

The Intersection of Autism and Law:

Remorse Assessments and Diagnosis Considerations in Sentencing

By

Tammie Rebecca Foster

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Abstract

A key concern in the legal evaluation of autistic offenders is the potential impact of autismrelated characteristics on assessments of remorse. Research shows that differences in social communication, central to autism, can lead to misconceptions about emotional expressions (Allely, 2015; Hepworth, 2017). Such misconceptions may negatively affect evaluations of an individual's mental state and moral character due to a lack of understanding of autism (Gardner et al., 2019; Maras et al., 2017). This issue is particularly significant when behavioural evidence is used to assess remorse, which is crucial in sentencing. Many jurisdictions in Australia and abroad encourage courts to consider an offender's conduct during the trial as an indication of remorse (e.g., *Sentencing Act* 1991, Vic).

In this thesis, I explore the interplay between autism, social perception, and judicial sentencing, illuminating how these factors converge to shape legal outcomes. Chapter 2 consists of an analysis of the social interaction challenges faced by autistic individuals, focusing on how misconceptions about their behaviour impact their acceptance in high-stakes environments like the criminal justice system. Through a systematic review and meta- analysis, I reveal the detrimental effects of these misconceptions on impression formation, social context, and the ramifications of diagnostic disclosure.

Chapter 3 presents a study on custodial sentences for autistic offenders, uncovering potential biases and disparities in sentencing compared to the general population, particularly in sexual assault cases. Chapter 4 conducts a detailed examination of sentencing cases involving offenders with autism to assess the influence of perceived remorse on judicial decisions. Findings indicated significant variability in the interpretation of remorse and its implications for sentencing length. Chapter 5 further analyses factors influencing judicial assessments in the same sentencing cases, revealing the critical role of perceived remorse and the often-unclear distinction between mitigating and aggravating factors.

Finally, Chapter 6 investigates evaluations of autistic and non-autistic individuals portraying

offenders in a mock sentencing scenario. Autistic offenders are rated less favourably on measures of remorse, moral culpability, rehabilitation, and offence severity, receiving longer sentences. This study pilots the Offender Remorse Evaluation (ORE) measure to understand the mechanisms behind remorse evaluations. Comprising 17 items across four dimensions, the ORE aims to shed light on why individuals with autism are perceived as less remorseful. Factor analysis and qualitative responses from participants provide valuable insights into how autistic testimonies differ from those of their non-autistic counterparts.

Overall, this thesis highlights the profound impact of societal perceptions of autism on legal outcomes, emphasising the need for judicial awareness and education to ensure fair treatment of autistic offenders in the legal system. By identifying biases and misconceptions, I advocate for the development of tailored evaluation tools and guidelines that consider the unique communication styles of autistic individuals, ultimately promoting more equitable sentencing practices.

Declaration

I certify that this thesis:

- does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and
- the research within will not be submitted for any other future degree or diploma without the permission of Flinders University; and
- to the best of my knowledge and belief, does not contain any material previously published or written by another person except where due reference is made in the text; and
- 4. a professional editor was not used in the preparation of this thesis. However, use of an artificial intelligence platform was used to suggest edits for clarity, conciseness, and improved sentence structure, which has been cited in the reference list.

Signed Tammie Foster

Date. 6th October 2024

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Lastly, I extend my appreciation to all the participants who made this research possible. I recognise that the nature and context of the study presented challenges in portraying the characters involved. Words cannot fully capture the rollercoaster journey of the last ten years, from my undergraduate studies to completing my PhD. What began as an interest in psychology for self-discovery led me to a discipline in autism research, an area about which I previously knew little. This journey has allowed me to recognise characteristics in myself that align with those on the autism spectrum. During this time, I was assessed and diagnosed as autistic, which has helped me confront the underlying reasons behind the challenges I faced in social relationships, short-term employment, and my unfinished high school education. While I still grapple with the label of autism, this marks the first time I am publicly acknowledging my connection to the diagnosis. I now understand how my brain processes information differently from most people.

In seeking to find myself, I have also discovered my identity in Christ, to whom I owe my life. I would not have been able to finish this journey without Him. Witnessing Him bring my family together and the people I've known throughout my life has been an amazing experience, and I know this is just the beginning.

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CHAPTER 1: Introduction

Overview

Autism Spectrum Disorder (ASD), or autism, is defined as a neurodevelopmental condition that impairs social interaction and communication and is commonly associated with behavioural challenges and sensory sensitivities (DSM-5-TR; American Psychiatric Association [APA], 2022). In 2015, the Australian Institute of Health and Welfare (AIHW) reported a prevalence rate of 0.7% in the Australian population, with males being four times more likely to receive a diagnosis than females (AIHW, 2017). Often, the diagnosis is not made until later in life when social demands increase in environments such as schools and workplaces (Bargiela et al., 2016; Clark et al., 2018; Stagg & Belcher, 2019). Consequently, adults with autism¹ may struggle with managing social interactions, face social isolation (Magiati et al., 2014), have difficulty finding employment (Gillberg et al., 2016), and in some cases, interact with the criminal justice system (CJS) (Allen et al., 2008).

Although these individuals are no more likely to commit crimes than individuals without an autism diagnosis (Brewer & Young, 2015; Mouridsen et al., 2008) they are overrepresented in the CJS (Archer & Hurley, 2013; Pearce & Berney, 2016; Rava et al., 2017), suggesting that they may be more likely to interact with the judiciary with less favourable outcomes. This overrepresentation may be partially attributed to the challenges autistic individuals face in social communication and understanding societal norms, which can result in misinterpretation of their actions. However, rather than being perpetrators of criminal or violent behaviour, individuals with autism are often more likely to be victims of crime. Research highlights that individuals with autism, particularly women, are at increased risk of victimisation, with studies showing that up to 90% of autistic women have experienced sexual violence (Cazalis et al., 2022). Moreover, autistic individuals are more vulnerable to various forms of interpersonal victimisation, including hate crimes and abuse (Chaplin & Mukhopadhyay, 2018; Pfeffer, 2016; Trundle et al., 2023). Despite growing research on how

¹ The terminology used to describe individuals on the autism spectrum is debated within both the academic and autism communities, with preferences for "autistic" versus "person with autism" reflecting broader discussions about identity, agency, and social inclusion (Bury et al., 2023; Buijsman et al., 2023); this thesis employs both forms to respect individual preferences and acknowledge the diversity of experiences.

certain features of autism may provide the context of vulnerability to a range of offending behaviours (Ali, 2018; Brewer et al., 2018; Brewer & Young, 2015; Young & Brewer, 2020), little is known about what happens to these individuals once they enter the criminal justice process (Berryessa, 2014; Berryessa et al., 2015).

