28(3), 193-200. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=102345934&site=ehost-live>
- Esbensen, A. J., Greenberg, J. S., Seltzer, M. M., & Aman, M. G. (2009). A longitudinal investigation of psychotropic and non-psychotropic medication use among adolescents and adults with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 39(9), 1339-1349. doi:10.1007/s10803-009-0750-3
- Esterberg, M. L., Trotman, H. D., Brasfield, J. L., Compton, M. T., & Walker, E. F. (2008). Childhood and current autistic features in adolescents with schizotypal personality disorder. *Schizophrenia research*, 104(1-3), 265-273.
- Faccini, L. (2014). Reconstructive therapy of a serial threatener with autism Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=cja&AN=97400906&site=ehost-live>
- Fago, D. P. (2003). Evaluation and treatment of neurodevelopmental deficits in sexually aggressive children and adolescents. *Professional Psychology: Research and Practice*, 34(3), 248-257. doi:10.1037/0735-7028.34.3.248
- Falkmer, T., Anderson, K., Falkmer, M., & Horlin, C. (2013). Diagnostic procedures in autism spectrum disorders: A systematic literature review. *European Child & Adolescent Psychiatry*, 22(6), 329-340. doi:10.1007/s00787-013-0375-0 [doi]
- Faller, K. C. (1996). A clinical sample of women who have sexually abused children. *Journal of Child Sexual Abuse*, 4(3), 13-30. doi:10.1300/J070v04n03\_02

- Farrington, D. P. (1983). Offending from 10 to 25 years of age. In K. T. Van Dusen, & S. A. Mednick (Eds.), *Prospective studies of crime and delinquency* (pp. 17-37). Dordrecht: Springer Netherlands. doi:10.1007/978-94-009-6672-7\_3
- Fazel, S., Sjöstedt, G., Långström, N., & Grann, M. (2007). Severe mental illness and risk of sexual offending in men: A case-control study based on Swedish national registers. *The Journal of Clinical Psychiatry*, 68(4), 588-596. doi:10.4088/JCP.v68n0415
- Fazel, S., Xenitidis, K., & Powell, J. (2008). The prevalence of intellectual disabilities among 12000 prisoners — A systematic review  
doi:<https://doi.org/10.1016/j.ijlp.2008.06.001>
- Feilzer, M., & Hood, R. (2004). *Differences or discrimination? minority ethnic young people in the youth justice system*. London, UK.: Youth Justice Board.
- Ferguson, C. J. (2007). The good, the bad and the ugly: A meta-analytic review of positive and negative effects of violent video games. *The Psychiatric Quarterly*, 78(4), 309-316. doi:10.1007/s11126-007-9056-9 [doi]
- Fernandez, Y. M., Marshall, W. L., Lightbody, S., & O'Sullivan, C. (1999). The child molester empathy measure: Description and examination of its reliability and validity. *Sexual Abuse: Journal of Research and Treatment*, 11(1), 17-32.  
doi:10.1177/107906329901100103
- Feshbach, N. D. (1984). Empathy, empathy training and the regulation of aggression in elementary school children. In *Aggression in children and youth* (pp. 192-208). Springer, Dordrecht.
- Feshbach, N. D., & Feshbach, S. (2009). Empathy and education. *The social neuroscience of empathy*, 85, 98.
- Feshbach, N. D., & Konrad, R. (2001). Modifying aggression and social prejudice. In *Prevention and Control of Aggression and the Impact on its Victims* (pp. 355-360). Springer, Boston, MA.

- Findon, J., Cadman, T., Stewart, C. S., Woodhouse, E., Eklund, H., Hayward, H., ... & Murphy, D. (2016). Screening for co-occurring conditions in adults with autism spectrum disorder using the strengths and difficulties questionnaire: A pilot study. *Autism Research*, 9(12), 1353-1363.
- Finkelhor, D. (1984). *Child sexual abuse*. New York.
- Finlay, W. M., & Lyons, E. (2002). Acquiescence in interviews with people who have mental retardation. *Mental retardation*, 40(1), 14-29.
- Fisher, D. (2002). *Adult sex offenders: Who are they? why and how do they do it? Sexual offending against children* (pp. 23-46) Routledge.
- Fisher, D., Beech, A., & Browne, K. (1999). Comparison of sex offenders to nonoffenders on selected psychological measures. *International Journal of Offender Therapy and Comparative Criminology*, 43(4), 473-491.
- Fitzgerald, M. (2012). Schizophrenia and autism/Asperger's syndrome: Overlap and difference. *Clinical Neuropsychiatry: Journal of Treatment Evaluation*, 9(4), 171-176.  
Retrieved from  
<http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2012-31008-003&site=ehost-live>
- Folstein, S., & Rutter, M. (1977). Infantile autism: a genetic study of 21 twin pairs. *Journal of Child Psychology and Psychiatry*, 18(4), 297-321.
- Fombonne, E. (2003). The prevalence of autism. *Journal American Medical Association*, 289(1), 87-89.
- Fombonne, E. (2005). The epidemiology of pervasive developmental disorders. *Recent Developments in Autism Research*, MF Casanova, ed.(New York, Nova Science Publishers Inc.), 1-25.
- Fonagy, P., Target, M., Gergely, G., Allen, J. G., & Bateman, A. W. (2003). The developmental roots of borderline personality disorder in early attachment relationships: A theory

and some evidence. *Psychoanalytic Inquiry*, 23(3), 412-459.

doi:10.1080/07351692309349042

Ford, J. D., & Courtois, C. A. (2013). *Treating complex traumatic stress disorders in children and adolescents: Scientific foundations and therapeutic models*. Guilford, UK: Guilford Press.

Ford, T. C., & Crewther, D. P. (2014). Factor analysis demonstrates a common schizoid phenotype within autistic and schizotypal tendency: implications for neuroscientific studies. *Frontiers in psychiatry*, 5, 117.

Freud, S. (1953). *Three essays on the theory of sexuality (1905)*. The standard edition of the complete psychological works of Sigmund Freud, volume VII (1901-1905): A case of hysteria, three essays on sexuality and other works (pp. 123-246)

Frith, U. (1989). Autism and "theory of mind". In *Diagnosis and treatment of autism* (pp. 33-52). Springer, Boston, MA.

Frith, U. (1991). In Frith U. (Ed.), *Autism and Asperger Syndrome*. New York, NY, US: Cambridge University Press. doi:10.1017/CBO9780511526770

Frith, U. (2004). Emanuel Miller lecture: Confusions and controversies about Asperger syndrome. *Journal of Child Psychology and Psychiatry*, 45: 672-686.  
doi:[10.1111/j.1469-7610.2004.00262.x](https://doi.org/10.1111/j.1469-7610.2004.00262.x)

Froggio, G. (2007). Strain and juvenile delinquency: A critical review of Agnew's general strain theory. *Journal of Loss and Trauma*, 12(4), 383-418.

Furby, L., Weinrott, M. R., & Blackshaw, L. (1989). Sex offender recidivism: A review. *Psychological Bulletin*, 105(1), 3-30. doi:10.1037/0033-2909.105.1.3

Fyson, R. (2007). *Young people with learning disabilities who sexually abuse: Understanding, identifying and responding from within generic education and welfare services*. (PhD, Centre for Social Work, University of Nottingham).

- Gannon, T. A., Olver, M. E., Mallion, J. S., & James, M. (2019). Does specialized psychological treatment for offending reduce recidivism? A meta-analysis examining staff and program variables as predictors of treatment effectiveness. *Clinical psychology review*, 101752.
- Gannon, T. A., Ward, T., Beech, A. R., & Fisher, D. (2008). *Aggressive offenders' cognition: Theory, research and practice*. John Wiley & Sons.
- Gantman, A., Kapp, S. K., Orenski, K., & Laugeson, E. A. (2012). Social skills training for young adults with high-functioning autism spectrum disorders: A randomized controlled pilot study. *Journal of autism and developmental disorders*, 42(6), 1094-1103.
- Garrigan, B., Adlam, A. L., & Langdon, P. E. (2016). The neural correlates of moral decision-making: A systematic review and meta-analysis of moral evaluations and response decision judgements. *Brain and cognition*, 108, 88-97.
- Garton, A. F., & Gringart, E. (2005). The Development of a Scale to Measure Empathy in 8- and 9-Year Old Children. *Australian Journal of Educational & Developmental Psychology*, 5, 17-25.
- Gates, J. A., Kang, E., & Lerner, M. D. (2017). Efficacy of group social skills interventions for youth with autism spectrum disorder: A systematic review and meta-analysis. *Clinical Psychology Review*, 52, 164-181.
- Geluk, C. A. M. L., Jansen, L. M. C., Vermeiren, R., Doreleijers, T. A. H., van Domburgh, L., de Bildt, A., et al. (2012). Autistic symptoms in childhood arrestees: Longitudinal association with delinquent behavior. *Journal of Child Psychology and Psychiatry*, 53(2), 160-167. doi:10.1111/j.1469-7610.2011.02456.x
- Geluk, C. A. M. L., van Domburgh, L., Doreleijers, T. A. H., Jansen, L. M. C., Bouwmeester, S., Garre, F. G., et al. (2014). Identifying children at risk of problematic development: Latent clusters among childhood arrestees. *Journal of Abnormal Child Psychology*, 42(4), 669-680. doi:10.1007/s10802-013-9811-3

- Gendreau, P. (1981). Treatment in corrections: Martinson was wrongp. Canadian Psychology/Psychologie Canadienne, 22(4), 332-338. doi:10.1037/h0081224
- General Data Protection Regulation (GDPR) (2016) Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) <https://eur-lex.europa.eu/eli/reg/2016/679/oj>.
- Ghaziuddin, M., Ghaziuddin, N., & Greden, J. (2002). Depression in persons with autism: Implications for research and clinical care. Journal of autism and developmental disorders, 32(4), 299-306.
- Ghaziuddin, M., Weidmer-Mikhail, E., & Ghaziuddin, N. (1998). Comorbidity of Asperger syndrome: a preliminary report. Journal of intellectual disability research, 42(4), 279-283.
- Gibbs J. C., Potter G. & Goldstein A. P. (1995) The EQUIP Programme: Teaching Youth to Think and Act Responsibly Through a Peer-Helping Approach. Research Press, Champaign, IL.
- Gibbs, J. C., Basinger, K. S., & Fuller, D. (1992). Moral Maturity: Measuring the Development of Sociomoral Reflection. Hillsdale, NJ: Lawrence Erlbaum
- Gillberg, C. L. (1992). The Emanuel Miller Memorial Lecture 1991: Autism and autistic-like conditions: Subclasses among disorders of empathy. Journal of Child Psychology and Psychiatry, 33(5), 813-842.
- Glaser, B. (2002). Therapeutic jurisprudence: An ethical paradigm for therapists in sex offender treatment programs. Western Criminology Review., 4, 143.
- Glaser, B. G. (1978). Theoretical sensitivity: Advances in the methodology of grounded theory Sociology Pr.



- Glaser, B. G., & Strauss, A. L. (2009). *The discovery of grounded theory: Strategies for qualitative research* Transaction Publishers.
- Glaser, B., & Strauss, A. (1967). The discovery of grounded theory. *London: Weidenfeld and Nicholson*, 24(25), 288-304.
- Glasser, M. (1988). Psychodynamic aspects of paedophilia. *Psychoanalytic Psychotherapy*,
- Göbbels, S., Ward, T., & Willis, G. M. (2012). An integrative theory of desistance from sex offending. *Aggression and Violent Behavior*, 17(5), 453-462.  
doi:<http://dx.doi.org/10.1016/j.avb.2012.06.003>
- Gonzalez, V. (2008). Validation of the social communication questionnaire (SCQ) in a Hispanic sample: understanding the impact of expressed emotion.
- Goodley, D. (2000). *Self-advocacy in the lives of people with learning difficulties: The politics of resilience* Open University Press.
- Goodman, A., Lamping, D. L., & Ploubidis, G. B. (2010). When to use broader internalising and externalising subscales instead of the hypothesised five subscales on the Strengths and Difficulties Questionnaire (SDQ): data from British parents, teachers and children. *Journal of abnormal child psychology*, 38(8), 1179-1191.
- Goodman, R. (1997). Psychometric properties of the strengths and difficulties questionnaire. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(11), 1337-1345. doi:10.1097/00004583-200111000-00015
- Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford University Press.
- Gough, D. Sandy, O. & James, T. (Eds) (2012) *An introduction to systematic reviews*. Sage, 2012.
- Grasswick, L. J., & Bradford, J. M. (2003). Osteoporosis associated with the treatment of paraphilias: A clinical review of seven case reports. *Journal of forensic sciences*, 48(4), 849-855.

- Greenall, P. V., & West, A. G. (2007). A study of stranger rapists from the English high security hospitals. *Journal of Sexual Aggression, 13*(2), 151-167.  
doi:10.1080/13552600701661540
- Grenon, I., & Merrick, J. (2014). Intellectual and developmental disabilities: Eugenics. *Frontiers in Public Health, 2*, 201-201. doi:10.3389/fpubh.2014.00201
- Gretton, H. M., McBride, M., Hare, R. D., O'Shaughnessy, R., & Kumka, G. (2001). Psychopathy and recidivism in adolescent sex offenders. *Criminal Justice and Behavior, 28*(4), 427-449.
- Griffin, H. L., & Vettor, S. (2012). Predicting sexual re-offending in a UK sample of adolescents with intellectual disabilities. *Journal of sexual aggression, 18*(1), 64-80.
- Griffin-Shelley, E. (2010). An asperger's adolescent sex addict, sex offender: A case study. *Sexual Addiction & Compulsivity, 17*(1), 46-64. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=48400425&site=ehost-live>
- Griffiths, D., Quinsey, V. L., & Hingsburger, D. (1989). Changing inappropriate sexual behaviour: A community based approach for persons with intellectual disabilities. Baltimore: Paul H.
- Griffiths, D., Richards, D., & Fedoroff, P. (2009). Persons with intellectual disabilities who sexually offend. *Sex Offenders: Identification, Risks, Assessment, Treatment and Legal Issues., 11*, 353-378.
- Grimshaw, R., Downes, P. G., & Smith, A. (2008). Young people who sexually abuse. Youth Justice Board.
- Grimwood, G. G., & Strickland, P. (2013). Young offenders: What next? House of Commons, Home Affairs Section: Standard Note: SN/HA/5896.
- Grubb-Blubaugh, V., Shire, B. J., & Balser, M. L. (1994). Behavior management and offenders with mental retardation: The jury system. *Mental Retardation, 32*(3), 213.