According to the latest AIHW report (2017), 83% of the 164,000 diagnosed individuals were under 25 years old compared to 64,000 in 2009, indicating a notable increase in the condition. Moreover, this figure suggests that autism awareness, recognition, and referral for diagnostic assessments have also improved. However, the increase in diagnosed cases might also suggest that many adults on the autism spectrum remain undiagnosed, missing out on clinical intervention and support services that could prevent negative outcomes associated with characteristics associated with the condition (Stagg & Belcher, 2019). These individuals may be unaware of how autism affects various aspects of their lives and can lead to negative consequences, including criminal activity. Often, individuals only become aware of their developmental difficulties after encountering the CJS and undergoing psychological assessments before a court hearing (Woodbury-Smith & Dein, 2014).

Individuals may encounter the CJS through various pathways, but they will ultimately need to mount a defence or enter a plea and engage with the court. Limited research suggests that offenders with autism characteristics tend to have less favourable outcomes in criminal court proceedings compared to those without such characteristics (Berryessa, 2018; Berryessa et al., 2015). Those found guilty of an offence, whether by plea or trial, may receive disproportionately harsh penalties due to misinterpretations of behaviours associated with autism (Maras et al., 2019). This thesis explores whether legal decision-makers view individuals with an autism diagnosis negatively in criminal court proceedings and, if so, whether this perception leads to harsher penalties.

Judicial Decision-Making

Crafting a just and equitable custodial sentence for convicted offenders poses a significant challenge for judges, balancing legal guidelines with recommendations from both the prosecution and defence. Bagaric (2016) suggests that the judicial reasoning process for sentencing decisions involves "instinctive syntheses", where judicial discretion and intuition play a considerable role in determining the outcome. The judiciary considers the relevant factors of sentencing, including the purpose and principles, as well as specific matters that should be imposed on a particular case, such as aggravating and mitigating factors. However, the circumstances in which many of these factors apply are unclear, and judges have considerable choice regarding their application, leading to unrestrained discretion in weighing each factor. As a result, the sentencing calculus process incorporates a degree of subjectivity since judges are influenced by their political views, values, and life experiences, which shape their attitudes (Bagaric, 2016).

The decision-making process for judges is further complicated by the vast amount of information, intricate legal rules, ambiguity of facts, and contradictory arguments about the application of rules. When faced with complex decisions, judges may employ heuristic thinking strategies, which can lead to fallibilities in judgment processes, ultimately affecting their legal decisions and the outcomes for offenders (Carson et al., 2007). Additionally, the consideration of aggravating or mitigating factors about an offender's circumstances is largely based on factual evidence of the case. However, judges' consideration of the offender's conduct and demeanour can be subjective. These subjective decisions, based on complex cognitive processes and heuristic-informed judgments, can result in an unfavourable outcome for the offender if the presentation of remorse is not effectively executed. Research has shown that heuristics, or mental shortcuts, can influence judicial decisions, often leading to biased judgments based on incomplete or emotionally charged information (Peer & Gamliel, 2013). In the context of remorse, if an offender's emotional presentation does not align with the judge's expectations or understanding of remorse, a harsher judgment or sentence could result.

The information provided to a judge about the offender, such as evaluations from psychiatrists or psychologists, can significantly influence the imposed penalty (Van Es et al., 2020). Despite attempts to present objective expert witness information, the decision-making process still heavily relies on subjective and intricate judgments. Moreover, judges possess discretion in determining which information, if any, should be considered (Edmond, 2008). When the offender's mental condition is presented as evidence in court, the insights obtained from expert witnesses have the potential to influence the judge's decision on various sentencing factors, ultimately leading to either retributive or restorative approaches in sentencing the offender (McCallum & Gowensmith, 2020).

Purposes and Principles of Sentencing

In the Australian CJS, judges determine the length of an offender's custodial sentence based on legislative limits. The maximum penalties for specific offences vary across Commonwealth, state, and territory jurisdictions. However, in most, but not all, judges have the authority to exercise discretion when considering the sentencing purposes and principles outlined in Sentencing Acts of Parliament. These acts, such as the Criminal Law Consolidation Act 1935 (SA) section 5 and the Sentencing Act 2017 (SA) section 37, provide guidelines for sentencing that are subject to legal frameworks and constitutional constraints. Sentencing purposes have evolved to reflect changing priorities in society, politics, and the law. While punishment remains a crucial aspect of the criminal justice system, there has been an increasing recognition of the importance of rehabilitation, mental health support, and community-based alternatives (Davidson et al., 2016; Fox, 1999). Guiding principles of sentencing have remained relatively consistent whereby the principle of proportionality requires that the severity of the sentence must be proportional to the seriousness of the offence committed. Judges have limited discretion in determining sentences under this principle (Hammond, 2007). Additionally, the principle of consistency requires that offences and the circumstances relating to the commission of the offence which are similar in nature result in similar sentences to ensure fairness in the sentencing process (Bagaric & Pathinayake, 2013).

Recently, the over-representation of people with disabilities and mental illness in the CJS has become a pressing issue. Autism, in particular, has gained attention due to the literature highlighting circumstances in which these individuals may be vulnerable to criminal involvement and misunderstood throughout the criminal justice process (Brewer et al., 2018; Maras et al., 2017). Legislation related to disability and mental health has been developed to guide decisions on appropriate support and treatment of offenders with qualifying conditions (Australian Parliament House, 2022). While the United Kingdom is currently leading in legislative guidelines to specifically address autistic offenders in the CJS (Parliamentary Office of Science and Technology, 2021), in Australia, legislation regarding autism is still in its infancy.

Autism and Sentencing Law

Jurisdictions across Australia are governed by provisions in legislation for prosecution and disposition where mental illness or intellectual disability has been identified. Application of these laws can provide offenders with a defence for "unsoundness of mind", where judgements are made regarding their mental fitness to enter a plea or to be found guilty (Arstein-Kerslake et al., 2017). Diversions from custodial penalties can be implemented resulting in the offender becoming a forensic patient ordered to receive treatment (Parliament of Australia, 2021). Legislation is not so salient for offenders diagnosed with a condition such as autism. Australia endorsed the United Nations' 'Convention on the Rights of Persons with Disabilities' suggesting that people with disability are protected by the law (Australian Human Rights Commission, 2013). However, the Human Rights Commission (AHRC, 2013) suggest that Australia's CJS is not upholding the rights of persons with disabilities identifying barriers that limit or prevent access to justice for these individuals. They identified that support, adjustments, or aid required to access protections such as during the criminal justice process were limited. Further, access to CJS diversions varies considerably across jurisdictions and in some cases, diversionary options are not available (AHRC, 2013). The AHRC (2020) have since made recommendations for police interview procedures, legal aid systems, and court proceedings to address these concerns. Furthermore, since the studies in this

chapter were conducted, changes have also been made to Victorian sentencing legislation that specifies autism spectrum disorder to be recognised as a mental impairment, which can be taken into consideration as a sentencing factor in addition to intellectual disability and mental illness (*Sentencing Act*, 1991 (Vic) s. 10A). Therefore an offender's autism diagnosis can be considered to: reduce the offender's moral culpability for the offence whereby less weight could be given to sentencing purposes of just punishment, denunciation, and deterrence; affect the type and conditions of sentencing such as diversions; increase the hardship experienced by the offender in prison; and increase the risk of adverse effects on the offender's mental health from imprisonment (*R v Verdins & Ors*, 2007). However, it is still suggested there remains uncertainty in how to apply the autism diagnosis in sentencing considerations (Wolf, 2021).

Sentencing Factor Applications

A judge must consider the purposes and principles of sentencing, as well as any relevant factors related to the offender's specific case such as any relevant information about their mental condition. They can only base their decision on the information presented in court. Some jurisdictions provide a comprehensive list of the mitigating and aggravating factors related to specific offences, while others take a more general approach (*Crimes Act* 1914 S16A; *Sentencing Act* 2017 SA s. 9-11). Typically, these factors include the severity of the offence, the offender's culpability, prior convictions, age, and whether they showed remorse (Findlay et al., 2014). The judge may interview the offender to gather more information, and expert witnesses, such as a psychologist or psychiatrist, may provide post- interview reports on the offender's social background and rehabilitative needs. This approach allows the judge to consider rehabilitative aims, rather than just punitive measures.

The mental state of an offender at the time of an offence is taken into consideration to determine if they were aware of the risks and consequences, if the offence was premeditated, and the motives involved (*Crimes Act* 1914, s. 16A). This information is weighed alongside mental health assessments to ascertain if the offender is morally culpable and eligible for an unsoundness of mind

plea (Commonwealth Sentencing Database, 2023). Similarly, intellectual disabilities are considered with different weights assigned according to the degree of disability. However, disabilities are taken into account regardless of whether they were present during the offence or sentence. Reduced moral culpability may be established if the offender's intellectual disability contributed to the criminal conduct and if imprisonment would be more burdensome than for a non-disabled offender (Findlay et al., 2014).

Verdins principles are often referred to in cases where an offender's mental impairment is evaluated as a sentencing factor. These principles were first expressed in R v *Tsiaras* (1996) and were later reformulated in the Court of Appeal for the case R v *Verdins & Ors* (2008). However, the court is not obliged to consider these principles unless they are raised by the accused. To do so, sufficient evidence is required, such as reports from a forensic psychologist or psychiatrist that detail the impact of the condition on the offence and how the offender will be affected during their sentence (Sentencing Advisory Council, 2023). It is the offender's responsibility to establish, on the balance of probabilities, the facts that align with the Verdins considerations. The Verdins principles below are outlined in R v *Verdins* (2007):

Impaired mental functioning, whether temporary or permanent ("the condition"), is relevant to sentencing in at least the following six ways:

- The condition may reduce the moral culpability of the offending conduct, as distinct from the offender's legal responsibility. Where that is so, the condition affects the punishment that is just in all the circumstances; and denunciation is less likely to be a relevant sentencing objective.
- 2. The condition may have a bearing on the kind of sentence that is imposed and the conditions in which it should be served.
- 3. Whether general deterrence should be moderated or eliminated as a sentencing consideration depends upon the nature and severity of the symptoms exhibited by the offender, and the effect of the condition on the mental capacity of the offender, whether at the time of the offending or at the date of sentence or both.
- 4. Whether specific deterrence should be moderated or eliminated as a

sentencing consideration likewise depends upon the nature and severity of the symptoms of the condition as exhibited by the offender, and the effect of the condition on the mental capacity of the offender, whether at the time of the offending or at the date of the sentence or both.

- 5. The existence of the condition at the date of sentencing (or its foreseeable recurrence) may mean that a given sentence will weigh more heavily on the offender than it would on a person in normal health.
- 6. Where there is a serious risk of imprisonment having a significant adverse effect on the offender's mental health, this will be a factor tending to mitigate punishment.

However, currently the legislation in Australia does not have a unified definition nor guidance for where the autism diagnosis fits in terms of mental impairment or disability. For the purposes of this discussion, one can assume that the diagnosis falls within the disability category, where the impact of the prison environment on an offender with a disability is also considered.

Retribution

The purpose of retribution in sentencing is to ensure that offenders receive the appropriate punishment for their actions. Proportionality is the guiding principle, meaning that the severity of punishment should match the severity of the offence (Findlay et al., 2014). If an offender's autism diagnosis is considered, it may reduce their moral culpability, resulting in a lesser weight applied to retribution and a less severe punishment. This is evident in cases where mental impairments were considered such as R v Windle (2012) and DPP v De La Rosa (2010).

Deterrence

Deterrence is an important factor in sentencing because it aims to prevent not only recidivism (specific deterrence) but also to deter others from committing similar offences (general deterrence). In cases where an offender has an autism diagnosis, the implications of the condition on the committed offence may not serve as an appropriate example to the community, leading to a reduced need for general deterrence in sentencing considerations (*Muldock v The Queen*, 2011). However, specific deterrence may be taken into account to increase the sentence if the offender is

deemed a danger to the community due to the decreased rehabilitation potential resulting from their condition (*DPP v De La Rosa*, 2010). This is particularly concerning for autistic individuals since the diagnosis is considered a lifelong disorder. The Verdins principles propose that specific deterrence should be based on the nature and severity of the condition's symptoms at the time of the offence and/or sentencing (R v Verdins, 2007).

Rehabilitation

One of the purposes of rehabilitation is to identify the causes of criminal behaviour through scientific means and tailor the sentencing to the specific needs of the offender to give them the best chance of becoming a law-abiding member of society (Findlay et al., 2014).

There are no principle limitations to the suggested solutions to rehabilitate criminal behaviour (Findlay et al., 2014). In cases where an offender has an autism diagnosis, it may serve as a mitigating factor in the aim of rehabilitation. Treatment programs outside of the prison system may be more appropriate, or the sentence length may be reduced since incarceration may be more burdensome for an autistic offender (*DPP v De La Rosa*, 2010). However, an autism diagnosis may not be considered a mitigating factor if characteristics of the condition that relate to the commission of the offence are deemed to remain unchanged.

Denunciation

Denunciation is the process of implementing the appropriate moral values on the offender and society, informed by public opinion. Similar to deterrence, a reduced moral culpability of the offence due to associated characteristics of the offender's diagnosis may reduce the need to denounce the offence. This is because the offender's motives and conditions for committing the offence may be different from those that would ordinarily attract public condemnation (*DPP v De La Rosa*, 2010).

Incapacitation

Incapacitation in sentencing aims to impose restraints on further offending by considering the future conduct of the offender, including their potential for future dangerousness and likelihood of reoffending. Rehabilitation potential is a factor that may be considered when determining whether the characteristics of the offender's diagnosis are mitigating or aggravating in the severity of the sentence imposed. If the symptoms of the diagnosis are determined to be causal to the offence and resistant to change, the diagnosis may be considered an aggravating factor under the purposes of incapacitation. The focus here is on future conduct, rather than solely on the primary offence (Findlay et al., 2014).