- Grubin, D. (2008). The use of medication in the treatment of sex offenders. *Prison Service Journal*, 178, 37-43.
- Guptill, J. T., Booker, A. B., Gibbs, T. T., Kemper, T. L., Bauman, M. L., & Blatt, G. J. (2007). [3 H]-flunitrazepam-labeled benzodiazepine binding sites in the hippocampal formation in autism: a multiple concentration autoradiographic study. *Journal of autism and developmental disorders*, 37(5), 911-920.
- Guyatt, G. H., Oxman, A. D., Vist, G. E., Kunz, R., Falck-Ytter, Y., Alonso-Coello, P., & Schünemann, H. J. (2008). GRADE: An emerging consensus on rating quality of evidence and strength of recommendations. *BMJ (Clinical Research Ed.)*,
- Hackett, S., & Masson, H. (2006). Young people who have sexually abused: What do they (and their parents) want from professionals? *Children and Society*, 20, 183–195.
- Hackett, S., Masson, H., & Phillips, S. (2005). *Services for young people who sexually abuse: A report on mapping and exploring services for young people who have sexually abused others*. London, UK.: Youth Justice Board for England and Wales.
- Hackett, S., Phillips, J., Masson, H., & Balfe, M. (2013). Individual, family and abuse characteristics of 700 british child and adolescent sexual abusers. *Child Abuse Review*, 22(4), 232-245. doi:10.1002/car.2246
- Hall, G. C. N. (1995). Sexual offender recidivism revisited: A meta-analysis of recent treatment studies. *Journal of Consulting and Clinical Psychology* 63, 802Y809.
- Hall, G. C. N., & Hirschman, R. (1991). Toward a theory of sexual aggression: A quadripartite model. *Journal of Consulting and Clinical Psychology*, 59(5), 662.
- Hammer, E., & Glueck, B., Jr. (1957). Psychodynamic patterns in sex offenders: A four-factor theory. *The Psychiatric Quarterly*, 31(1-4), 325-345. doi:10.1007/BF01568731
- Hanson, R. K. (2000). Treatment outcome and evaluation problems (and solutions). In D. R. Laws, S. M. Hudson, & T. Ward (Eds.), *Remaking relapse prevention with sex offenders: A sourcebook* (pp. 485-499). Thousand Oaks, CA: Sage.

- Hanson, R. K. (2003). Empathy deficits of sexual offenders: A conceptual model. *Journal of Sexual Aggression*, 9(1), 13-23. doi:10.1080/1355260031000137931
- Hanson, R. K., & Bussiere, M. T. (1998). Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology*, 66(2), 348-362.
- Hanson, R. K., & Morton-Bourgon, K. E. (2005). The characteristics of persistent sexual offenders: a meta-analysis of recidivism studies. *Journal of consulting and clinical psychology*, 73(6), 1154.
- Hanson, R. K., & Morton-Bourgon, K. E. (2009). The accuracy of recidivism risk assessments for sexual offenders: a meta-analysis of 118 prediction studies. *Psychological assessment*, 21(1), 1.
- Hanson, R. K., Broom, I., & Stephenson, M. (2004). Evaluating community sex offender treatment programs: A 12-year follow-up of 724 offenders. *Canadian Journal of Behavioural Science / Revue Canadienne Des Sciences Du Comportement*, 36(2), 87-96. 10.1037/h0087220
- Happé, F. G. (1994). Wechsler IQ profile and theory of mind in autism: A research note. *Journal of Child Psychology and Psychiatry*, 35(8), 1461-1471.
- Happé, F. G. (1996). Studying weak central coherence at low levels: children with autism do not succumb to visual illusions. A research note. *Journal of Child Psychology and Psychiatry*, 37(7), 873-877.
- Happé, F., & Frith, U. (1996). The neuropsychology of autism. *Brain*, 119(4), 1377-1400.
- Hare, D. (2004). The health and social care needs of family carers supporting adults with autistic spectrum disorders. *Autism Research & Treatment*, 8(4), 425-444-DOI: 10.1177/1362361304047225.

- Hare, D. J., Gould, J., Mills, R., & Wing, L. (1999). A preliminary study of individuals with autistic spectrum disorders in three special hospitals in England. London: National Autistic Society.
- Hare, R. D. (1999). Psychopathy as a risk factor for violence. *Psychiatric Quarterly*, 70(3), 181-197. doi:10.1023/A:1022094925150
- Hare, R. D., Harpur, T. J., Hakstian, A. R., Forth, A. E., Hart, S. D., & Newman, J. P. (1990). The revised psychopathy checklist: reliability and factor structure. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 2(3), 338.
- Harris, D. A., Mazerolle, P., & Knight, R. A. (2009). Understanding male sexual offending: A comparison of general and specialist theories. *Criminal Justice and Behavior*, 36(10), 1051-1069. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2009-17903-005&site=ehost-live>
- Harsch, S., Bergk, J. E., Steinert, T., Keller, F., & Jockusch, U. (2006). Prevalence of mental disorders among sexual offenders in forensic psychiatry and prison doi:<https://doi.org/10.1016/j.ijlp.2005.11.001>
- Hart-Kerkhoffs, L., Doreleijers, T. A., Jansen, L. M., van Wijk, A. P., & Bullens, R. A. (2009). Offense related characteristics and psychosexual development of juvenile sex offenders. *Child and Adolescent Psychiatry and Mental Health*, 3(1), 19. doi:10.1186/1753-2000-3-19 [doi]
- Haskins, B. G., & Silva, J. A. (2006). Asperger's disorder and criminal behavior: forensic-psychiatric considerations. *Journal of the American Academy of Psychiatry and the Law Online*, 34(3), 374-384.
- Hawes, S. W., Boccaccini, M. T., & Murrie, D. C. Psychopathy and the combination of psychopathy and sexual deviance as predictors of sexual recidivism: Meta-analytic findings using the psychopathy checklist—revised.
- Hawk, G. L., Warren, J. I., & Rosenfeld, B. D. (1993). Prevalence of sexual offenses among mentally retarded criminal defendants. *Ps*, 44(8), 784-786. doi:10.1176/ps.44.8.784

- Hayes, L., Giallo, R., & Richardson, K. (2010). Outcomes of an early intervention program for children with disruptive behaviour. *Australasian Psychiatry*, 18(6), 560-566. doi:10.3109/10398562.2010.498047
- Hayes, S. (1991). Sex offenders. *Australia and New Zealand Journal of Developmental Disabilities*, 17(2), 221-227. doi:10.1080/07263869100034441
- Hayes, S. (2004). Pathways for offenders with intellectual disabilities. *Offenders with Developmental Disabilities*, Jan 1, 68-89.
- Hayes, S., & Baker, B. (2014). Female sex offenders and pariah femininities: Rewriting the sexual scripts. *Journal of Criminology*, 2014, 1-8.
- Hays, S., Murphy, G. H., Langdon, P. E., Rose, D., & Reed, T. (2007). Group treatment for men with intellectual disability and sexually abusive behaviour: Service user views. *Journal of Intellectual & Developmental Disability*, 32(2), 106-116. doi:10.1080/13668250701413715 Retrieved from <https://doi.org/10.1080/13668250701413715>
- Heaton, K. M., & Murphy, G. H. (2013). Men with intellectual disabilities who have attended sex offender treatment groups: A follow-up. *Journal of Applied Research in Intellectual Disabilities*, 26(5), 489-500. doi:10.1111/jar.12038
- Hellemans, H., Colson, K., Verbraeken, C., Vermeiren, R., & Deboutte, D. (2007). Sexual behaviour in high functioning male adolescents and young adults with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 37(2), 260-269.
- Hendricks, S. E., FAU, F. D., Hartmann K FAU - Quafe,,M.A., FAU, Q. M., FAU, S. R., & Graber, B. Brain structure and function in sexual molesters of children and adolescents.
- Henggeler, S. W., Cunningham, P. B., Pickrel, S. G., Schoenwald, S. K., & Brondino, M. J. (1996). Multisystemic therapy: An effective violence prevention approach for serious juvenile offenders. *Journal of adolescence*, 19(1), 47-61.

- Hertz-Picciotto, I., & Delwiche, L. (2009). The rise in autism and the role of age at diagnosis. *Epidemiology (Cambridge, Mass.)*, 20(1), 84.
- Higgs, T., & Carter, A. J. (2015) Autism spectrum disorder and sexual offending: Responsivity in forensic interventions. *Aggression and Violent Behavior*, 22, 112-119.  
doi:10.1016/j.avb.2015.04.003
- Hill E, Berthoz S, Frith U (2004). Brief report: cognitive processing of own emotions in individuals with autistic spectrum disorder and in their relatives. *Journal of Autism & Developmental Disorders*, 34, 229-35.
- Hill, A., Briken, P., Kraus, C., Strohm, K., & Berner, W. (2003). Differential pharmacological treatment of paraphilias and sex offenders. *International Journal of Offender Therapy and Comparative Criminology*, 47(4), 407-421.
- Hingsburger, D., Griffiths, D., & Quinsey, V. (1991). Detecting counterfeit deviance: Differentiating sexual deviance from sexual inappropriateness. *The Habilitative Mental Healthcare Newsletter*, 10(9), 51-54.
- Hippler, K., Viding, E., Klicpera, C., & Happé, F. (2010). Brief report: No increase in criminal convictions in Hans Asperger's original cohort. *Journal of Autism & Developmental Disorders*, 40(6), 774-780. doi:10.1007/s10803-009-0917-y
- Hoare, T., & Wilson, J. (2010). *Directory of services for high-risk young people*. Centre for Mental Health, London.
- Hodgins, S. (2000). The etiology and development of offending among persons with major mental disorders. In S. Hodgins (Ed.), *Violence among the mentally ill: Effective treatments and management strategies* (pp. 89-116). Dordrecht: Springer Netherlands. doi:10.1007/978-94-011-4130-7\_7
- Hoffman, M. L. (1981). *Empathy and moral development: Implications for caring and justice*. Cambridge, UK: Cambridge University Press.

- Hoffman, M. L. (2001). *Empathy and moral development: Implications for caring and justice*. Cambridge, UK: Cambridge University Press.
- Hofvander, B., Delorme, R., Chaste, P., Nydén, A., Wentz, E., Ståhlberg, O., ... & Råstam, M. (2009). Psychiatric and psychosocial problems in adults with normal-intelligence autism spectrum disorders. *BMC psychiatry*, 9(1), 35.
- Hoghugh, M. S., Bhate, S. R., & Graham, F. (1997). *Working with sexually abusive adolescents: A practice manual*. Sage.
- Hollis, V., & Belton, E. (2017). *Children and young people who engage in technology-assisted harmful sexual behaviour; a study of their behaviours, backgrounds and characteristics*. London: NSPCC.
- Holopainen, A., de Veld, D. M., Hoddenbach, E., & Begeer, S. (2018). Does Theory of Mind Training Enhance Empathy in Autism?. *Journal of autism and developmental disorders*, 1-8.
- Home Office (1997) *No More Excuses – A new approach to tackling youth crime in England and Wales*, CM 3809, November 1997.
- Hoppe, D. J., Schemitsch, E. H., Morshed, S., Tornetta, P., 3rd, & Bhandari, M. (2009). Hierarchy of evidence: Where observational studies fit in and why we need them. *The Journal of Bone and Joint Surgery. American Volume*, 91 Suppl 3, 2-9. doi:10.2106/JBJS.H.01571 [doi]
- Howlin, P., (2004) *Legal issues, in Autism and Asperger Syndrome: Preparing for Adulthood*, P. Howlin, (Ed.) Routledge: London. p. 300-312.
- Howlin, P., Goode, S., Hutton, J., & Rutter, M. (2004). Adult outcome for children with autism. *Journal of Child Psychology & Psychiatry*, 45(2), 212-229 18p. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=106627188&site=ehost-live>



- Hrdlicka, M., & Dudova, I. (2013). Controversies in autism: is a broader model of social disorders needed?. *Child and adolescent psychiatry and mental health*, 7(1), 9.
- Hudson, S. M., Ward, T., & McCormack, J. C. (1999). Offense pathways in sexual offenders. *Journal of Interpersonal Violence*, 14(8), 779-798.
- Hughes, C., & Russell, J. (1993). Autistic children's difficulty with mental disengagement from an object: Its implications for theories of autism. *Developmental psychology*, 29(3), 498.
- Hughes, C., Russell, J., & Robbins, T. W. (1994). Evidence for executive dysfunction in autism. *Neuropsychologia*, 32(4), 477-492.
- Hughes, N. (2012). *Nobody made the connection: The prevalence of neurodisability in young people who offend*. Office of the Children's Commissioner. London, UK.
- Hunter J., & Becker, J. V. (1994). The role of deviant sexual arousal in juvenile sexual offending: Etiology, evaluation, and treatment. *Criminal justice and behavior*, 21(1), 132-149.
- Hunter, J. A., Gilbertson, S. A., Vedros, D., & Morton, M. (2004). Strengthening community-based programming for juvenile sexual offenders: Key concepts and paradigm shifts. *Child Maltreat*, 9(2), 177-189. doi:10.1177/1077559504264261
- Hunter, J., A., Figueiredo, A., J., & Malamuth, N., M. (2010). Developmental pathways into social and sexual deviance. *Journal of Family Violence*, 25, 141-148.
- Hurst, R. M., Nelson-Gray, R. O., Mitchell, J. T., & Kwapil, T. R. (2007). The relationship of Asperger's characteristics and schizotypal personality traits in a non-clinical adult sample. *Journal of Autism and Developmental Disorders*, 37(9), 1711-1720.
- Huws, J. C., & Jones, R. S. P. (2008). Diagnosis, disclosure, and having autism: An interpretative phenomenological analysis of the perceptions of young people with autism. *Journal of Intellectual & Developmental Disability*, 33(2), 99-107.

10.1080/13668250802010394 Retrieved from

<https://doi.org/10.1080/13668250802010394>

institutionalized subjects *Nordic Journal of Psychiatry* 2008;62:160-67.

Jaarsma, P., & Welin, S. (2012). Autism as a natural human variation: Reflections on the claims of the neurodiversity movement. *Health Care Analysis*, 20, 20–30.

doi:10.1007/s10728-011-0169-9

Jacobson, J., & Talbot, J. (2009). *Vulnerable defendants in the criminal courts: A review of provision for adults and children*. London, UK: The Prison Reform Trust.

Jahoda, A., Dagnan, D., Jarvie, P., & Kerr, W. (2006). Depression, social context and cognitive behavioural therapy for people who have intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, 19(1), 81-89.

Jamieson, S., & Marshall, W. L. (2000). Attachment styles and violence in child molesters. *Journal of Sexual Aggression*, 5(2), 88-98. doi:10.1080/13552600008413301

Janssen, C. G., Schuengel, C., & Stolk, J. (2002). Understanding challenging behaviour in people with severe and profound intellectual disability: A stress-attachment model. *Journal of Intellectual Disability Research : JIDR*, 46(Pt 6), 445-453. doi:430 [pii]

Johnson, T. C. (1988). Child perpetrators—children who molest other children: Preliminary findings doi:[https://doi.org/10.1016/0145-2134\(88\)90030-0](https://doi.org/10.1016/0145-2134(88)90030-0)

Jones, A. P., Happè, F. G. E., Gilbert, F., Burnett, S., & Viding, E. (2010). Feeling, caring, knowing: Different types of empathy deficit in boys with psychopathic tendencies and autism spectrum disorder. *Journal of Child Psychology and Psychiatry*, 51(11), 1188-1197. doi:10.1111/j.1469-7610.2010.02280.x

Jones, E. & Chaplin, E. (2017) A systematic review of the effectiveness of psychological approaches in the treatment of sex offenders with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*. DOI: 10.1111/jar.12345

- Jones, M. C., & Okere, K. (2008). Treatment of hypersexual behavior with oral estrogen in an autistic male. *Southern Medical Journal*, 101(9), 959-960.  
doi:10.1097/SMJ.0b013e318180b3de [doi]
- Jones, T., & Newburn, T. (2013). Policy convergence, politics and comparative penal reform: Sex offender notification schemes in the USA and UK. *Punishment & Society*, 15(5), 439-467. doi:10.1177/1462474513504801
- Joyce, C. J., Dillane, J., & Vasquez, E. A. (2013). The role of anger in offending: A grounded theory analysis of mentally disordered patients. *Journal of Forensic Psychiatry & Psychology*, 24(2), 247-268. doi:10.1080/14789949.2013.773454
- Junghans, C., Feder, G., Hemingway, H., Timmis, A., & Jones, M. (2005). Recruiting patients to medical research: double blind randomised trial of "opt-in" versus "opt-out" strategies. *Bmj*, 331(7522), 940.
- Kamp-Becker, I., Ghahreman, M., Heinzl-Gutenbrunner, M., Peters, M., Renschmidt, H., & Becker, K. (2013). Evaluation of the revised algorithm of Autism Diagnostic Observation Schedule (ADOS) in the diagnostic investigation of high-functioning children and adolescents with autism spectrum disorders. *Autism*, 17(1), 87-102.
- Kanner, L. (1943). Autistic disturbances of affective contact. *Nervous child*, 2(3), 217-250.
- Kanner, L. (1967). Autistic disturbances of affective contact. *Acta paedopsychiatrica*, 35(4), 100-136.
- Kapp, S. K., Gillespie-Lynch, K., Sherman, L. E., & Hutman, T. (2013). Deficit, difference, or both? Autism and neurodiversity. *Developmental psychology*, 49(1), 59.
- Katz, N., & Zemishlany, Z. (2006). Criminal responsibility in asperger's syndrome. *Israel Journal of Psychiatry and Related Sciences*, 43(3), 166-173. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2007-00813-006&site=ehost-live>

- Keeling, J. A., Rose, J. L., & Beech, A. R. (2009). Sexual offending theories and offenders with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, 22(5), 468-476. doi:10.1111/j.1468-3148.2009.00493.x
- Kelbrick, M., & Radley, J. (2013). Forensic rehabilitation in asperger syndrome: A case report. *Jnl Intell Disabil Offen Behav*, 4(1), 60-64. doi:10.1108/JIDOB-03-2013-0007
- Kelly, T., Richardson, G., Hunter, R., & Knapp, M. (2002). Attention and executive function deficits in adolescent sex offenders. *Child Neuropsychology*, 8(2), 138-143. doi:10.1076/chin.8.2.138.8722
- Kemper, T. L., & Bauman, M. L. (1993). The contribution of neuropathologic studies to the understanding of autism. *Neurologic Clinics*, 11(1), 175-187. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=1993-29945-001&site=ehost-live>
- Kemshall, H., Wood, J., Westwood, S., Stout, B., Wilkinson, B., Kelly, G., et al. (2010). Child sex offender review (CSOR) public disclosure pilots: A process evaluation
- Kendall-Tackett, K., Lyon, T., Taliaferro, G., & Little, L. (2005). Why child maltreatment researchers should include children's disability status in their maltreatment studies. *Child Abuse & Neglect*, 29(2), 147-151.
- King, C., & Murphy, G. (2014). A systematic review of people with autism spectrum disorder and the criminal justice system. *Journal of Autism & Developmental Disorders*, 44(11), 2717-2733. doi:10.1007/s10803-014-2046-5
- Klimecki, M. R., Jenkinson, J., & Wilson, L. (1994). A study of recidivism among offenders with an intellectual disability. *Australia and New Zealand Journal of Developmental Disabilities*, 19(3), 209-219.
- Knight, R. A., & Sims-Knight, J. E. (2004). Testing an etiological model for male juvenile sexual offending against females. *Journal of Child Sexual Abuse*, 13(3-4), 33-55.

- Kohler, E., Keysers, C., Umiltà, M. A., Fogassi, L., Gallese, V., & Rizzolatti, G. (2002). Hearing sounds, understanding actions: action representation in mirror neurons. *Science*, 297(5582), 846-848.
- Kohn, Y., Fahum, T., Ratzoni, G., & Apter, A. (1998). Aggression and sexual offense in asperger's syndrome. *Israel Journal of Psychiatry and Related Sciences*, 35(4), 293-299.
- Kopp, S., & Gillberg, C. (2011). The autism spectrum screening questionnaire (ASSQ)-revised extended version (ASSQ-REV): An instrument for better capturing the autism phenotype in girls? A preliminary study involving 191 clinical cases and community controls. *Research in Developmental Disabilities*, 32(6), 2875-2888.  
doi:<http://dx.doi.org/10.1016/j.ridd.2011.05.017>
- Kremer, J. F., & Dietzen, L. L. (1991). Two approaches to teaching accurate empathy to undergraduates: Teacher-intensive and self-directed. *Journal of College Student Development*.
- Kriegman, D. (2006). The reduction of sexual offense recidivism following commitment and psychodynamic treatment. *Journal of Sexual Offender Civil Commitment: Science and the Law*, 1, 90-98.
- Kristensen Whittaker, M., Brown, J., Beckett, R., & Gerhold, C. (2006). Sexual knowledge and empathy: A comparison of adolescent child molesters and non-offending adolescents. *Journal of sexual aggression*, 12(2), 143-154.
- Kroese, B. S., Dagnan, D., & Loumidis, K. (2005). Cognitive-behaviour therapy for people with learning disabilities. In *Cognitive-Behaviour Therapy for People with Learning Disabilities* (pp. 13-27). Routledge.
- Krueger R. B. & Kaplan M. S. (2001) Depot-leuprolide acetate for treatment of paraphilias: a report of twelve cases. *Archives of Sexual Behaviour* 30, 409–22.
- Krug, D. A., Arick, J. R., & Almond, P. J. (1978). ABC—Autism behaviour checklist. Portland, OR: ASIEP Education Co.

- Lalumiere, M. L., & Quinsey, V. L. (1994). The discriminability of rapists from non-sex offenders using phallometric measures: A meta-analysis. *Criminal Justice and Behavior*, 21(1), 150-175.
- LaMalfa, G., Lassi, G., Bertelli, M., Salvini, R., & Placidi, G. F. (2004). Autism and intellectual disability: A study of prevalence on a sample of the Italian population. *Journal of Intellectual Disability Research*, 48, 262–267.
- Lambrick, F., & Glaser, W. (2004). Sex offenders with an intellectual disability. *Sexual Abuse : A Journal of Research and Treatment*, 16(4), 381-392.
- Lane, S. L. (1997). The sexual abuse cycle In Ryan, G., Leversee, T. F., & Lane, S. (2010). *Juvenile sexual offending: Causes, consequences, and correction* John Wiley & Sons.
- Lane, S., & Lobanov-Rostovsky, C. (1997). Special populations: Children, females, the developmentally disabled, and violent youth. *Juvenile sexual offending: Causes, consequences, and correction*, 322-359.
- Lane, S., & Ryan, G. (2010). Habituated patterns: The sexual abuse cycle. *Juvenile Sexual Offending: Causes Consequences, and Corrections*, 3rd Ed. Hoboken, New Jersey: John Wiley and Sons, Inc,
- Langdon P., Clare, I., & Murphy, G., (2011) Moral reasoning theory and illegal behaviour by adults with intellectual disabilities, *Psychology, Crime & Law*, 17:2, 101-115, DOI: 10.1080/10683160903392384
- Langdon, P. E., Maxted, H., Murphy, G. H., & Group, S. (2007). An exploratory evaluation of the ward and hudson offending pathways model with sex offenders who have intellectual disability. *Journal of Intellectual & Developmental Disability*, 32(2), 94-105. doi:10.1080/13668250701364686
- Langdon, P. E., Murphy, G. H., Clare, I. C. H., Palmer, E. J., & Rees, J. (2013). An evaluation of the EQUIP treatment programme with men who have intellectual or other developmental disabilities. *Journal of Applied Research in Intellectual Disabilities*, 26(2), 167-180. 10.1111/jar.12004

- Langevin, R., & Curnoe, S. (2011). Psychopathy, ADHD, and brain dysfunction as predictors of lifetime recidivism among sex offenders. *Int J Offender Ther Comp Criminol*, 55(1), 5-26. doi:10.1177/0306624X09360968
- Långström, N. (2004). Accuracy of actuarial procedures for assessment of sexual offender recidivism risk may vary across ethnicity. *Sexual Abuse: A Journal of Research and Treatment*, 16(2), 107-120. doi:10.1023/B:SEBU.0000023060.61402.07
- Långström, N., Enebrink, P., Laurén, E. M., Lindblom, J., Werkö, S., & Hanson, R. K. (2013). Preventing sexual abusers of children from reoffending: systematic review of medical and psychological interventions. *British Medical Journal*, 347, f4630.
- Langton, L., & Piquero, N. L. (2007). Can general strain theory explain white-collar crime? A preliminary investigation of the relationship between strain and select white-collar offenses. *Journal of Criminal Justice*, 35(1), 1-15.
- Large, J., & Thomas, C., (2011) Redesigning and evaluating an adapted sex offender treatment programme for offenders with an intellectual disability in a secure setting: preliminary findings, *Journal of Learning Disabilities and Offending Behaviour*, Vol. 2 Issue: 2, pp.72-83, doi: 10.1108/20420921111152450 Permanent link to this document: <http://dx.doi.org/10.1108/20420921111152450>
- Larimer, M. E., & Marlatt, G. A. (2004). Relapse prevention: An overview of Marlatt's cognitive-behavioral model. In *Psychosocial Treatments* (pp. 11-28). Routledge.
- Laws S. M. Hudson & T. Ward (Eds.) (2000), *Remaking relapse prevention with sex offenders: A sourcebook* (pp. 143-166). Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781452224954.n8
- Laws, D. R., & Marshall, W. L. (1990). A conditioning theory of the etiology and maintenance of deviant sexual preference and behaviour. *Handbook of sexual assault* (pp. 209-229) Springer.
- Laws, D. R., & Marshall, W. L. (2003). A brief history of behavioural and cognitive behavioural approaches to sexual offenders: Part 1. early developments. *Sexual*

Abuse: A Journal of Research and Treatment, 15(2), 75-92.

doi:10.1177/107906320301500201 [doi]

Leekam, S. R., Nieto, C., Libby, S. J., Wing, L., & Gould, J. (2007). Describing the sensory abnormalities of children and adults with autism. *Journal of autism and developmental disorders*, 37(5), 894-910.

Leksell, J., & Billing, E. (2016). An evaluation of a cognitive educational program tailored for young women with mental illness: A qualitative interview study. *Nordic Journal of Nursing Research*, 36(3), 155-160.

Levenson, J. (2014). Incorporating trauma-informed care into evidence-based sex offender treatment. *Journal of Sexual Aggression*, 20(1), 9-22.

doi:10.1080/13552600.2013.861523

Levenson, J. S. (2014). Trauma informed treatment. In M. Carich (Ed.), *Safer society handbook of adult sexual offending assessment and treatment*. Brandon, VT: Safer Society Press.

Levenson, J., Letourneau, E., Armstrong, K., & Zgoba, K.M. (2009). Failure to register as a sex offender: Is it associated with recidivism? *Justice Quarterly*, 27(3), 1–27.

<http://www.informaworld.com/smpp/content~db=all?content=10.1080/07418820902972399>.

Lin, J., & Simon, W. (2016). Examining specialization among sex offenders released from prison. *Sex Abuse*, 28(3), 253-267. doi:10.1177/1079063214547581

Lindsay, W. R. (2002). Research and literature on sex offenders with intellectual and developmental disabilities. *Journal of Intellectual Disability Research*, 46, 74-85.

doi:10.1046/j.1365-2788.2002.00006.x

Lindsay, W. R. (2005). Model underpinning treatment for sex offenders with mild intellectual disability: Current theories of sex offending. *Mental Retardation*, 43(6), 428-441.



Lindsay, W. R., & Smith, A. H. W. (1998). Responses to treatment for sex offenders with intellectual disability: A comparison of men with 1- and 2-year probation sentences. *Journal of Intellectual Disability Research*, 42(5), 346-353. doi:10.1046/j.1365-2788.1998.00147.x

Lindsay, W. R., Carson, D., O'Brien, G., Holland, A. J., Taylor, J. L., Wheeler, J. R., & Steptoe, L. (2014). A comparison of referrals with and without autism spectrum disorder to forensic intellectual disability services. *Psychiatry, Psychology and Law*, 21(6), 947-954. 10.1080/13218719.2014.918081 Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2014-51949-011&site=ehost-live>

Lindsay, W. R., Elliot, S. F., & Astell, A. (2004). Predictors of sexual offence recidivism in offenders with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, 17(4), 299-305. 10.1111/j.1468-3148.2004.00217.x

Lindsay, W. R., Holland, A. J., Carson, D., Taylor, J. L., O'Brien, G., Steptoe, L., et al. (2013). Responsivity to criminogenic need in forensic intellectual disability services. *Journal of Intellectual Disability Research*, 57(2), 172-181. doi:10.1111/j.1365-2788.2012.01600.x

Lindsay, W. R., Holland, A. J., Taylor, J. L., Michie, A., Bambrick, M., O'Brien, G., et al. (2009). Diagnostic information and adversity in childhood for offenders with learning disabilities referred to and accepted into forensic services. *Advances in Mental Health and Learning Disabilities*, 3(4), 18-24. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2010-10774-005&site=ehost-live>

Lindsay, W. R., Holland, T., Wheeler, J. R., Carson, D., O'Brien, G., Taylor, J. L., . . . Young, S. J. (2010). Pathways through services for offenders with intellectual disability: A one- and two-year follow-up study. *Ajidd-American Journal on Intellectual and Developmental Disabilities*, 115(3), 250-262. doi:10.1352/1944-7558-115.3.250

- Lindsay, W. R., Howells, L., & Pitcaithly, D. (1993). Cognitive therapy for depression with individuals with intellectual disabilities. *British Journal of Medical Psychology*, 66(2), 135-141. doi:10.1111/j.2044-8341.1993.tb01736.x
- Lindsay, W. R., Smith, A. H. W., Law, J., Quinn, K., Anderson, A., Smith, A., et al. (2002). A treatment service for sex offenders and abusers with intellectual disability: Characteristics of referrals and evaluation. *Journal of Applied Research in Intellectual Disabilities*, 15(2), 166-174. doi:10.1046/j.1468-3148.2002.00111.x
- Lindsay, W. R., Steele, L., Smith, A. H. W., Quinn, K., & Allan, R. (2006). A community forensic intellectual disability service: Twelve year follow up of referrals, analysis of referral patterns and assessment of harm reduction. *Legal and Criminological Psychology*, 11, 113-130. doi:10.1348/135532505X55669
- Lindsay, W. R., Steptoe, L., Wallace, L., Haut, F., & Brewster, E. (2013). An evaluation and 20-year follow-up of a community forensic intellectual disability service. *Criminal Behaviour and Mental Health*, 23(2), 138-149. 10.1002/cbm.1859
- Lindsay, W.R., Michie, A.M., Whitefield, E., Martin, V., Grieve, A., & Carson, D. (2006). Response patterns on the Questionnaire on Attitudes Consistent with Sexual Offending in groups of sex offenders with intellectual disability. *Journal of Applied Research in Intellectual Disabilities*, 19
- Lindsay, W.R., Neilson C. Q., Morrison, F., Smith, A.H.W. (1998) The treatment of six men with a learning disability convicted of sex offences with children. *British Journal of Clinical Psychology* 37: 83 –98.
- Lipps, T., (1903) in Decety, J. E. (Ed.) (2011). *Empathy: From bench to bedside*. MIT Press. London, UK.
- Lipsey, M. W., Chapman, G. L., & Landenberger, N. A. (2001). Cognitive-behavioral programs for offenders. *The Annals of the American Academy of Political and Social Science*, 578(1), 144-157. doi:10.1177/000271620157800109
- Lisman, W. A. (1987). *Organic psychiatry*. Oxford, UK: Blackwell.