Overall, it appears that autism can have both mitigating and aggravating effects on the retrospective and prospective approaches to sentencing. However, the lack of clear guidance on how to apply diagnoses such as autism poses a risk of unjust and disparate sentences, given the discretionary approach to the weights distributed across the purposes of sentencing.

Remorse and Sentencing

In many Western jurisdictions, including Australia, remorse is deemed a critical factor in criminal justice determinations (Bagaric & Amarasekara, 2001; Weisman, 2009). It is believed to enhance rehabilitation potential and reduce reoffending likelihood (Bandes, 2021; Corwin et al., 2012). Empirical evidence supports the idea that expressions of remorse lead to positive character evaluations (Darby & Schlenker, 1989; MacLin et al., 2009; Robinson et al., 1994; Tombs & Jagger, 2006) and increased satisfaction among those who punish transgressors (Funk et al., 2014; Strelan & van Prooijen, 2013). While remorse has been shown to reduce sentence severity in mock juror studies (Corwin et al., 2012; MacLin et al., 2009), its impact on recidivism remains unclear.

Currently, there is no conclusive evidence that expressions of remorse decrease recidivism, yet it is often cited as a mitigating factor in the legal system (Bandes, 2016). In fact, offender remorse is the most frequently mentioned mitigating factor in sentencing decisions (Court Crown Survey, 2012). Judges have discretion to use mitigating factors to lessen penalties (Legal Service Commission, 2020). In Australia, evidence such as early guilty pleas or cooperation with police can be used to assess remorse (Proeve et al., 1999), but the determination of remorse remains subjective, relying heavily on the offender's behavior during the judicial process (s. 5 *Sentencing Act* 1991

[Vic]).

The terms "contrition" and "remorse" are often used interchangeably by courts. In *DPP v Goldberg* (2001), it was established that contrition involves more than mere regret; genuine contrition requires the acceptance of responsibility for wrongdoing (*R v Hall*, 2005; *R v Loiterton*, 2005). An offender's expressions of remorse are likely considered genuine contrition if they acknowledge their wrongdoing. Courts must evaluate the degree of contrition under Section 16A(2)(f)(ii), considering various factors including direct testimony. Recognised indicators of contrition include entering a guilty plea, cooperating with law enforcement, and exhibiting contrite behaviour. However, the weight given to these expressions can vary by case, and genuine or perceived remorse remains critical. The court warns against significant sentencing discounts without proper evidence of remorse (CSD, 2023). Ongoing conduct and statements are more indicative of genuine contrition than the plea alone (CSD, 2023). Offenders may submit letters of contrition as evidence of remorse. For instance, in *Omorogbe v The Queen* (2013), the judge accepted the offender's contrition expressed in a letter, alongside a 25% discount for an early guilty plea. Conversely, in *DPP v Blackman* (2014), letters of contrition were given less weight when not presented directly in court (CSD, 2023).

Demonstrating genuine contrition can suggest reasonable prospects for rehabilitation, potentially leading to reduced sentences. In *Cameron v The Queen* (2002), it was suggested that if genuine contrition is satisfactorily demonstrated, judges might place less emphasis on general deterrence, which could serve both to encourage the offender and set an example for others. Genuine contrition may also indicate that specific deterrence is unnecessary, leading to a lighter sentence (CSD, 2023). However, a lack of remorse may prompt the court to impose greater deterrence.

Indicators for evaluating remorse include guilty pleas, cooperation with authorities, and overall conduct throughout the judicial process. Different forms of evidence such as direct testimony, written letters, and expert witness reports can also contribute to assessments. While some guidance exists for evaluating remorse in the criminal court system, judgments are inherently subjective, which can lead to errors. The interpretation of remorse, even when accompanied by contrition, can result in disproportionate penalties, particularly affecting autistic offenders whose expressions of remorse may be misinterpreted due to differences in outward behaviour.

Demeanour Evidence

Criminal justice is a complex process initiated by police investigations into the alleged offence/s where sufficient evidence is required to warrant charges against the accused (Director of Public Prosecutions, 2016) Once an individual is charged with a criminal offence, any conduct exhibited from the accused can be used as evidence in criminal proceedings (Judicial Commission of New South Wales, 2020). Post-offence conduct, which also includes demeanour evidence, can be used to infer guilt in cases where the accused pleads not guilty (*Jury Directions Act*, 2015 (Austl) s. 21). Additionally, the demeanour of offenders assists the judiciary in remorse evaluations for mitigation considerations in sentencing decisions (Rossmanith, 2015). Demeanour evidence can be recorded by criminal justice personnel such as arresting and investigative police, parole officers, and psychologists and/or psychiatrists (Director of Public Prosecutions, 2016).

Characteristics of autism may be inadvertently considered when collecting demeanour evidence (Allely, 2015; Hepworth, 2017). Specifically, differences in social communication could result in misconceptions about an accused's demeanour (Freckelton, 2011; Grant et al., 2018). Negative evaluations could be made about the person's mental state and moral qualities due to limited knowledge about autism (Berryessa, 2014; Cea, 2014; Freckelton, 2013; Freckelton & List, 2009; Gardner et al., 2019; Maras et al., 2017). This is particularly important when demeanour evidence is used to evaluate remorse in the decision making of the judiciary where remorse is written into Australian sentencing legislation. For example, in

s. 5 of the *Sentencing Act* 1991(Vic), "In sentencing an offender a court may have regard to the conduct of the offender on or in connection with the trial or hearing as an indication of remorse or lack of remorse on his or her part".

Remorse Identification

Remorse is defined as a feeling of guilt and regret about something one has done (Cambridge Dictionary, 2024), often expressed through nonverbal behaviour such as facial expressions, body language, and voice tone. Unlike apologies, which focus on spoken words, remorse demands attention to the feelings being conveyed (Weisman, 2004). Nonverbal cues are crucial for determining the emotional state of others, allowing people to predict their thoughts and actions (Castillo & Mallard, 2012; Freeman et al., 2012; Frith, 2009). These cues include facial expressions, body language, voice tone, eye gaze, and hand gestures (DePaulo et al., 2003; Hostetter, 2011). Visual and auditory expressions can provide information on emotional states, allowing people to quickly infer probable intentions and behaviour (Barrett et al., 2007; Gendron et al., 2013; Juslin & Scherer, 2005). The integration of cues from different behavioural modalities is important for affect recognition, and conflicting cues can affect the recognition of emotions (Aviezer et al., 2012; Rajhans et al., 2016).