- Loeber, R., Green, S. M., Lahey, B. B., Frick, P. J., & McBurnett, K. (2000). Findings on disruptive behavior disorders from the first decade of the developmental trends study. *Clinical Child and Family Psychology Review*, 3(1), 37-60.  
doi:10.1023/A:1009567419190
- Lopez, V. A., & Emmer, E. T. (2000). Adolescent male offenders: A grounded theory study of cognition, emotion, and delinquent crime contexts. *Criminal Justice and Behavior*, 27(3), 292-311.
- Lord, C., & Bishop, S. L. (2015). Recent advances in autism research as reflected in DSM-5 criteria for autism spectrum disorder. *Annual review of clinical psychology*, 11, 53-70.
- Lord, C., Rutter, M., DiLavore, P.C., Risi, S. (2000) *Autism Diagnostic Observation Schedule (ADOS)*. Los Angeles, California: Western Psychological Services.
- Lord, C., Rutter, M., DiLavore, P.C., Risi, S., Gotham, K., Bishop, S. (2012) *Autism Diagnostic Observation Schedule, Second Edition (ADOS-2) Manual (Part I): Modules 1–4*. Torrance, CA: Western Psychological Services.
- Lösel, F., & Schmucker, M. (2005). The effectiveness of treatment for sexual offenders: A comprehensive meta-analysis. *Journal of Experimental Criminology*, 1(1), 117-146.  
10.1007/s11292-004-6466-7 Retrieved from  
<http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2006-04207-007&site=ehost-live>
- Lovell, E. (2002). *Children and young people who display sexually harmful behaviour*. London, UK.: National Society for the Prevention of Cruelty to Children (NSPCC).
- Lunsky, Y., Frijters, J., Griffiths, D. M., Watson, S. L., & Williston, S. (2007). Sexual knowledge and attitudes of men with intellectual disability who sexually offend. *Journal of Intellectual & Developmental Disability*, 32(2), 74-81. doi:779858823 [pii]
- Lussier, P. (2005). The criminal activity of sexual offenders in adulthood: Revisiting the specialization debate. *Sexual Abuse: A Journal of Research and Treatment*, 17(3), 269-292.

- Lussier, P. (2014). Sex offending: A criminological perspective. *Journal of Criminal Justice*, 42, 105-110.
- Lussier, P., Van Den Berg, C., Bijleveld, C., & Hendriks, J. (2012). A developmental taxonomy of juvenile sex offenders for theory, research, and prevention: The adolescent-limited and the high-rate slow desister. *Criminal Justice and Behavior*, 39(12), 1559-1581.
- Main, M., & Solomon, J. (1986). Discovery of an insecure-disorganized/disoriented attachment pattern. (pp. 95-124). Westport, CT, US: Ablex Publishing. Retrieved from RIS Format UTF-8; RIS Format UTF-8
- Mair, K. J., & Stevens, R. H. (1994). Offending histories and offending behaviour: A ten year follow-up of sex offenders tried by sheriff and district courts in grampian, scotland. *Psychology, Crime and Law*, 1(1), 83-92.
- Malamuth, N. M. (1996). The confluence model of sexual aggression: Feminist and evolutionary perspectives. (pp. 269-295). New York, NY, US: Oxford University Press. Retrieved from RIS Format UTF-8; RIS Format UTF-8
- Malli, M., & Forrester-Jones, R. V. E. (2016). "I'm not being rude, I'd want somebody normal" Adolescents' perception of their peers with Tourette's syndrome; an exploratory study. *Journal of Developmental and Physical Disabilities* , 29(2), 279-305.  
<https://doi.org/10.1007/s10882-016-9524-y>
- Malovic, A., Rossiter, R. and Murphy, G. (2018), "Keep Safe: the development of a manualised group CBT intervention for adolescents with ID who display harmful sexual behaviours", *Journal of Intellectual Disabilities and Offending Behaviour*, Vol. 9 No. 1, pp. 49-58. <https://doi.org/10.1108/JIDOB-10-2017-0023>
- Mann, R. E., & Barnett, G. D. (2013). Victim Empathy Intervention With Sexual Offenders: Rehabilitation, Punishment, or Correctional Quackery? *Sexual Abuse*, 25(3), 282–301.  
<https://doi.org/10.1177/1079063212455669>

- Mann, R. E., & Hollin, C. R. (2007). Sexual offenders' explanations for their offending. *Journal of Sexual Aggression*, 13(1), 3-9. 10.1080/13552600701365621 Retrieved from <https://doi.org/10.1080/13552600701365621>
- Mann, R. E., Beech, A. R. (2003). Cognitive distortions, schemas, and implicit theories. In Ward, T., Laws, D. R., Hudson, S. M. (Eds.), *Sexual deviance: Issues and controversies* (pp. 135–153). Thousand Oaks, CA: Sage.
- Mann, R. E., Webster, S. D., Schofield, C., & Marshall, W. L. (2004). Approach versus avoidance goals in relapse prevention with sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 16(1), 65-75.
- Maras, K. L., & Bowler, D. M. (2012). Brief report: Suggestibility, compliance and psychological traits in high-functioning adults with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 6(3), 1168-1175. doi:10.1016/j.rasd.2012.03.013
- Maras, K. L., Crane, L., Mulcahy, S., Hawken, T., Cooper, P., Wurtzel, D., et al. (2017). Brief report: Autism in the courtroom: Experiences of legal professionals and the autism community. *Journal of Autism and Developmental Disorders*, 47(8), 2610-2620. doi:10.1007/s10803-017-3162-9
- Maras, K., Mulcahy, S., & Crane, L. (2015). Is autism linked to criminality? *Autism*, 19(5), 515-516. doi:10.1177/1362361315583411
- Marotta, P. L. (2017). A systematic review of behavioral health interventions for sex offenders with intellectual disabilities. *Sexual abuse: a journal of research and treatment*, 29, 148-185.
- Marquis, J. N. (1970). Orgasmic reconditioning: Changing sexual object choice through controlling masturbation fantasies. *Journal of Behavior Therapy and Experimental Psychiatry*, 1, 263-271.

- Marsa, F., O'Reilly, G., Carr, A., Murphy, P., O'Sullivan, M., Cotter, A., et al. (2004). Attachment styles and psychological profiles of child sex offenders in Ireland. *J Interpers Violence*, 19(2), 228-251. doi:10.1177/0886260503260328
- Marsh, I. (2007). *Theories of crime* Routledge.
- Marshall, W. L. (1971). A combined treatment method for certain sexual deviations. *Behaviour Research and Therapy*, 9, 292-294.
- Marshall, W. L. (1989). Intimacy, loneliness and sexual offenders  
doi:[https://doi.org/10.1016/0005-7967\(89\)90083-1](https://doi.org/10.1016/0005-7967(89)90083-1)
- Marshall, W. L. (1996). Assessment, treatment, and theorizing about sex offenders: Developments during the past twenty years and future directions. *Criminal Justice and Behavior*, 23(1), 162-199. 10.1177/0093854896023001011 Retrieved from <https://doi.org/10.1177/0093854896023001011>
- Marshall, W. L. (1997). *Pedophilia: Psychopathology and theory*. (pp. 152-174). New York, NY, US: The Guilford Press. Retrieved from RIS Format UTF-8; RIS Format UTF-8
- Marshall, W. L. (2007). Diagnostic issues, multiple paraphilias, and comorbid disorders in sexual offenders: Their incidence and treatment  
doi:<https://doi.org/10.1016/j.avb.2006.03.001>
- Marshall, W. L., & Barbaree, H. E. (1990). An integrated theory of the etiology of sexual offending. In W. L. Marshall, D. R. Laws & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 257-275). Boston, MA: Springer US. doi:10.1007/978-1-4899-0915-2\_15
- Marshall, W. L., & Laws, D. R. (2003). A brief history of behavioural and cognitive behavioural approaches to sexual offender treatment: Part 2. the modern era. *Sexual Abuse: A Journal of Research and Treatment*, 15(2), 93-120.  
doi:10.1177/107906320301500202 [doi]

- Marshall, W. L., & Marshall, L. E. (2007). The utility of the random controlled trial for evaluating sexual offender treatment: The gold standard or an inappropriate strategy? *Sexual Abuse*, 19(2), 175-191.
- Marshall, W. L., & Williams, S. (1975). A behavioral approach to the modification of rape. *Quarterly Bulletin of the British Association for Behavioural Psychotherapy*, 4, 78.
- Marshall, W. L., Fernandez, Y. M., Serran, G. A., Mulloy, R., Thornton, D., Mann, R. E., & Anderson, D. (2003). Process variables in the treatment of sexual offenders: A review of the relevant literature. *Aggression and Violent Behavior*, 8(2), 205-234.  
10.1016/S1359-1789(01)00065-9 Retrieved from  
<http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2003-02656-007&site=ehost-live>
- Marshall, W. L., Hamilton, K., & Fernandez, Y. (2001). Empathy deficits and cognitive distortions in child molesters. *Sexual Abuse: Journal of Research and Treatment*, 13(2), 123-130. doi:10.1177/107906320101300205
- Marshall, W. L., Hudson, S. M., Jones, R., & Fernandez, Y. M. (1995). Empathy in sex offenders. *Clinical Psychology Review*, 15(2), 99-113.  
doi:[http://dx.doi.org/10.1016/0272-7358\(95\)00002-7](http://dx.doi.org/10.1016/0272-7358(95)00002-7)
- Marshall, W. L., Serran, G. A., & Cortoni, F. A. (2000). Childhood attachments, sexual abuse, and their relationship to adult coping in child molesters. *Sexual Abuse: A Journal of Research and Treatment*, 12(1), 17-26. doi:10.1023/A:1009507703393
- Martinson, R. (1974). What works? Questions and answers about prison reform. *The public interest*, 35, 22.
- Marzuk, P. (1996) Violence, crime, and mental illness: How strong a link? (1996). *Archives of General Psychiatry*, 53(6), 481-486. doi:10.1001/archpsyc.1996.01830060021003
- Masson, H., & Hackett, S. (2003). A decade on from the NCH report (1992): Adolescent sexual aggression policy, practice and service delivery across the UK and republic of

ireland. *Journal of Sexual Aggression*, 9(2), 109-124.

doi:10.1080/13552600310001632084

Mathersul, D., McDonald, S., & Rushby, J. A. (2013). Understanding advanced theory of mind and empathy in high-functioning adults with autism spectrum disorder. *Journal of clinical and experimental neuropsychology*, 35(6), 655-668.

Matson, J. L., & Fodstad, J. C. (2009). The treatment of food selectivity and other feeding problems in children with autism spectrum disorders. *Research in Autism Spectrum Disorders*, 3(2), 455-461.

Matson, J. L., Baglio, C. S., Smiroldo, B. B., Hamilton, M., Paclowskyj, T., Williams, D., et al. (1996). Characteristics of autism as assessed by the Diagnostic Assessment for the Severely Handicapped-II (DASH-II). *Research in Developmental Disabilities*, 17, 135-143.

Matson, J., & Rivet, T. (2008). The effects of severity of autism and PDD-NOS symptoms on challenging behaviors in adults with intellectual disabilities. *Journal of Developmental and Physical Disabilities*, 20(1), 41-51. doi:10.1007/s10882-007-9078-0

May, J., Osmond, K., & Billick, S. (2014). Juvenile delinquency treatment and prevention: A literature review. *Psychiatric Quarterly*, 85(3), 295-301. doi:10.1007/s11126-014-9296-4

Mayes, S. D., Calhoun, S. L., Waschbusch, D. A., & Baweja, R. (2017). Autism and reactive attachment/disinhibited social engagement disorders: Co-occurrence and differentiation. *Clinical Child Psychology and Psychiatry*, 22(4), 620-631. doi:10.1177/1359104516678039

Mazurek, M. O., Lu, F., Symecko, H., Butter, E., Bing, N. M., Hundley, R. J., ... & Handen, B. L. (2017). A prospective study of the concordance of DSM-IV and DSM-5 diagnostic criteria for autism spectrum disorder. *Journal of autism and developmental disorders*, 47(9), 2783-2794.



- Mazza, M., Pino, M. C., Mariano, M., Tempesta, D., Ferrara, M., De Berardis, D., ... & Valenti, M. (2014). Affective and cognitive empathy in adolescents with autism spectrum disorder. *Frontiers in human neuroscience*, 8, 791.
- McAlinden, A. (2012). The governance of sexual offending across europe: Penal policies, political economies and the institutionalization of risk. *Punishment & Society*, 14(2), 166-192. doi:10.1177/1462474511435573
- McBrien, J., Hodgetts, A., & Gregory, J. (2003). Offending and risky behaviour in community services for people with intellectual disabilities in one local authority. *The Journal of Forensic Psychiatry & Psychology*, 14(2), 280-297. doi:10.1080/1478994031000084828
- McCabe, M. P. (1999). Sexual knowledge, experience and feelings among people with disability. *Sexuality and Disability*, 17(2), 157-170. doi:10.1023/A:1021476418440
- McCarthy, J., Hemmings, C., Kravariti, E., Dworzynski, K., Holt, G., Bouras, N., & Tsakanikos, E. (2010). Challenging behavior and co-morbid psychopathology in adults with intellectual disability and autism spectrum disorders. *Research in Developmental Disabilities*, 31(2), 362-366.
- McConaghy N., Blaszczyński A. & Kidson W. (1988) Treatment of sex offenders with imaginal desensitisation and/or medroxyprogesterone. *Acta Psychiatrica Scandinavica*, 77, 199–206.
- McCrory, E. (2011). In NSPCC. (Ed.), *A treatment manual for adolescents displaying harmful sexual behaviours. change for good*. London, UK: Jessica Kingsley Publishers.
- McDougle, C. J., Brodtkin, E. S., Naylor, S. T., Carlson, D. C., Cohen, D. J., & Price, L. H. (1998). Sertraline in adults with pervasive developmental disorders: A prospective open-label investigation. *Journal of Clinical Psychopharmacology*, 18(1) Retrieved from [http://journals.lww.com/psychopharmacology/Fulltext/1998/02000/Sertraline\\_in\\_Adults\\_With\\_Pervasive\\_Developmental.10.aspx](http://journals.lww.com/psychopharmacology/Fulltext/1998/02000/Sertraline_in_Adults_With_Pervasive_Developmental.10.aspx)

- McElroy, S. L., Soutullo, C. A., Taylor Jr., P., Nelson, E. B., Beckman, D. A., Brusman, L. A., et al. (1999). Psychiatric features of 36 men convicted of sexual offenses. *The Journal of Clinical Psychiatry*, 60(6), 414-420. doi:10.4088/JCP.v60n0613
- McKee, C. (2014). *Crime outcomes in England and Wales 2013/14*. first edition (Home Office Statistical Bulletin No. HOSB 01/14). London, UK: Home Office.
- McLeod, D. A. (2015). Female offenders in child sexual abuse cases: A national picture. *Journal of Child Sexual Abuse*, 24(1), 97-114.
- McMackin, R. A., Leisen, M. B., Cusack, J. F., LaFratta, J., & Litwin, P. (2002). The relationship of trauma exposure to sex offending behavior among male juvenile offenders. *Journal of Child Sexual Abuse*, 11(2), 25-40.
- McPartland, J. C., Reichow, B., & Volkmar, F. R. (2012). Sensitivity and specificity of proposed DSM-5 diagnostic criteria for autism spectrum disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, 51(4), 368-383.
- McPheeters, M. L., Warren, Z., Sathe, N., Bruzek, J. L., Krishnaswami, S., Jerome, R. N., & Veenstra-VanderWeele, J. (2011). A systematic review of medical treatments for children with autism spectrum disorders. *Pediatrics*, 127(5), e1312-e1321. Retrieved from <http://pediatrics.aappublications.org/content/127/5/e1312.abstract>
- Melvin, C. L., Langdon, P. E., & Murphy, G. H. (2017). Treatment effectiveness for offenders with autism spectrum conditions: A systematic review. *Psychology, Crime & Law*, , 1-29. 10.1080/1068316X.2017.1324027 Retrieved from <http://dx.doi.org/10.1080/1068316X.2017.1324027>
- Melvin, C. L., Langdon, P. E., & Murphy, G. H. (2019a). "I feel that if I didn't come to it anymore, maybe I would go back to my old ways and I don't want that to happen": Adapted sex offender treatment programmes: Views of service users with autism spectrum disorders. *Journal of Applied Research in Intellectual Disabilities*, 0(0) doi:10.1111/jar.12641

- Melvin, C. L., Langdon, P. E., & Murphy, G. H. (2019b) (RIDD-D-19-00373) "They're the hardest group to treat, that changes the least". Adapted sex offender treatment programmes for individuals with Autism Spectrum Disorders: Clinician Views and Experiences. *Research in Developmental Disabilities*.
- Merton, R. K. (1938). Social structure and anomie. *American sociological review*, 3(5), 672-682.
- Mews, A., Di Bella, L., & Purver, M. (2017). Impact evaluation of the prison-based core sex offender treatment programme. (). London, UK: Ministry of Justice. Retrieved from [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/623876/sotp-report-web-.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/623876/sotp-report-web-.pdf)
- Meyer WJ III, Cole C, Emory E. (2002) Depo provera treatment for sex offending behaviour: An evaluation of outcome. *Bulletin American Academy Psychiatry Law*. 20:249–59.
- Milton, J., Duggan, C., Latham, A., Egan, V., & Tantam, D. (2002). Case history of co-morbid asperger's syndrome and paraphilic behaviour. *Medicine Science and the Law*, 42(3), 237-244.
- Ministry of Justice (2010) *Breaking the Cycle: Effective Punishment, Rehabilitation and Sentencing of Offenders*, CM 7972. December 2010.
- Ministry of Justice (2013) *Transforming Youth Custody. Putting Education at the Heart of Detention*. Consultation Paper CP4/2013. The Stationery Office Limited. London, UK
- Ministry of Justice (2013) *Transforming Youth Custody: Putting education at the heart of detention*, Consultation Paper CP4/2013, February 2013.
- Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, 100(4), 674-701. doi:10.1037/0033-295X.100.4.674
- Moffitt, T. E., Caspi, A., Harrington, H., & Milne, B. J. (2002). Males on the life-course-persistent and adolescence-limited antisocial pathways: Follow-up at age 26 years.