Currently, there is no legal consensus on how to identify remorse and limited empirical evidence to provide guidance on the specific physical expressions or physiological markers that indicate genuine remorse (Bandes, 2016; Proeve & Tudor, 2010). Despite this, many believe that remorse is conveyed through nonverbal cues such as gestures, facial expressions, and other paralinguistic cues (MacLin et al., 2009; Rossmanith et al., 2018; Weisman, 2014; Zhong et al., 2014). Remorse is often characterised as a 'sad demeanour' that includes facial expressions, body language, and gaze, but the specifics within these categories are inconsistent among different observers including judges (Rossmanith, 2015; Sundby, 1998; Zhong et al., 2014).

Distinguishing genuine from fabricated expressions of remorse has received little attention in empirical research. Ten Brinke et al. (2012) studied behavioural indicators using video recordings of personal transgressions, comparing genuine and falsified remorse. Individuals displaying falsified remorse showed a wider range of emotional expressions than those with genuine remorse. However, most body and verbal behaviours did not exhibit significant differences. Another study looked at differences in self-referencing (I, me, and my) between genuine and fabricated remorse in type written statements (Moberley & Villar, 2015). Selfreferences were higher in genuine remorse statements compared to fabricated remorse statements. Similar to deceptive studies (Hancock et al., 2007; Newman et al., 2003), it is thought that the lack of the actual experience or in effort to distance the self from the deceptive communication explains the reduction in self-referencing.

Ruback and Hopper (1986) conducted a study on parole board members' judgements before and after interviewing offenders. Board members had access to the offender's file containing relevant information for determining their release before the interview and rated the offender's attitude and level of remorse during the interview. The study found that board members' judgments became less accurate in predicting the offender's success upon subsequent release after the face-toface interview. This led to the release of high-risk offenders more often. Similar findings were revealed in a study on the release probability of offenders with different levels of psychopathy (Porter et al., 2009). Psychopathic offenders, known for their charm and manipulation (ten Brinke et al., 2017), were 2.5 times more likely to receive conditional release than non-psychopaths.

These studies prove the beneficial effects of complying to 'display rules' which refer to social guidelines that dictate contextual emotional expressions (Begeer et al., 2011). In certain situations, it's necessary to exert calculated control over emotional presentation, even if it doesn't match one's internal emotional state (Zeman & Garber, 1996). In the criminal courtroom, displaying remorse is recommended as it conforms to social guidelines and can positively impact sentencing, regardless of whether it reflects the offender's true emotional state. A remorseful presentation is the offender's best defence when a judge is evaluating their individual case according to the purposes and principles of sentencing.

To receive the minimum sentence, offenders are motivated to appear genuinely remorseful. However, given the associated display rules and the difficulty in identifying genuine remorse, most motivated individuals should successfully convey a sense of remorse regardless of its authenticity, which has led to ongoing controversy over whether assessments of remorse should remain or be eliminated in sentencing decisions. Despite the complexity of genuine remorse identification and limited supporting evidence for its relevance in criminal justice determinations, it remains an influential component in sentencing decisions.

Evaluations of Autism Characteristics

Autism can have a wide range of effects on daily functioning, from mild to profound, and is categorised by levels of required support (Gardner et al., 2018). See Table 1. Individuals experiencing autism may also have intellectual disabilities, defined by an IQ below 70, which can exacerbate the symptoms of autism increasing required support, making their presentation more noticeable to others (Eaves & Ho, 1996; Waterhouse et al., 1996).

Identifying autism in individuals without intellectual disability and lower support needs (high functioning) is challenging since they typically do not have physical presentations which differentiate them from individuals without autism (Pearce & Berney, 2016). Instead, autism is manifested in the way these individuals communicate and interact with others, leading to behaviours that deviate from social norms. Unfortunately, some people may misinterpret these behaviours as the person's innate negative personality or (im)moral character. Such misinterpretations can lead to unfavourable character judgments and a lack of understanding regarding this presentation (Han et al., 2022).

Table 1. Severity level for autism by social communication and restricted interests and repetitivebehaviours categories

	Diagnostic Features	
Level Definition	Social Communication	Restricted Interests and Repetitive Behaviours
3: Requiring very substantial support (high)	Severe deficits in verbal and nonverbal social communication skills cause severe impairments in functioning, very limited initiation of social interactions, and minimal response to social overtures from others. For example, a person with few words of intelligible speech who rarely initiates interaction and, when he or she does, makes unusual approaches to meet needs only and responds to only very direct social approaches.	Inflexibility of behaviour, extreme difficulty coping with change, or other restricted/repetitive behaviors markedly interfere with functioning in all spheres. Great distress/difficulty changing focus or action.
2. Requiring substantial support (moderate)	Marked deficits in verbal and nonverbal social communication skills; social impairments apparent even with supports in place; limited initiation of social interactions; and reduced or abnormal responses to social overtures from others. For example, a person who speaks simple sentences, whose interaction is limited to narrow special interests, and who has markedly odd nonverbal communication.	Inflexibility of behaviour, difficulty coping with change, or other restricted/repetitive behaviours appear frequently enough to be obvious to the casual observer and interfere with functioning in a variety of contexts. Distress and/or difficulty changing focus or action.
1. Requiring support (low)	Without supports in place, deficits in social communication cause noticeable impairments. Difficulty initiating social interactions, and clear examples of atypical or unsuccessful responses to social overtures of others. May appear to have decreased interest in social interactions. For example, a person who is able to speak in full sentences and engages in communication but whose to- and-fro conversation with others fails, and whose attempts to make friends are odd and typically unsuccessful.	Inflexibility of behaviour causes significant interference with functioning in one or more contexts. Difficulty switching between activities. Problems of organisation and planning hamper independence.

Source: Diagnostic and Statistical Manual of Mental Disorders 5th Edition, Text Revision (2022)

Offenders presenting with autism may face additional difficulties when the judiciary look for signs of remorse. The core features of autism, such as social-emotional reciprocity and nonverbal communication (APA, 2022), can put this population at a disadvantage when navigating the complexities of the criminal justice process. From initial interactions with the police to prosecution in court, there are numerous opportunities for their characteristic behaviour to be misunderstood and judged harshly. For instance, limited facial expressions and body language typical to autism (Browning & Caulfield, 2011), may appear as indifference in court. Additionally, the tendency to engage in monologues and have difficulties with discourse management may be perceived as egotistical and disrespectful (Boutot et al., 2016; Colle et al., 2008). Non-conforming communicative behaviours such as gaze aversion, monotone or loud speech, and minimal use of gestures may deviate from social norms (Paul & Fahim, 2014; Tager-Flusberg et al., 2005), potentially leading a judge to make a negative assumption about the offender's identity and take it into account during sentencing.