Development and Psychopathology, 14(1), 179-207.

doi:10.1017/S0954579402001104

Mooney, E. L., Gray, K. M., Tonge, B. J., Sweeney, D. J., & Taffe, J. R. (2009). Factor analytic study of repetitive behaviours in young children with pervasive developmental disorders. *Journal of Autism and Developmental Disorders*, 39(5), 765-774.

Moran, H. (2010). Clinical observations of the differences between children on the autism spectrum and those with attachment problems: The Coventry Grid. *Good Autism Practice (GAP)*, 11(2), 46-59.

Moultrie, D., & Beckett, R. (2011). *Barnardo's Taith service: 10 year review (Service Review)*. Cardiff: Barnardo's Cymru.

Mouridsen, S. E. (2012). Current status of research on autism spectrum disorders and offending. *Research in Autism Spectrum Disorders*, 6(1), 79-86.

doi:10.1016/j.rasd.2011.09.003

Mouridsen, S. E., Rich, B., Isager, T., & Nedergaard, N. J. (2008). Pervasive developmental disorders and criminal behaviour: A case control study. *International Journal of Offender Therapy & Comparative Criminology*, 52(2), 196-205. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=31279485&site=ehost-live>

Muhle, R., Trentacoste, S. V., & Rapin, I. (2004). The genetics of autism. *Pediatrics*, 113(5), e472-e486. Retrieved

from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=12858449&site=ehost-live>

Murphy, D. (2010). Extreme violence in a man with an autistic spectrum disorder: Assessment and treatment within high-security psychiatric care. *Journal of Forensic Psychiatry & Psychology*, 21(3), 462-477. doi:10.1080/14789940903426885

- Murphy, D. (2010). Understanding offenders with autism-spectrum disorders: What can forensic services do? *Advances in Psychiatric Treatment*, 16(1), 44-46. Retrieved from <http://apt.rcpsych.org/content/16/1/44.abstract>
- Murphy, G. (2007). Intellectual disability, sexual abuse, and sexual offending. In A. Carr, G. O'Reilly, P. N. Walsh, & J. McEvoy (Eds.), *The handbook of intellectual disability and clinical psychology practice* (pp. 831-866). New York, NY, US: Routledge/Taylor & Francis Group.
- Murphy, G. H. (2003). Capacity to consent to sexual relationships in adults with learning disabilities. *Journal of Family Planning and Reproductive Health Care*, 29(3), 148-149. doi:10.1783/147118903101197520
- Murphy, G. H., Sinclair, N., Hays, S., Heaton, K., Powell, S., Langdon, P., . . . SOTSEC-ID. (2010). Effectiveness of group cognitive-behavioural treatment for men with intellectual disabilities at risk of sexual offending. *Journal of Applied Research in Intellectual Disabilities*, 23(6), 537-551. doi:10.1111/j.1468-3148.2010.00560.x
- Murphy, G., & Mason, J. (2014). Forensic and offending behaviours. In E. Tsakanikos, & J. McCarthy (Eds.), *Handbook of psychopathology in intellectual disability: Research, practice, and policy* (pp. 281-303). New York, NY: Springer New York. doi:10.1007/978-1-4614-8250-5\_18
- Murphy, G., Powell, S., Guzman, A., & Hays, S. (2007). Cognitive-behavioural treatment for men with intellectual disabilities and sexually abusive behaviour: A pilot study. *Journal of Intellectual Disability Research*, 51(11), 902-912. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=26851308&site=ehost-live>
- Murphy, W., Coleman, E., & Haynes, M. (1983). Treatment and evaluation issues with the mentally retarded sex offender. In J. G. Greer, & I. R. Stuart (Eds.), *The sexual aggressor: Current perspectives on treatment*. (). New York: Van Nostrand Reinhold.

- Murrie, D. C., Warren, J. I., Kristiansson, M., & Dietz, P. E. (2002). Asperger's syndrome in forensic settings. *The International Journal of Forensic Mental Health*, 1(1), 59-70. doi:10.1080/14999013.2002.10471161
- Murray, D., Lesser, M. and Lawson, W. (2005) 'Attention, monotropism and the diagnostic criteria for autism.' *Autism*. Vol. 9(2), pp. 136-156.
- Myers B.A. (1991) Treatment of sexual offences by persons with developmental disabilities. *American Journal of Mental Retardation* 95, 563–9.
- National Autistic Society (2008) *Autism: a guide for criminal justice professionals*. National Autistic Society. London, UK.
- National Institute for Health and Care Excellence (2015) *Challenging behaviour and learning disabilities: prevention and interventions for people with learning disabilities whose behaviour challenges*. [NG11].
- National Institute for Health and Care Excellence (NICE) *Autism spectrum disorder in adults: diagnosis and management Clinical guideline [CG142]*. August 2016. <https://www.nice.org.uk/guidance/cg142>
- National Institute for Health and Care Excellence (NICE) *Autism spectrum disorder in under 19s: support and management Clinical guideline [CG170]*. August 2013. <https://www.nice.org.uk/guidance/cg170>
- National Institute for Health and Care Excellence (NICE) *Harmful sexual behaviour among children and young people NICE guideline [NG55]*. September 2016. <https://www.nice.org.uk/guidance/ng55>
- Newman, S. S., & Ghaziuddin, M. (2008). Violent crime in asperger syndrome: The role of psychiatric comorbidity. *Journal of Autism and Developmental Disorders*, 38(10), 1848-1852. doi:10.1007/s10803-008-0580-8 [doi]

- Newschaffer, C. J., Croen, L. A., Daniels, J., Giarelli, E., Grether, J. K., Levy, S. E., et al. (2007). The epidemiology of autism spectrum disorders. *Annual Review of Public Health, 28*, 235-258. doi:10.1146/annurev.publhealth.28.021406.144007
- Nemiah, J.C., Freyberger, H., Sifneos, P.E. (1976) Alexithymia: a view of the psychosomatic process. In: Hill OW, editor. *Modern trends in psychosomatic medicine*. London: Butterworths, pp430–9.
- Nora, C., Rautio, D., Asztalos, J., Stoetzer, U., & Bölte, S. (2016). Social skills group training in high-functioning autism: A qualitative responder study. *Autism, 20*(8), 995-1010. doi:10.1177/1362361315621885
- NSPCC. (2019). Harmful sexual behaviour framework. an evidence-informed framework for children and young people displaying harmful sexual behaviours. 2nd edition. Retrieved 06/17, 2019, from [file:///C:/Users/psych/Dropbox/Articles/Assessments/NSPCC%20\[2019\]%20harmful-sexual-behaviour-framework.pdf](file:///C:/Users/psych/Dropbox/Articles/Assessments/NSPCC%20[2019]%20harmful-sexual-behaviour-framework.pdf)
- O'Callaghan, D. (1999). Young abusers with learning disabilities: Towards better understanding and positive interventions. In M. Calder (Ed.), *Working with young people who sexually abuse: New pieces of the jigsaw puzzle*. (). Lyme Regis: Russell House.
- O'Callaghan, D. (2002). A framework for undertaking initial assessments of young people with intellectual disabilities who present problematic/harmful sexual behaviours. Manchester: AIM Project,
- Oblak, A., Gibbs, T. T., & Blatt, G. J. (2009). Decreased GABAA receptors and benzodiazepine binding sites in the anterior cingulate cortex in autism. *Autism Research, 2*(4), 205-219.
- O'Brien, G., Taylor, J., Lindsay, W., Holland, A., Carson, D., Steptoe, L., et al. (2010). A multi-centre study of adults with learning disabilities referred to services for antisocial or offending behaviour: Demographic, individual, offending and service characteristics. *Jnl Learn Disabil Offen Behav, 1*(2), 5-15. doi:10.5042/jldob.2010.0415

Offences Against the Person Act (2861) <https://www.legislation.gov.uk/ukpga/Vict/24-25/100/contents>

Offender Health Collaborative (2015) Liaison and diversion manager and practitioner resources: service user involvement. NHS England. August 2015.  
[http://www.csom.org/pubs/law\\_enforcement\\_key\\_roles.pdf](http://www.csom.org/pubs/law_enforcement_key_roles.pdf)

Office for National Statistics. (2019). Crime in England and Wales, year ending March 2019. London, UK: Office for National Statistics.

Ohlsson Gotby, V., Lichtenstein, P., Långström, N., & Pettersson, E. (2018). Childhood neurodevelopmental disorders and risk of coercive sexual victimization in childhood and adolescence—a population-based prospective twin study. *Journal of Child Psychology and Psychiatry*, 59(9), 957-965.

Olver, M. E., & Wong, S. C. P. (2006). Psychopathy, sexual deviance, and recidivism among sex offenders. *Sex Abuse*, 18(1), 65-82. doi:10.1177/107906320601800105

Omeni, E., Barnes, M., MacDonald, D., Crawford, M., & Rose, D. (2014). Service user involvement: Impact and participation: A survey of service user and staff perspectives. *BMC Health Services Research*, 14(1), 491. 10.1186/s12913-014-0491-7 Retrieved from <https://doi.org/10.1186/s12913-014-0491-7>

Ozonoff, S., Strayer, D. L., McMahon, W. M., & Filloux, F. (1994). Executive function abilities in autism and Tourette syndrome: An information processing approach. *Journal of Child Psychology and Psychiatry*, 35(6), 1015-1032.

Patel, K., & Lord, A. (2001). Ethnic minority sex offenders' experiences of treatment. *Journal of Sexual Aggression*, 7(1), 40-50. doi:10.1080/13552600108413320

Pavlov, I. P. (1927). *Conditional reflexes: An investigation of the physiological activity of the cerebral cortex*. Oxford, England: Oxford Univ. Press. Retrieved from RIS Format UTF-8; RIS Format UTF-8



- Peinemann, F., Tushabe, D. A., & Kleijnen, J. (2013). Using multiple types of studies in systematic reviews of health care interventions: A systematic review. *Plos One*, 8(12), e85035. doi:10.1371/journal.pone.0085035
- Pellicano, E. (2010). Individual differences in executive function and central coherence predict developmental changes in theory of mind in autism. *Developmental Psychology*, 46(2), 530-544. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=49143474&site=ehost-live>
- Pellicano, E. (2012). The development of executive function in autism. *Autism research and treatment*, 2012.
- Petri, G., Beadle-Brown, J., & Bradshaw, J. (2017). "More honoured in the breach than in the Observance" Self-advocacy and human rights10.3390/laws6040026
- Pflugradt, D. M., Allen, B. P., & Zintsmaster, A. J. (2018). Adverse childhood experiences of violent female offenders: A comparison of homicide and sexual perpetrators. *International journal of offender therapy and comparative criminology*, 62(8), 2312-2328.
- Scraton, P. (2007) "The neglect of Power and Rights: A Response to Problem Solving" in Zoë Davies and Will McMahon (ed) *Debating Youth Justice: From Punishment to Problem Solving*. Centre for Justice and Crime Studies. London, UK.
- Piaget, J., & Cook, M. (1952). *The origins of intelligence in children*. New York: International Universities Press.
- Pluye, P., Robert, E., Cargo, M., Bartlett, G., O’Cathain, A., Griffiths, F., Rousseau, M. (2011). *Proposal: A mixed methods appraisal tool for systematic mixed studies reviews*. Montréal: McGill University, , 1-8.
- Polaschek, D. L. L., & Ward, T. (2002). The implicit theories of potential rapists: What our questionnaires tell us. *Aggression and Violent Behaviour*, 7(4), 385-406. doi:[https://doi.org/10.1016/S1359-1789\(01\)00063-5](https://doi.org/10.1016/S1359-1789(01)00063-5)

- Popper, K. R. (1959). The propensity interpretation of probability. *The British journal for the philosophy of science*, 10(37), 25-42.
- Porter, S., Fairweather, D., Drugge, J., Herve, H., Birt, A., & Boer, D. P. (2000). Profiles of psychopathy in incarcerated sexual offenders. *Criminal Justice and Behaviour*, 27(2), 216-233. doi:10.1177/0093854800027002005
- Porter, S., ten Brinke, L., & Wilson, K. (2009). Crime profiles and conditional release performance of psychopathic and non-psychopathic sexual offenders. *Legal and Criminological Psychology*, 14(1), 109-118. doi:10.1348/135532508X284310
- Powers of Criminal Courts (Sentencing) Act (2000)  
<https://www.legislation.gov.uk/ukpga/2000/6/contents>
- Prentky, R. A., Knight, R. A., Sims-Knight, J. E., Straus, H., Rokous, F. A., & Cerce, D. (1989). Developmental antecedents of sexual aggression. *Development and Psychopathology*, 1(2), 153-169.
- Prentky, R., & Righthand, S. (2003). *Juvenile sex offender assessment protocol-II (J-SOAP-II) manual*. Washington, DC: US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Preston, S. D., & De Waal, F. B. (2002). Empathy: Its ultimate and proximate bases. *Behavioral and brain sciences*, 25(1), 1-20.
- Prosser, H., & Bromley, J. (1998). Interviewing people with intellectual disabilities. *Clinical psychology and people with intellectual disabilities*, 99-113.
- Pullman, L. E., Leroux, E. J., Motayne, G., & Seto, M. C. (2014). Examining the developmental trajectories of adolescent sexual offenders  
doi:<https://doi.org/10.1016/j.chiabu.2014.03.003>
- Quinsey, V. L., Bergersen, S. G., & Steinman, C. M. (1976). Changes in physiological and verbal responses of child molesters during aversion therapy. *Canadian Journal of Behavioral Science*, 8, 202-212.

- Rack, J. (2005). The incidence of hidden disabilities in the prison population. Egham, Surrey: Dyslexia Institute.
- Radford, L., Corral, S., Bradley, C., Fisher, H., & et al. (2011). Child abuse and neglect in the UK today. London, UK: NSPCC.
- Radley, J., & Shaherbano, Z. (2011). Asperger syndrome and arson: A case study Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=67525472&site=ehost-live>
- Ray, F., Marks, C., & Bray-Garretson, H. (2004). Challenges to treating adolescents with asperger's syndrome who are sexually abusive. *Sexual Addiction & Compulsivity*, 11(4), 265-285. 10.1080/10720160490900614 Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2005-01382-005&site=ehost-live>
- Reaven, J, Blakeley-Smith A, Culhane-Shelburne K, & Susan, H. (2011). Group cognitive behavior therapy for children with high-functioning autism spectrum disorders and anxiety: A randomized trial. *Journal of Child Psychology and Psychiatry*, 53(4), 410-419. doi:10.1111/j.1469-7610.2011.02486.x
- Reisinger, L. M., Cornish, K. M., & Fombonne, É. (2011). Diagnostic differentiation of autism spectrum disorders and pragmatic language impairment. *Journal of autism and developmental disorders*, 41(12), 1694-1704.
- Reiss, A. J. (1960). Sex offenses: The marginal status of the adolescent. *Law and Contemporary Problems*, 25, 309.
- Reitzel, L. R., & Carbonell, J. L. (2006). The effectiveness of sexual offender treatment for juveniles as measured by recidivism: A meta-analysis. *Sex Abuse*, 18(4), 401-421. doi:10.1177/107906320601800407
- Rich, P. (2006). Attachment and sexual offending: Understanding and applying attachment theory to the treatment of juvenile sexual offenders. Chichester: John Wiley.

- Richardson, L., Julie Beadle-Brown, Bradshaw, J., Guest, C., Malovic, A., & Himmerich, J. (2016). "I felt that I deserved it" – experiences and implications of disability hate crime. *Tizard Learning Disability Rev*, 21(2), 80-88. 10.1108/TLDR-03-2015-0010 Retrieved from <https://doi.org/10.1108/TLDR-03-2015-0010>
- Richell, R. A., Mitchell, D. G. V., Peschardt, K. S., Winston, J. S., Leonard, A., Dolan, R. J., et al. (2005). Trust and distrust: The perception of trustworthiness of faces in psychopathic and non-psychopathic offenders. *Personality and Individual Differences*, 38(8), 1735-1744. doi:10.1016/j.paid.2004.11.017
- Rogers, J., Viding, E., Blair, R. J., Frith, U., & Happe, F. (2006). Autism spectrum disorder and psychopathy: Shared cognitive underpinnings or double hit? *Psychological Medicine*, 36(12), 1789-1798. doi:S0033291706008853 [pii]
- Rollins, P. R., Campbell, M., Hoffman, R. T., & Self, K. (2016). A community-based early intervention program for toddlers with autism spectrum disorders. *Autism: The International Journal of Research & Practice*, 20(2), 219-232 14p. doi:10.1177/1362361315577217
- Romero J.J. & Williams L.M. (1983) Group psychotherapy and intensive probation supervision with sex offenders. *Federal Probation*; 47:36–42.
- Romero J.J. & Williams L.M. (1985) Recidivism among convicted sex offenders: a 10-year follow-up study. *Federal Probation*; 49:58–64.
- Romero, T., Castellanos, M. A., & de Waal, F. B. (2010). Consolation as possible expression of sympathetic concern among chimpanzees. *Proceedings of the National Academy of Sciences*, 107(27), 12110-12115.
- Rose, J., Jenkins, R., O'connor, C., Jones, C., & Felce, D. (2002). A group treatment for men with intellectual disabilities who sexually offend or abuse. *Journal of Applied Research in Intellectual Disabilities*, 15(2), 138-150.

- Rosenberg, A. D., Abell, S. C., & Mackie, J. K. (2005). An examination of the relationship between child sexual offending and psychopathy. *Journal of Child Sexual Abuse*, 14(3), 49-66. doi:10.1300/J070v14n03\_03 [doi]
- Rösler, A., & Witztum, E. (1998). Treatment of men with paraphilia with a long-acting analogue of gonadotropin-releasing hormone. *New England Journal of Medicine*, 338(7), 416-422.
- Ross L. A., Bland W. P., Ruskin P. & Bacher N. (1987) Antiandrogen treatment of aberrant sexual activity. *American Journal of Psychiatry* 14, 1511
- Rubenstein, E., Wiggins, L. D., Schieve, L. A., Bradley, C., DiGuseppi, C., Moody, E., et al. (2019). Associations between parental broader autism phenotype and child autism spectrum disorder phenotype in the study to explore early development. *Autism*, 23(2), 436-448. doi:10.1177/1362361317753563
- Rueda, P., Fernández-Berrocal, P., & Baron-Cohen, S. (2015). Dissociation between cognitive and affective empathy in youth with Asperger Syndrome. *European Journal of Developmental Psychology*, 12(1), 85-98.
- Rutter, M. (2004) Incidence of autism spectrum disorders: changes over time and their meaning. *Acta Paediatrica*. doi: 10.1080/08035250410023124.
- Rutter, M., Andersen-Wood, L., Beckett, C., Bredenkamp, D., Castle, J., Groothues, C., O'Connor, T. G. (1999). Quasi-autistic patterns following severe early global privation. English and Romanian adoptees (ERA) study team. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 40(4), 537-549.
- Rutter, M., Bailey, A., & Lord, C. (2003). SCQ. The Social Communication Questionnaire. Torrance, CA: Western Psychological Services.
- Rutter, M., Le Couteur, A., & Lord, C. (2003). Autism diagnostic interview-revised. Los Angeles, CA: Western Psychological Services, 29, 30.

- Ryan, G., Lleversee, T. F., & Lane, S. (2010). *Juvenile sexual offending: Causes, consequences, and correction* John Wiley & Sons.
- Ryan, G., Miyoshi, T. J., Metzner, J. L., Krugman, R. D., & Fryer, G. E. (1996). Trends in a national sample of sexually abusive youths. *Journal of the American Academy of Child & Adolescent Psychiatry*, 35(1), 17-25.
- Sadiq, F. A., Slator, L., Skuse, D., Law, J., Gillberg, C., & Minnis, H. (2012). Social use of language in children with reactive attachment disorder and autism spectrum disorders. *European child & adolescent psychiatry*, 21(5), 267-276.
- Safeguarding Vulnerable Groups Act (2006)  
<https://www.legislation.gov.uk/ukpga/2006/47/contents>
- Sajith, S. G., Morgan, C., & Clarke, D. (2008). Pharmacological management of inappropriate sexual behaviours: a review of its evidence, rationale and scope in relation to men with intellectual disabilities. *Journal of Intellectual Disability Research*, 52(12), 1078-1090.
- Sakdalan, J. A., & Gupta, R. (2014). Wise mind—risky mind: A reconceptualisation of dialectical behaviour therapy concepts and its application to sexual offender treatment. *Journal of Sexual Aggression*, 20(1), 110-120.  
doi:10.1080/13552600.2012.724457
- Saleem, Y. A., (2005) *Empathy and Offenders with Intellectual Disabilities* (Unpublished Clinical Psychology Doctorate Thesis). Lancaster University. Lancaster, UK.
- Salminen, J.K., Saarijarvi, S., Aarela, E., Toikka, T., Kauhanen, J. (1999) Prevalence of alexithymia and its association with sociodemographic variables in the general population of Finland. *Journal of Psychosomatic Research*, 46: 75–82.
- Sample, L.L., & Kadleck, C. (2008). Sex offender laws: Legislators' accounts of the need for policy. *Criminal Justice Policy Review*, 19(1), 40–62.

- Sandler, J.C., Freeman, N.J., & Socia, K.M. (2008). Does a watched pot boil? A time-series analysis of New York State's sex offender registration and notification law. *Psychology, Public Policy, and Law*, 14(4), 284–302.
- Sappok, T., Brooks, W., Heinrich, M., McCarthy, J., & Underwood, L. (2017). Cross-cultural validity of the social communication questionnaire for adults with intellectual developmental disorder. *Journal of Autism and Developmental Disorders*, 47(2), 393-404. doi:10.1007/s10803-016-2967-2
- Sappok, T., Diefenbacher, A., Gaul, I., & Bölte, S. (2015). Validity of the social communication questionnaire in adults with intellectual disabilities and suspected autism spectrum disorder. *American journal on intellectual and developmental disabilities*, 120(3), 203-214.
- Saunders, E., Awad, G. A., & Levene, J. (1984). A clinical study of male adolescent sexual offenders. *Int J Offender Ther Comp Criminol*, 28(2), 105-116.  
doi:10.1177/0306624X8402800204
- Sawyer, A., Lake, J. K., Lunskey, Y., Liu, S., & Desarkar, P. (2014). Psychopharmacological treatment of challenging behaviours in adults with autism and intellectual disabilities: A systematic review. *Research in Autism Spectrum Disorders*, 8(7), 803-813. doi:<http://dx.doi.org/10.1016/j.rasd.2014.03.021>
- Saxe, R., & Kanwisher, N. (2003). People thinking about thinking people: the role of the temporo-parietal junction in “theory of mind”. *Neuroimage*, 19(4), 1835-1842.
- Schalkwyk, G., Volkmar, F., & Corlett, P. (2017). A predictive coding account of psychotic symptoms in autism spectrum disorder. *Journal of Autism & Developmental Disorders*, 47(5), 1323-1340. doi:10.1007/s10803-017-3065-9
- Scheler, M., (1954) in Decety, J. E. (Ed.) (2011). *Empathy: From bench to bedside*. MIT Press. London, UK.
- Schmucker, M., & Losel, F. (2008). Does sexual offender treatment work? A systematic review of outcome evaluations. *Psicothema*, 20(1), 10-19.

- Schram, D., & Milloy, C. (1995). Community notification: A study of offender characteristics and recidivism. Olympia: Washington State Institute for Public Policy.  
<http://www.wsipp.wa.gov/rptfiles/chrrec.pdf>
- Schuck, R. K., Flores, R. E., & Fung, L. K. (2019). Brief Report: Sex/Gender Differences in Symptomology and Camouflaging in Adults with Autism Spectrum Disorder. *Journal of autism and developmental disorders*, 49(6), 2597-2604.
- Schwenck, C., Mergenthaler, J., Keller, K., Zech, J., Salehi, S., Taurines, R., et al. (2012). Empathy in children with autism and conduct disorder: Group-specific profiles and developmental aspects. *Journal of Child Psychology and Psychiatry*, 53(6), 651-659. doi:10.1111/j.1469-7610.2011.02499.x
- Scragg, P. & Shah, A., (1994) Prevalence of Asperger's syndrome in a secure hospital British *Journal of Psychiatry*, 165 (1994), pp. 679-682.
- Seara-Cardoso, A., Neumann, C., Roiser, J., McCrory, E., & Viding, E. (2012). Investigating associations between empathy, morality and psychopathic personality traits in the general population. *Personality and Individual Differences*, 52(1), 67-71.
- Seligman, M. E., & Csikszentmihalyi, M. (2014). Positive psychology: An introduction. In *Flow and the foundations of positive psychology* (pp. 279-298). Springer, Dordrecht.
- Sentencing Council (2009) *Overarching Principles: Sentencing Youth - Definitive Guideline*  
[https://www.sentencingcouncil.org.uk/wp-content/uploads/web\\_overarching\\_principles\\_sentencing\\_youths.pdf](https://www.sentencingcouncil.org.uk/wp-content/uploads/web_overarching_principles_sentencing_youths.pdf)
- Sentencing Council (2014) *Sexual Offences - Definitive Guideline*  
<https://www.sentencingcouncil.org.uk/wp-content/uploads/Sexual-offences-definitive-guideline-Web.pdf>
- Sentencing Council (2017) *Sentencing Children and Young People Overarching Principles and Offence Specific Guidelines for Sexual Offences and Robbery: Definitive Guideline*  
<https://www.sentencingcouncil.org.uk/wp-content/uploads/Sentencing-Children-and-Young-People-definitive-guideline-Web.pdf>



- Serin, R. C. (1996). Violent recidivism in criminal psychopaths. *Law and Human Behavior*, 20(2), 207-217. doi:10.1007/BF01499355
- Serin, R. C., & Kennedy, S. (1997). Treatment readiness and responsivity: Contributing to effective correctional programming. Correctional Service Canada, Corporate Development, Research Branch.
- Seto, M. C., & Lalumiere, M. L. (2010). What is so special about male adolescent sexual offending? A review and test of explanations through meta-analysis. *Psychological Bulletin*, 136(4), 526-575. doi:10.1037/a0019700 [doi]
- Sevlever, M., Roth, M. E., & Gillis, J. M. (2013). Sexual abuse and offending in autism spectrum disorders. *Sexuality and Disability*, 31(2), 189-200.
- Shah, A., & Frith, U. (1983). An islet of ability in autistic children: A research note. *Journal of child Psychology and Psychiatry*, 24(4), 613-620.
- Shakespeare, T. (2006). The social model of disability. *The disability studies reader*, 2, 197-204.
- Shakespeare, T., & Watson, N. (1997). Defending the social model. *Disability & Society*, 12(2), 293-300.
- Shallice, T. (1982). Specific impairments of planning. In D. E. Broadbent, & L. Weiskrantz (Eds.), *The neuropsychology of cognitive function* (pp. 199-209). London: The Royal Society.
- Shamay-Tsoory, S. G. (2011). The neural bases for empathy. *The Neuroscientist*, 17(1), 18-24.
- Shaw, J. A., & Budd, E. C. (1982). Determinants of acquiescence and naysaying of mentally retarded persons. *American Journal of Mental Deficiency*.
- Sigfusdottir, I. D., Kristjansson, A. L., & Agnew, R. (2012). A comparative analysis of general strain theory. *Journal of Criminal Justice*, 40(2), 117-127. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2012-09437-003&site=ehost-live>

- Silani, G., Bird, G., Brindley R., Singer, T., Frith, C., Frith, U. (2008) Levels of emotional awareness and autism: An fMRI study. *Social Neuroscience*, 3, 97–112.
- Silberman, S. (2017). *Neurotribes: The legacy of autism and how to think smarter about people who think differently*. Atlantic Books.
- Silva, J. A., Ferrari, M. M., & Leong, G. B. (2002). The case of Jeffrey Dahmer: Sexual serial homicide from a neuropsychiatric developmental perspective. *Journal of Forensic Sciences*, 47(6), 1347-1359.
- Silva, J. A., Leong, G. B., & Ferrari, M. M. (2004). A neuropsychiatric developmental model of serial homicidal behaviour. *Behavioural sciences & the law*, 22(6), 787-799.
- Simon, L. M. (1997). The myth of sex offender specialization: An empirical analysis. *New England Journal on Crime & Civil Confinement*, 23, 387.
- Sinclair, N. (2011). Development and evaluation of a treatment package for men with an intellectual disability who sexually offend. (Unpublished PhD). University of Kent, Kent, UK.
- Singer, T. (2006). The neuronal basis and ontogeny of empathy and mind reading: review of literature and implications for future research. *Neuroscience & Biobehavioral Reviews*, 30(6), 855-863.
- Siponmaa, L., Kristiansson, M., Jonson, C., Nyden, A., & Gillberg, C. (2001). Juvenile and young adult mentally disordered offenders: The role of child neuropsychiatric disorders. *Journal of the American Academy of Psychiatry and the Law*, 29(4), 420-426.
- Skinner, B. F. (1953). *Science and human behaviour*. New York: Macmillan.