Decades of research indicate that personal characteristics are inferred quickly and with little information, primarily based on expressive behaviour (Allport, 1961; Carlston & Skowronski, 2005; Fletcher-Watson et al., 2008; Schneider et al., 1979). Negative impressions of an offender may lead judges to make negative character assessments, such as an absence of remorse. There is growing evidence that people presenting with autism are judged more negatively and perceived as more deceptive compared to individuals without autism (Heasman & Gillespie, 2018; Lim et al., 2022b; Stagg et al., 2014). The limited research on offenders presenting with autism suggest judges have limited understanding of the symptoms associated with the condition and find it difficult to apply psychiatric information to their decisions (Allely & Cooper, 2017). Barristers and solicitors report a lack of training regarding offenders and autism, and there are concerns about the court's lack of support for these individuals during the criminal court process (Maras et al., 2017). These findings increase the potential for misinterpretations and negative inferences by legal decision makers. Experimental research has shown that characteristics common to autism displayed by an accused have decreased perceptions of remorse, increased perceptions of guilt, and attracted longer sentences imposed by mock jurors (Berryessa et al., 2015; Maras et al., 2019). Moreover, negative impressions of autism are made even when diagnostic information is available (Maras et al., 2019; Sasson et al., 2017).

Autism and Impression Management

Impression management (or self-presentation) concerns the ability to manipulate the impression made on others by regulating one's own behaviour (Leary, 1996; Levine & Feldman, 1997). Successful impression management requires determining the preferences of the other person or social environment (display rules) and possessing the motivation to engage in matching behaviours (Kuzmanovic et al., 2013; Leary et al., 1986). Difficulty understanding the mind of others is an area of study (i.e., Theory of Mind [ToM]), proposed to explain the social communication challenges associated with autism (Baron-Cohen et al., 1997; Happe, 1995). Furthermore, deficits in social motivation are also common in autism (Chevallier et al., 2012; Clements et al., 2018). Supporting evidence has shown that diagnosed individuals are less strategic in self-presentation compared to individuals without an autism diagnosis (Scheeren et al., 2016) and might not always instinctively consider what others think about them (Cage et al., 2013; Senju et al., 2009).

Persons with characteristics of autism may lack the motivation to modify their behaviour in front of a judge and/or fail to recognise a certain presentation is expected. For most serious criminal court proceedings, an accused will appoint a barrister to represent them in court (Craigie, 2005). The legal team may provide the accused with advice such as dressing appropriately, what to say, and how to behave in preparation for court appearances (Legal Aid Western Australia, 2018). Despite being coached to present a certain way, offenders may lack the social skills to effectively manage their self-presentation and behave in a way that was expected and coached (Scheeren et al., 2016; Scheeren et al., 2010).

Remorse Displays and Experiences in Autism

Consider the possibility that an individual's ability to present as remorseful may be impaired and lead to a misinterpretation of their emotional state. This impairment may result from differences in emotional processing and understanding that cause their expressions to deviate from the observer's expectations. Moreover, they may be unaware of how their presentation is perceived by others, making it difficult to ameliorate the situation. Such difficulties are commonly associated with autism, including impaired ToM, limited emotional processing and expressiveness, and difficulties with meta-perception (Baron-Cohen et al., 1997; Bolte et al., 2008; Sasson et al., 2018; Usher et al., 2018; Winkielman et al., 2009).

According to the 'weak central coherence' theory, individuals with autism may struggle to comprehend the larger context or meaning of a situation, leading to challenges with abstract reasoning and problem-solving, particularly in social situations. This difficulty in integrating emotional information across different contexts and levels of abstraction may lead to challenges in recognising and responding to emotional cues, empathy, and social communication (Happe, 1999). Consequently, these individuals may have difficulties forming a coherent narrative of their own experiences and recalling events over time. As a result, they may focus on the logical consequences of an action, rather than the emotional impact of the event, which can affect the level of remorse felt (and displayed) by an offender possessing these difficulties, depending on the details that led to the offence and the offence itself. Furthermore, their lack of emotional expression or understanding of the bigger picture could be misinterpreted by a judge as a lack of empathy or emotional connection.

A Case of Misunderstanding

Social norms determine communicative behaviours and their associated meanings, which can vary across cultures. For instance, while some cultures find it appropriate to make eye contact during social interactions, it is considered inappropriate in others (Kastanakis & Voyer, 2014). Similarly, while standing in close proximity during social interactions is the norm in some countries, western societies prefer interpersonal space (Knapp & Hall, 2010). These differences in normative behaviour can result in cross-cultural difficulties in accurately and efficiently determining the mental states of others, leading to unfavourable impressions (Adams et al., 2010; Perez-Zapata et al., 2016).

Neurodiverse interactions can lead to communication difficulties stemming from differing perspectives and experiences, which may contribute to misconceptions about individuals with autism. The 'double empathy problem' describes a disconnection between individuals with different norms and expectations of each other (Milton, 2012). According to the latest 'Autism in Australia' survey (AIHW, 2017), "understanding and being understood by others" is the greatest difficulty experienced by this population. Individuals without an autism diagnosis have been shown to experience difficulty interpreting the facial expressions (Brewer et al., 2016; Faso et al., 2015), and mental states (Edey et al., 2016; Sheppard et al., 2016) of individuals diagnosed with autism, and even feel less empathy towards them (Komeda, 2015). This lack of empathy may be due to different experiences of the world.

Accurately recognising others' mental and emotional states, like remorse, necessitates an understanding of their emotional expressions (Goldstein & Winner, 2012). This has implications not only for the social outcomes of individuals experiencing autism but also for the criminal justice system, as the internal affective states of these individuals could be misinterpreted by legal-decision makers and present negative consequences in this multifaceted process.

Remorse and Offence Type

Research on whether specific offences elicit varying expectations for remorse display from judges is limited. However, van Oorschot et al. (2017) argue that evaluations of remorse are often influenced by stereotyped perceptions of the offender based on the nature of the offence. This concept, termed a "typified whole-case narrative," refers to the patterned and normalised storytelling presented to judges (Tata, 1997). Such narratives shape how judges attribute responsibility for the offence, impacting the perceived significance of the offender's remorse.

For instance, van Oorschot et al. discuss the 'drug-addict' narrative, which often leads judges
to view remorse as inauthentic and apologies as strategic, given the offender's vulnerability to relapse. Similarly, the 'angry young male' narrative, typically associated with public assaults, may prompt judges to discount displays of remorse due to the involvement of multiple parties, which diffuses blame. These examples suggest that remorse can be undervalued based on the nature of the offence, but it is equally plausible that certain offences might prompt greater emphasis on remorse. Research supports the idea that the type of offence affects perceptions of remorse. For example, a study by Barnett and Feild (1978) indicated that an offender's perceived character significantly influenced sentencing in sexual assault cases, with perceptions of remorse negatively correlating with severity of penalty in these cases. Similarly, Kleinke et al. (1992) found a correlation between perceived remorse and sentence length in sexual assault cases. The harsher penalties for sexual assault offenders may reflect a broader societal view of these crimes as more dangerous and damaging, particularly due to the perceived high recidivism rates of sex offenders (Katz et al., 2020; Levenson et al., 2007). This contrasts with narratives surrounding drug addiction, where recidivism is seen as a vulnerability of the offender, potentially diminishing the perceived authenticity of remorse. Moreover, specific offences such as arson, assault, and sex-related offences are often linked to certain offender profiles, such as the 'dangerous criminal' or 'victimised individual' stereotypes (Ali, 2018; Allen et al., 2008; Mogavero, 2016). The judicial assessment of remorse may be further complicated when considering offenders with autism, as these individuals often face a form of "double jeopardy." Their unique neurological characteristics may increase vulnerability to committing certain offences while also influencing how their remorse is perceived in court. Thus, autism introduces an additional layer of complexity to the judicial evaluation process, as these offenders may be judged not only based on the nature of their offence but also on the stereotypical perceptions of their behaviour due to their autism.