- Smith, A. (2009). The empathy imbalance hypothesis of autism: a theoretical approach to cognitive and emotional empathy in autistic development. *the Psychological record*, 59(3), 489-510.
- Smith, C., Allardyce, S., Hackett, S., Bradbury-Jones, C., Lazenbatt, A., & Taylor, J. (2014). Practice and policy in the UK with children and young people who display harmful sexual behaviours: An analysis and critical review. *Journal of Sexual Aggression*, 20(3), 267-280. doi:10.1080/13552600.2014.927010
- Smith, I. C., Reichow, B., & Volkmar, F. R. (2015). The effects of DSM-5 criteria on number of individuals diagnosed with autism spectrum disorder: A systematic review. *Journal of Autism and Developmental Disorders*, 45(8), 2541-2552.
- Smith, J. A., & Osborn, M. (2007). Pain as an assault on the self: An interpretative phenomenological analysis of the psychological impact of chronic benign low back pain. *Psychology and health*, 22(5), 517-534.
- Snyder, H. N., & Sickmund, M. (2006). *Juvenile offenders and victims: 2006 national report*. Office of Juvenile Justice and Delinquency Prevention,
- Søderstrøm, H., Nilsson, T., Sjødin, A.-K., Carlstedt, A., & Forsman, A. (2005). The childhood-onset neuropsychiatric background to adulthood psychopathic traits and personality disorders. *Comprehensive Psychiatry*, 46, pp. 111-116
- Sofronoff, K., Attwood, T., & Hinton, S. (2005). A randomised controlled trial of a CBT intervention for anxiety in children with Asperger syndrome. *Journal of child psychology and psychiatry*, 46(11), 1152-1160.
- SOTSEC-ID. (2002). *Cognitive behavioural treatment for men with intellectual disabilities who are at risk of sexual offending. A treatment manual. (First edition)*. Sinclair N., Booth S. and Murphy G. H. (Eds.). Kent, UK: SOTSEC-ID.
- SOTSEC-ID; Murphy, G. H., Sinclair, N., Hays, S., Heaton, K., Powell, S., Langdon, P., et al. (2010). Effectiveness of group cognitive-behavioural treatment for men with

- intellectual disabilities at risk of sexual offending. *Journal of Applied Research in Intellectual Disabilities*, 23(6), 537-551. doi:10.1111/j.1468-3148.2010.00560.x
- Stokes, M., Newton, N., & Kaur, A. (2007). Stalking, and social and romantic functioning among adolescents and adults with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 37(10), 1969-1986. doi:10.1007/s10803-006-0344-2
- Stone, V. E., Baron-Cohen, S., & Knight, R. T. (1998). Frontal lobe contributions to theory of mind. *Journal of Cognitive Neuroscience*, 10(5), 640-656.  
doi:10.1162/089892998562942
- Stotland, E. (1978). *Empathy, fantasy and helping*. Sage.
- Strauss, A. & Corbin, J. (1998). *Basics of qualitative research: Grounded theory procedures and techniques*. Newberry Park: Sage.
- Sturgeon, M., Tyler, N., & Gannon, T. A. (2018). A systematic review of group work interventions in UK high secure hospitals  
doi:<https://doi.org/10.1016/j.avb.2017.11.004>
- Stuss, D. T., & Benson, D. F. (1984). Neuropsychological studies of the frontal lobes. *Psychological bulletin*, 95(1), 3.
- Suchy, Y., Whittaker, J. W., Strassberg, D. S., & Eastvold, A. (2009). Neurocognitive differences between pedophilic and nonpedophilic child molesters. *Journal of the International Neuropsychological Society*, 15(2), 248-257.  
doi:10.1017/S1355617709090353
- Sugihara, G., Tsuchiya, K. J., & Takei, N. (2008). Distinguishing broad autism phenotype from schizophrenia-spectrum disorders. *Journal of autism and developmental disorders*, 38(10), 1998-1999.
- Sundby, S. E. (2002). The capital jury and empathy: The problem of worthy and unworthy victims. *Cornell Law Review*, 88, 343.

- Sutton, L. R., Hughes, T. L., Huang, A., Lehman, C., Paserba, D., Talkington, V., et al. (2013). Identifying individuals with autism in a state facility for adolescents adjudicated as sexual offenders: A pilot study. *Focus on Autism and Other Developmental Disabilities*, 28(3), 175-183. doi:10.1177/1088357612462060
- Svedin, C. G., Åkerman, I., & Priebe, G. (2011). Frequent users of pornography. A population based epidemiological study of swedish male adolescents  
doi:<https://doi.org/10.1016/j.adolescence.2010.04.010>
- Swedberg, R. (2012). Theorizing in sociology and social science: Turning to the context of discovery. *Theory and society*, 41(1), 1-40.
- Sykes, G. M., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. *American Sociological Review*, 22(6), 664-670. doi:10.2307/2089195
- Talbot, J. (2009). No one knows: Offenders with learning disabilities and learning difficulties. *International Journal of Prisoner Health*, 5(3), 141-152.  
doi:10.1080/17449200903115797
- Talbot, J. (2010). *Seen and heard: Supporting vulnerable children in the youth justice system*. London: Prison Reform Trust.
- Talbot, T. J., & Langdon, P. E. (2006). A revised sexual knowledge assessment tool for people with intellectual disabilities: Is sexual knowledge related to sexual offending behaviour? *Journal of Intellectual Disability Research*, 50(7), 523-531.  
doi:10.1111/j.1365-2788.2006.00801.x
- Tantam, D. (2012). *Autism Spectrum Disorders Through the Life Span*. Jessica Kingsley Publishers. London, UK.
- Taurines, R., Schwenck, C., Westerwald, E., Sachse, M., Siniatchkin, M., & Freitag, C. (2012). ADHD and autism: differential diagnosis or overlapping traits? A selective review. *ADHD Attention Deficit and Hyperactivity Disorders*, 4(3), 115-139.

Taylor, J. L. (2002). A review of the assessment and treatment of anger and aggression in offenders with intellectual disability. *Journal of Intellectual Disability Research*, 46, 57-73. doi:10.1046/j.1365-2788.2002.00005.x

Taylor, J. L., Novaco, R. W., & Brown, T. (2016). Reductions in aggression and violence following cognitive behavioural anger treatment for detained patients with intellectual disabilities. *Journal of Intellectual Disability Research*, 60(2), 126-133. doi:10.1111/jir.12220

The Autism Act (2009) <http://www.legislation.gov.uk/ukpga/2009/15/contents>

The British Psychological Society (2015) Children and Young People with Neuro-Disabilities in the Criminal Justice System. Position Paper. Produced by the Working Group of the Professional Practice Board on Neurodisability and Crime. Leicester, UK.

The British Psychological Society (2017) Practice Guidelines. Third Edition. Leicester, UK.

The Children Act (1989) <http://www.legislation.gov.uk/ukpga/1989/41/contents>

The Children Act (2004) <http://www.legislation.gov.uk/ukpga/2004/31/contents/enacted>

The Children's and Families Act (2014)

<http://www.legislation.gov.uk/ukpga/2014/6/contents/enacted>

The Children's Commissioner (2001). UK Commissioners United Nations Committee on the Rights of the Child (UNCRC) Report. Office of the Children's Commissioner. London, UK.

The Children's Commissioner (2015). UK Commissioners United Nations Committee on the Rights of the Child (UNCRC) Report (1st July 2015). Office of the Children's Commissioner. London, UK.

The Children's Commissioner (2017) Implementation of the UN Convention on the Rights of Persons with Disabilities. Office of the Children's Commissioner. London, UK.

- The Children's Commissioner (2019). Far less than they deserve. Children with learning disabilities or autism living in mental health hospitals. Office of the Children's Commissioner. London, UK.
- The Crime and Disorder Act (1998) <http://www.legislation.gov.uk/ukpga/1998/37/contents>
- The Criminal Justice Act (2003) <https://www.legislation.gov.uk/ukpga/2003/44/contents>
- The Crown Prosecution Service (2019) Legal Guidance, Youth Crime: Youth Offenders <https://www.cps.gov.uk/legal-guidance/youth-offenders>
- The Data Protection Act (1998) <http://www.legislation.gov.uk/ukpga/1998/29/contents>
- The Equality Act (2010) <http://www.legislation.gov.uk/ukpga/2010/15/contents/enacted>
- The Home Office (2010) Disclosure and Barring Service Guidance. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/184095/disclosure-scheme-guidance.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/184095/disclosure-scheme-guidance.pdf)
- The Offender Health Research Network (OHRN) (2006) Comprehensive Health Assessment Tool (CHAT) A standardised holistic screening tool for assessing the healthcare needs of young people in the Youth Justice System. University of Manchester. Manchester, UK.
- The Sexual Offences Act (1956) [http://www.legislation.gov.uk/ukpga/1956/69/pdfs/ukpga\\_19560069\\_en.pdf](http://www.legislation.gov.uk/ukpga/1956/69/pdfs/ukpga_19560069_en.pdf)
- The Sexual Offences Act (2003) <http://www.legislation.gov.uk/ukpga/2003/42/contents>
- The Taith Service. (2014). Annual report 2013/2014. Bridgend, UK: Barnardos.
- Thibaut F., Cordier B. & Kuhn J. M. (1996) Gonadotrophin hormone releasing hormone agonist in cases of severe paraphilia: a lifetime treatment? *Psychoneuroendocrinology*, 21, 411–9.

- Thornberg, R. and Charmaz, K. (2012). Grounded Theory. In Lapan, S., Quartaroli, M., & Riemer, F., (Eds) *Qualitative Research Methods: AN Introduction to methods and designs* (pp41-67) San Francisco: Jossey-Bass.
- Tick, B., Bolton, P., Happe, F., Rutter, M., & Rijdsdijk, F. Heritability of autism spectrum disorders: A meta-analysis of twin studies [Autism spectrum disorders; DF extremes analysis; heritability; meta-analysis; twin studies EDAT- 2015/12/29 06:00 MHDA- 2017/01/18 06:00 CRDT- 2015/12/29 06:00 PHST- 2015/10/27 00:00 [accepted] PHST- 2015/12/29 06:00 [entrez] PHST- 2015/12/29 06:00 [pubmed] PHST- 2017/01/18 06:00 [medline] AID - 10.1111/jcpp.12499 [doi] PST - ppublish] Retrieved from 2016 May database.
- Tonry, M. (2007). Determinants of penal policies. *Crime & Justice*, 36(1), 1-48.  
doi:10.1086/518582
- Tucker, J. A., & Roth, D. L. (2006). Extending the evidence hierarchy to enhance evidence-based practice for substance use disorders. *Addiction*, 101(7), 918-932 15p.  
Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=106342309&site=ehost-live>
- Tuckman, B. W., & Jensen, M. A. C. (1977). Stages of small-group development revisited. *Group & Organization Studies*, 2(4), 419-427.
- Tudiver, J & Griffin, J (1992) Treating Developmentally Disabled Adolescents who have Committed Sexual Abuse. *SIECCAN Newsletter*, 27 (2).
- Turk J. (2011) Comorbidities: ASD & Other Developmental Disorders. Presentation to ACAMH and BPS/DCP Child and Young Person Faculty LD Network Conference, Leeds
- Turner, D., Basdekis-Jozsa, R., & Briken, P. (2013). Prescription of testosterone-lowering medications for sex offender treatment in German forensic-psychiatric institutions. *The journal of sexual medicine*, 10(2), 570-578.



Underwood, L., McCarthy J, Craig, T. (2016). Autism spectrum disorder among specialist mental health service users with intellectual disability. *Research in Developmental Disorders*.

United Nations (2014) Universal Periodic Review Mid-Term Report of the United Kingdom of Great Britain and Northern Ireland, and the British Overseas Territories, and the Crown Dependencies

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/398295/uk-upr-mid-term-report2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/398295/uk-upr-mid-term-report2014.pdf)

United Nations Committee on the Rights of the Child (UNCRC) (2007) General Comment No. 10: Children's rights in juvenile justice. GE.07-41351 (E). 270407.

US Congress (1996) H.R.1683 - Jacob Wetterling Crimes Against Children and Sexually Violent Offenders Registration Improvements Act of 1997

<https://www.congress.gov/bill/105th-congress/house-bill/1683>

US Congress (1996) S.1675 -The Pam Lychner Sexual Offender Tracking and Identification Act of 1996 (Lychner Act) [https://www.congress.gov/bill/104th-congress/senate-bill/1675?q=%7B%22search%22%3A%5B%22The+Pam+Lychner+Sexual+Offender+Tr](https://www.congress.gov/bill/104th-congress/senate-bill/1675?q=%7B%22search%22%3A%5B%22The+Pam+Lychner+Sexual+Offender+Tracking+and+Identification+Act+of+1996%22%5D%7D&s=1&r=9)

[acking+and+Identification+Act+of+1996%22%5D%7D&s=1&r=9](https://www.congress.gov/bill/104th-congress/senate-bill/1675?q=%7B%22search%22%3A%5B%22The+Pam+Lychner+Sexual+Offender+Tracking+and+Identification+Act+of+1996%22%5D%7D&s=1&r=9)

Van Ijzendoorn, M., Feldbrugge, J., Derks, F., De Ruiter, C., Verhagen, M., Philipse, M., et al. (1997). Attachment representations of personality-disordered criminal offenders. *American Journal of Orthopsychiatry*, 67(3), 449-459.

van Schalkwyk, G. I., Volkmar, F. R., & Corlett, P. R. (2017). A predictive coding account of psychotic symptoms in autism spectrum disorder. *Journal of autism and developmental disorders*, 47(5), 1323-1340.

Van Wijk, A. P., Blokland, A., Duits, N., Vermeiren, R., & Harkink, J. (2007). Relating psychiatric disorders, offender and offence characteristics in a sample of adolescent sex offenders and non-sex offenders. *Criminal Behaviour and Mental Health*, 17(1), 15-30.

- Van Wijk, A., Van Horn, J., Bullens, R., Bijleveld, C., & Doreleijers, T. (2005). Juvenile sex offenders: A group on its own? *International Journal of Offender Therapy and Comparative Criminology*, 49(1), 25-36.
- Vásquez, B.E., Maddan, S., & Walker, J.T. (2008). The influence of sex offender registration and notification laws in the United States. *Crime & Delinquency*, 54(2), 175–192.
- Vereenoghe, L., Gega, L., & Langdon, P. E. (2017). Intellectual disability and computers in therapy: Views of service users and clinical psychologists. *Cyberpsychology-Journal of Psychosocial Research on Cyberspace*, 11(1) doi:{10.5817/CP2017-1-11
- Chester, V., Wells, H., Lovell, M., Melvin, C., & Tromans, S. J. (2019). The prevention of offending behaviour by people with intellectual disabilities: a case for specialist childhood and adolescent early intervention. *Advances in Mental Health and Intellectual Disabilities*. doi:10.1108/AMHID-03-2019-0008
- Vess, J., Day, J., Powell, M. & Graffam, J., (2014) International sex offender registration laws: research and evaluation issues based on a review of current scientific literature, *Police Practice and Research: An International Journal*, 15:4, 322-335, DOI:10.1080/15614263.2011.646744
- Vick, J., McRoy, R., & Matthews, B. M. (2002). Young female sex offenders: Assessment and treatment issues. *Journal of Child Sexual Abuse*, 11(2), 1-23. doi:10.1300/J070v11n02\_01
- Vizard, E. (2013). Practitioner review: The victims and juvenile perpetrators of child sexual abuse--assessment and intervention. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 54(5), 503-515. doi:10.1111/jcpp.12047 [doi]
- Vizard, E., French, L., Hickey, N., & Bladon, E. (2004). Severe personality disorder emerging in childhood: A proposal for a new developmental disorder. *Criminal Behaviour and Mental Health : CBMH*, 14(1), 17-28.
- Vizard, E., Hickey, N., & McCrory, E. (2007). Developmental trajectories associated with juvenile sexually abusive behaviour and emerging severe personality disorder in

- childhood: 3 - year study. *The British Journal of Psychiatry. Supplement*, 49, s27-32. doi:190/5/s27 [pii]
- Vizard, E., Hickey, N., French, L., & McCrory, E. (2007). Children and adolescents who present with sexually abusive behaviour: A UK descriptive study. *Journal of Forensic Psychiatry & Psychology*, 18(1), 59-73. doi:10.1080/14789940601056745
- Volkmar, F. R. (1991). Autism and the pervasive developmental disorders. *Psychiatric Services*, 42(1), 33-35.
- Wade, D. T., & de Jong, B. A. (2000). Recent advances in rehabilitation. *BMJ (Clinical Research Ed.)*, 320(7246), 1385-1388. doi:10.1136/bmj.320.7246.1385 [doi]
- Wainwright, V., McDonnell, S., Lennox, C., Shaw, J., & Senior, J. (2016). Soldier, civilian, criminal: Identifying pathways to offending of ex-armed forces personnel in prison. *Psychology, Crime & Law*, 22(8), 741-757. doi:10.1080/1068316X.2016.1181175
- Wakeling, H. C., Webster, S. D., Mann, R. E. (2005). Sexual offenders' treatment experience: A qualitative and quantitative investigation. *Journal of Sexual Aggression*, 11, 171-186.
- Wampold, B. E., & Brown, G. S. (2005). Estimating variability in outcomes attributable to therapists: A naturalistic study of outcomes in managed care. *Journal of Consulting and Clinical Psychology*, 73(5), 914-923. doi: Doi 10.1037/0022-006x.73.5.914
- Wampold, B.E., & Bolt, D.M. (2006). Therapist effects: Clever ways to make them (and everything else) disappear. *Psychotherapy Research*, 16, 184–187.
- Ward, T. (2000). Sexual offenders' cognitive distortions as implicit theories. *Aggression and Violent Behavior*, 5(5), 491-507. doi:[http://dx.doi.org/10.1016/S1359-1789\(98\)00036-6](http://dx.doi.org/10.1016/S1359-1789(98)00036-6)
- Ward, T. (2001). A critique of hall and hirschman's quadripartite model of child sexual abuse. *Psychology, Crime & Law*, 7(4), 333-350.

- Ward, T. (2007). In Maruna S. (Ed.), *Rehabilitation: Beyond the risk paradigm*. London: London: Routledge.
- Ward, T. (2014). The explanation of sexual offending: From single factor theories to integrative pluralism. *Journal of Sexual Aggression*, 20(2), 130-141.
- Ward, T., & Brown, M. (2004). The good lives model and conceptual issues in offender rehabilitation. *Psychology, Crime & Law*, 10(3), 243-257.
- Ward, T., & Hudson, S. M. (1998a). The Construction and Development of Theory in the Sexual Offending Area: A Metatheoretical Framework. [Sexual Abuse: A Journal of Research and Treatment](#) volume 10, pages 47–63
- Ward, T., & Hudson, S. M. (1998b). A model of the relapse process in sexual offenders. *Journal of Interpersonal Violence*, 13(6), 700-725.
- Ward, T., & Keenan, T. (1999). Child molesters' implicit theories. *Journal of Interpersonal Violence*, 14(8), 821-838. doi:10.1177/088626099014008003
- Ward, T., & Marshall, W. L. (2004). Good lives, aetiology and the rehabilitation of sex offenders: A bridging theory. *Journal of Sexual Aggression*, 10(2), 153-169. doi:10.1080/13552600412331290102
- Ward, T., & Maruna, S. (2007). *Rehabilitation: Beyond the risk paradigm*. London. London: Routledge.
- Ward, T., & Siegert, R. J. (2002). Toward a comprehensive theory of child sexual abuse: A theory knitting perspective. *Psychology, Crime and Law*, 8(4), 319-351.
- Ward, T., Hudson, S. M., & Keenan, T. (1998). A self-regulation model of the sexual offense process. *Sexual Abuse: A Journal of Research and Treatment*, 10(2), 141-157. doi:10.1023/A:1022071516644

- Ward, T., Hudson, S. M., Johnston, L., & Marshall, W. L. (1997). Cognitive distortions in sex offenders: An integrative review. *Clinical psychology review*, 17(5), 479-507.
- Ward, T., Keenan, T., & Hudson, S. M. (2000). Understanding cognitive, affective, and intimacy deficits in sexual offenders: A developmental perspective  
doi:[https://doi.org/10.1016/S1359-1789\(98\)00025-1](https://doi.org/10.1016/S1359-1789(98)00025-1)
- Ward, T., Mann, R. E., & Gannon, T. A. (2007). The good lives model of offender rehabilitation: Clinical implications. *Aggression & Violent Behavior*, 12(1), 87-107.  
Retrieved from  
<http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=106147020&site=ehost-live>
- Ward, T., Polaschek, D. L., & Beech, A. R. (2006). *Theories of sexual offending* Wiley Online Library.
- Ward, T., Keown, K., & Gannon, T. A. (2009). Cognitive distortions as belief, value and action judgmentsdoi:10.1002/9780470746295.ch3 Retrieved from  
<https://doi.org/10.1002/9780470746295.ch3>
- Warner, B. D., & Fowler, S. K. (2003). Strain and violence: Testing a general strain theory model of community violence. *Journal of Criminal Justice*, 31(6), 511-521.
- Wazana, A., Bresnahan, M., & Kline, J. (2007). The autism epidemic: fact or artifact?. *Journal of the American Academy of Child & Adolescent Psychiatry*, 46(6), 721-730.
- Webster, C. D., Douglas, K. S., Eaves, D., & Hart, S. D. (1997). *HCR-20: Assessing risk for violence (Version 2)*. Burnaby, British Columbia, Canada: Mental Health, Law, and Policy Institute, Simon Fraser University.
- Webster, S. D., & Beech, A. R. (2000). The nature of sexual offenders' affective empathy: A grounded theory analysis. *Sexual Abuse: A Journal of Research and Treatment*, 12(4), 249-261.
- Wechsler, D. (2014). *WISC-V: Technical and interpretive manual*. NCS Pearson, Incorporated.

- Weschler, D. (2011). WASI-II: Wechsler abbreviated scale of intelligence—second edition. San Antonio: Psychological Corporation. Corporation TP
- West, M., Rose, M. S., Spreng, S., Sheldon-Keller, A., & Adam, K. (1998). Adolescent attachment questionnaire: A brief assessment of attachment in adolescence. *Journal of Youth and Adolescence*, 27(5), 661-673. doi:10.1023/A:1022891225542
- Weston, L., Hodgekins, J., & Langdon, P.E., (2016). Effectiveness of cognitive behavioural therapy with people who have autistic spectrum disorders: A systematic review and meta-analysis. *Clinical Psychology Review*, 49, 41-54.
- Wheeler, J. R., Holland, A. J., Bambrick, M., Lindsay, W. R., Carson, D., Steptoe, L., . . . O'Brien, G. (2009). Community services and people with intellectual disabilities who engage in anti-social or offending behaviour: Referral rates, characteristics, and care pathways. *Journal of Forensic Psychiatry & Psychology*, 20(5), 717-740. 10.1080/14789940903174048 Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=44252777&site=ehost-live>
- Whitney, E. R., Kemper, T. L., Bauman, M. L., Rosene, D. L., & Blatt, G. J. (2008). Cerebellar purkinje cells are reduced in a subpopulation of autistic brains: A stereological experiment using calbindin-D28k. *Cerebellum (London, England)*, 7(3), 406-416. doi:10.1007/s12311-008-0043-y [doi]
- Whittle, M., (1972) *Malignant Alienation* in Adshad, G. & Jacob, C. (2008) (Eds). *Personality disorder: The definitive reader*. Jessica Kingsley Publishers, London, UK.
- Wilkins, J., & Matson, J. L. (2009). A comparison of social skills profiles in intellectually disabled adults with and without ASD. *Behaviour Modification*, 33, 143–155.
- Williams, F. and Mann, R.E. (2010), “The treatment of intellectually disabled sex offenders in the national offender management service: the adapted sex offender treatment programme”, in Craig, L.A., Lindsay, W.R. and Brown, K.D. (Eds), *Assessment and Treatment of Sexual Offenders with Intellectual Disabilities: A Handbook*, Wiley, Chichester

- Williams, F., Wakeling, H., & Webster, S. (2007). A psychometric study of six self-report measures for use with sexual offenders with cognitive and social functioning deficits. *Psychology, Crime & Law*, 13(5), 505-522. 10.1080/10683160601060739 Retrieved from <https://doi.org/10.1080/10683160601060739>
- Willis, G. M., & Grace, R. C. (2009). Assessment of community reintegration planning for sex offenders: Poor planning predicts recidivism. *Criminal Justice and Behavior*, 36(5), 494-512. doi:10.1177/0093854809332874
- Wilson, R. J. (1999). Emotional congruence in sexual offenders against children. *Sexual Abuse*, 11(1), 33-47.
- Wing, J., Beevor, A., Curtis, R., Park, S., Hadden, J., & Burns, A. (1998). Health of the Nation Outcome Scales (HoNOS): Research and development. *British Journal of Psychiatry*, 172(1), 11-18. doi:10.1192/bjp.172.1.11
- Wing, L. (1981). Asperger's syndrome: A clinical account. *Psychological Medicine; Psychological Medicine*, 11(1), 115-129. doi:10.1017/S0033291700053332
- Wing, L. (1981). Sex ratios in early childhood autism and related conditions. *Psychiatry Research*, 5(2), 129-137. doi:10.1016/0165-1781(81)90043-3
- Wing, L., & Gould, J. (1979). Severe impairments of social interaction and associated abnormalities in children: Epidemiology and classification. *Journal of Autism and Developmental Disorders*, 9(1), 11-29. doi:10.1007/BF01531288
- Wing, L., & Potter, D. (2002). The epidemiology of autistic spectrum disorders: is the prevalence rising? *Mental retardation and developmental disabilities research reviews*, 8(3), 151-161.
- Wing, L., Leekam, S. R., Libby, S. J., Gould, J., & Larcombe, M. (2002). The diagnostic interview for social and communication disorders: Background, inter-rater reliability and clinical use. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 43(3), 307-325. doi:10.1111/1469-7610.00023 [doi]

- Winter-Messiers, M. A., Herr, C. M., Wood, C. E., Brooks, A. P., Gates, M. A. M., Houston, T. L., & Tingstad, K. I. (2007). How far can Brian ride the Daylight 4449 Express? A strength-based model of Asperger syndrome based on special interest areas. *Focus on Autism and Other Developmental Disabilities*, 22(2), 67-79.
- Witwer, A. N., & Lecavalier, L. (2007). Autism screening tools: an evaluation of the social communication questionnaire and the developmental behaviour checklist–autism screening algorithm. *Journal of Intellectual and Developmental Disability*, 32(3), 179-187.
- Wolf, S. (1984). A multifactor model of deviant sexuality. paper presented at third international conference on victimology [Abstract].
- Wolff, S., Narayan, S., & Moyes, B. (1988). Personality characteristics of parents of autistic children: a controlled study. *Journal of Child Psychology and Psychiatry*, 29(2), 143-153.
- Wolfgang, M. E., & Tracy, P. E. (1982). *The 1945 and 1958 birth cohorts: A comparison of the prevalence, incidence, and severity of delinquent behavior.* . Philadelphia: Center for Studies in Criminology and Criminal Law, University of Pennsylvania.
- Woodbury-Smith, M. R., Clare, I. C. H., Holland, A. J., & Kearns, A. (2006). High functioning autistic spectrum disorders, offending and other law-breaking: findings from a community sample. *The Journal of Forensic Psychiatry & Psychology*, 17(1), 108-120.
- Woodbury-Smith, M. R., Clare, I. C. H., Holland, A. J., Kearns, A., Staufenberg, E., & Watson, P. (2005). A case-control study of offenders with high functioning autistic spectrum disorders. *Journal of Forensic Psychiatry & Psychology*, 16(4), 747-763.  
doi:10.1080/14789940500302554
- Woodbury-Smith, M., & Dein, K. (2014). Autism spectrum disorder (ASD) and unlawful behaviour: Where do we go from here? *Journal of Autism & Developmental Disorders*, 44(11), 2734-2741. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=98836480&site=ehost-live>



- Woodbury-Smith, M., & Dein, K. (2014). Autism spectrum disorder (ASD) and unlawful behaviour: Where do we go from here? *Journal of Autism & Developmental Disorders*, 44(11), 2734-2741. doi:10.1007/s10803-014-2216-5
- World Health Organization. (1992). *The ICD-10 classification of mental and behavioural disorders: Clinical descriptions and diagnostic guidelines*. Geneva: World Health Organization.
- Worling, J. R. (1995). Sexual abuse histories of adolescent male sex offenders: Differences on the basis of the age and gender of their victims. *Journal of Abnormal Psychology*, 104(4), 610-613. doi:10.1037/0021-843X.104.4.610
- Worling, J. R., & Curwen, T. (2001). *The ERASOR: Estimate of risk of adolescent sexual offense recidivism (Version 2.0)*. Unpublished manuscript. Toronto, Canada: Ontario Ministry of Community and Social Services.
- Wright, P., Nobrega, J., Langevin, R., & Wortzman, G. (1990). Brain density and symmetry in pedophilic and sexually aggressive offenders. *Annals of Sex Research*, 3(3), 319-328. doi:10.1007/BF00849186
- Young, D. J., Bebbington, A., Anderson, A., Ravine, D., Ellaway, C., Kulkarni, A., et al. (2008). The diagnosis of autism in a female: Could it be rett syndrome? *European Journal of Pediatrics*, 167(6), 661-669. doi:10.1007/s00431-007-0569-x
- Youth Justice Board & Ministry of Justice (2014). *Youth justice statistics 2012/13*. England and Wales. London, UK: Office of National Statistics.
- Youth Justice Board (2008) *AssetPlus Model Document*.  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/364092/AssetPlus\\_Model\\_Document\\_1\\_1\\_October\\_2014.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/364092/AssetPlus_Model_Document_1_1_October_2014.pdf)
- Youth Justice Board (2008) *Young People who Sexually Offend. Key Elements of Effective Practice*. London, UK.

Youth Justice Board (2019) Standards for children in the youth justice system.

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/780504/Standards for children in youth justice services 2019.doc.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/780504/Standards_for_children_in_youth_justice_services_2019.doc.pdf)

Youth Justice Board (2019) Types of prison sentences: Sentences for Young People

<https://www.gov.uk/types-of-prison-sentence/sentences-for-young-people>

ySOTSEC + Be Safe (2017) Keep Safe: Group Intervention for Young People with Learning Disabilities & Harmful Sexual Behaviour(s) & their Parents/Carers. 1st Edition. Prepared by The Keep Safe Development Group and the AWP Be Safe Service. ySOTSEC-ID. Canterbury, UK.

Zickgraf, H., & Mayes, S. D. (2019). Psychological, Health, and Demographic Correlates of Atypical Eating Behaviors in Children with Autism. *Journal of Developmental and Physical Disabilities*, 31(3), 399-418.