Several studies show that factors such as mental health, addiction, age, and gender affect sentencing outcomes and perceptions of rehabilitation. For instance, Davidson and Rosky (2015) found that mental health issues and addiction influenced sentencing differently depending on the

offence. Offenders with mental health issues often received shorter sentences for manslaughter but longer sentences for murder and sexual assault, while drug addiction resulted in harsher sentences for certain offences. This suggests that mental health and addiction status can complicate the assessment of remorse, as judges may view these factors as mitigating or aggravating depending on the offence.

The role of perceived character is also crucial in how remorse is evaluated. Research by Silver and Berryessa (2023) explored how verbal expressions of remorse influenced perceptions of an offender's moral character, particularly in assault cases. Their study found that remorseful presentations enhanced an offender's perceived moral character, which in turn influenced sentencing preferences. Offenders perceived negatively were more likely to receive severe sentences, even when their perceived character did not directly reflect the immorality of the offence.

In summary, judicial assessments of remorse are influenced by both the offence and the offender's perceived characteristics. Stereotypical narratives, such as those surrounding addiction or anger, can lead judges to undervalue remorse, while certain offences, such as sexual assault, may amplify its perceived importance due to the perceived threat posed by the offender. When considering offenders with autism, the complexity of these dynamics increases, as their neurological characteristics may interact with these narratives to further shape how remorse is evaluated. Consequently, it is critical to examine both the offence type and the individual characteristics of the offender to fully understand how remorse factors into judicial decision-making.

Summary

This introduction established a foundation for the thesis by thoroughly exploring how judicial discretion, subjectivity, and various factors, including autism, impact sentencing in Australia. It examined the complexity of judges' decision-making and the specific sentencing purposes involved when addressing offenders with mental impairments. Additionally, it discussed how a diagnosis of autism can act as either a mitigating or aggravating factor, influencing assessments of moral culpability, rehabilitation potential, and an offender's ability to cope with the prison environment.

The concept of remorse was defined and analysed, with various indicators for evaluating offender remorse identified, such as guilty pleas, cooperation with law enforcement, expert testimony, and the offender's overall conduct. Additionally, this chapter explored how remorse is evaluated within social contexts and how assessments of individuals with autism might affect sentencing outcomes.

Social theories related to autism and common characteristics were examined, considering their influence on how remorse is experienced, expressed and perceived within this population. Finally, this chapter highlighted the potential interactions between offence type, perceived dangerousness, moral character, remorse, and diagnosis, which may collectively shape the severity of sentences.

The following chapter presents a comprehensive analysis of the social interaction challenges faced by autistic individuals through a systematic review and meta-analysis. It specifically examines how misconceptions about their appearance and behaviour affect their acceptance in high-stakes environments, such as the criminal justice system. This study highlights the detrimental impact of these misconceptions on impression formation, social context, and the consequences of diagnostic disclosure.

CHAPTER 2: Impressions of Autism

Limited research exists on how defendants with autism are perceived in criminal judicial settings. For instance, Allely and Cooper (2017) conducted the only systematic review on the topic available at the start of this project, which included just four studies. As a result, the present systematic review and meta-analysis aimed to adopt a broader approach in evaluating impressions of individuals on the autism spectrum. This involved exploring various social situations and contributing factors that may enhance or diminish negative impressions. To achieve these objectives, I developed the following four research questions:

How do perceptions differ between individuals with and without an autism diagnosis?

Contributing factors of impression formation during social interaction overlap with behaviours that distinguish those on the autism spectrum as defined by diagnostic criteria such as differences in verbal and nonverbal communicative behaviours (APA, 2022).

Distinctions of social presentation among the autism population can be found in facial expressions (Faso et al., 2015; Grossman et al., 2013), use of gestures (de Marchena & Eigsti, 2010) and vocal prosody (Peppé et al., 2011). Considering the expressive behavioural differences in autism, the expectation and comprehension of social behaviour are likely to be contributing factors to the misinterpretation of individuals experiencing autism where negative impressions are potentially consequential such as in criminal justice environments. The primary aim of the present study is to determine if, and to what degree, individuals diagnosed with autism are judged more negatively by unaware perceivers compared to individuals who don't identify with autism. Furthermore, the mechanisms behind these judgments, such as misinterpretations of social behaviour, will be investigated.

Do perceptions of individuals with autism change for those who also have autism?

Research increasingly indicates that social interactions involving individuals with autism are influenced by both parties, leading to a bidirectional impairment in communication (Alkhaldi et al., 2019; Milton, 2012; Morrison et al., 2019). The 'double empathy problem' suggests that neurodiverse individuals may experience a "mismatch of salience" similar to cross-cultural

exchanges (Adler, 2003; Milton, 2012). While Theory of Mind (ToM) deficits are often associated with autism, perceivers may also struggle to interpret atypical behaviors, especially when these behaviors do not align with conventional social norms (Baron-Cohen et al., 1997; Happe, 1995).

Studies show mixed results regarding these dynamics. For example, Edey et al. (2016) demonstrated that neurodiverse participants have distinct kinematic communication patterns, with non-autistic individuals being better at interpreting the mental states of non-autistic animations than those of autistic animations. Furthermore, Grossman et al. (2019) found that both autistic and non-autistic peers rated autistic individuals less favorably in social evaluations, underscoring a potential bias against those with autism in social contexts.

In criminal court proceedings, these biases can have significant consequences. Misinterpretations of behaviour or social cues may lead to unfavourable perceptions of defendants with autism, potentially affecting judges' decisions and sentencing. Understanding whether perceptions differ based on the perceiver's own neurodiversity is crucial, as it may inform strategies to ensure fair treatment of autistic offenders within the judicial system.

Do impressions of individuals on the autism spectrum change based on social context?

Public settings, such as courts, significantly shape the impressions people form, often due to limited self-disclosure during initial encounters. Research shows that interactional environments influence emotional and behavioural responses (Cherulnik & Bayless, 1986; Smith-Lovin, 1979). For instance, courtroom behaviour tends to be formal and restrained, while university study sessions encourage more collaborative and open interactions.

The consequences of misperceptions in these contexts can be severe. Ineffective communication can lead to reduced employment opportunities (Berney, 2004), negative peer attitudes can affect academic performance (Nevill & White, 2011), and individuals who fail to convey credibility in court risk devastating outcomes (Berryessa, 2016; Lim et al., 2022a). Evidence shows that social behavior and the expectations of others vary by environment (Bargh et al., 2002; Gawronski et al., 2016).

Alkhaldi et al. (2019) explored how social settings influence perceptions of individuals with autism. Their study revealed that diagnosed individuals were generally viewed less favourably unless the perceiver was unaware of the context, suggesting that situational knowledge affects impressions. When perceivers were informed about specific scenarios, non-diagnosed individuals received more favourable ratings, indicating that situational understanding can mitigate negative biases.

Given that misunderstandings of social behaviour may contribute to unfavourable impressions of those with autism, this review will examine how environmental factors mediate these perceptions. Understanding how individuals on the autism spectrum are socially assessed in various contexts, particularly in high-stakes environments like courtrooms, is crucial for ensuring fair treatment and preventing misjudgments.

Does knowledge of a diagnosis lead to more favourable impressions?

The discounting principle suggests that diagnostic labels can mitigate negative evaluations and emotional responses to inappropriate behaviour (Kelley, 1971). Research supports this, indicating that the presence of a diagnosis reduces negative outcomes for individuals (Gillespie-Lynch et al., 2015; Matthews et al., 2015; Sasson & Morrison, 2019). A systematic review of vignette-based studies further validated these findings (O'Connor et al., 2020). However, a recent scoping review focusing on autism revealed that, despite potential benefits, diagnosed individuals often encounter stigma and negative situations when their diagnosis is disclosed (Thompson-Hodgetts et al., 2020).

For autistic defendants in criminal court settings, these dynamics are particularly critical. While knowledge of their diagnosis could potentially lead to more empathetic treatment by jurors or judges, the stigma associated with autism may overshadow these benefits, leading to harsher evaluations and outcomes. Understanding how diagnostic disclosure interacts with social context and perceiver biases is essential for ensuring that autistic individuals receive fair treatment within the judicial system.

Presentation Modalities

Experimental methods utilise various stimuli, such as text, images, and audio/visual recordings, to analyse human behaviour. However, relying solely on linguistic approaches may overlook the nuanced information conveyed through multisensory applications (Couch, 1986; Thompson et al., 1974). Research indicates that physiological responses differ between visual and text stimuli (Ambach et al., 2012), and the type of stimulus can shape the information used to form impressions (Rashotte, 2003). Additionally, different perceiver groups, such as by sex or age, may respond differently to the same stimuli (Otto, 1962; Rashotte, 2003).

In this review, I anticipate that various presentation modalities (e.g., auditory only, visual and audio) will be examined in the included studies. These modalities have significant implications for real-life scenarios and can help identify factors that may reduce misconceptions and negative evaluations of individuals on the autism spectrum. For instance, Sasson et al., (2017) found that diagnosed individuals received less favourable ratings than non-diagnosed individuals across multiple modalities (audio-visual, audio-only, silent video, static image) from mock auditions for a reality game show. Notably, transcripts of speech did not show significant differences, suggesting that it is the nuances in visual and auditory presentation, rather than content alone, that drive negative evaluations.

These findings imply that written communication may be more beneficial for individuals on the autism spectrum in high-stakes environments, such as the legal system, where negative impressions can have serious consequences. This review will explore various presentation modalities and their implications in social contexts, particularly for autistic individuals.

Trends in Impressions and Perceptions of Autism

Perceptions and understanding of autism have evolved significantly, with diagnostic criteria expanding to include a broader range of symptoms, behaviours, and abilities. This shift has fostered greater recognition of the unique strengths and talents of individuals on the autism spectrum (Happé & Frith, 2020). Social media and entertainment platforms have also raised awareness about autism's

diversity (Beykikhoshk et al., 2015; Kollia et al., 2017) while government initiatives have increased support and resources, contributing to positive changes in societal attitudes (Dillenburger et al., 2017).

However, not all individuals with autism choose to disclose their diagnosis, and many may remain unaware of how similar challenges affect their lives, leading to delayed diagnoses and support (Belcher et al., 2022; Gesi et al., 2021). Importantly, not all defendants with autism will have received a diagnosis prior to their court appearance, as diagnosis often occurs retrospectively. This is especially significant in criminal court contexts, where understanding an individual's neurodiversity can impact perceptions and outcomes.

Therefore, this study will examine trends in impressions of individuals with undisclosed autism.

Participant Level Co-variates

The formation of impressions can be influenced by participant-level covariates such as age and sex, reflecting differences in attitudes, behaviours, and preferences. Research indicates that older adults tend to exhibit a more positive bias than younger adults when viewing various stimuli, including faces and scenery (Mather & Carstensen, 2005; Mather & Knight, 2005). Additionally, females generally demonstrate greater sensitivity and accuracy in interpreting emotions (Montague et al., 2005), and personality traits (Carney et al., 2007). Notably, studies have found sex differences in the effectiveness of various stimulus types; for example, females are more accurate with video and audio stimuli, while males show no significant difference in response (Murphy et al., 2003).

In the context of the criminal justice system, these participant-level covariates can significantly affect how defendants, particularly those with autism, are perceived by jurors and judges. Understanding how age and sex influence impression formation is crucial, as biased perceptions can impact verdicts and sentencing outcomes. Therefore, the present study will account for age and sex-related effects in the analyses to better understand their implications in legal settings.

Method

Search Strategy

A protocol was developed following the preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) to ensure transparency, accountability, and consistency (Moher et al., 2015). See Appendix B. The research questions and study selection criteria were developed using the SPICE framework (Table 2), which is specifically suited for the social sciences (Booth, 2006). The following 7 health and multi-disciplinary databases were targeted for the search: MEDLINE, PsycINFO, Web of Science, ProQuest, CINAHL, Scopus, and PubMed. The initial searches were conducted on 16th and 17th September (2020) with a final search conducted on February 14th (2023) to identify any new studies before the data synthesis and meta-analysis.²

The main search was conducted in MEDLINE using concepts and keywords derived from the SPICE categories. Thesaurus hierarchies were explored to find associated key terms. The final search terms used for all other databases from September 16th to 17th, 2020, were: (Autism* or ASD or Autistic* or Asperger*) AND (behavio* or communicat* or characteristic* or presentation or manifest*) AND (attitude* or perception* or person perception or impression* or judgment* or view* or opinion*) AND (health knowledge or diagnostic information or knowledge or inform* or label*) AND (interpersonal relations or social interaction or social partner or social* or interaction*)

² The time lapse between searches was due to a period of personal and maternity leave.

SPICE catego	ries	Definition			
		Studies that represent any form of social			
Sattings	Social acting lintanation	interaction which includes the presentation of			
Settings:	Social setting/interaction	autistic person/s (e.g., professional, educational,			
		legal)			
Paranaativa	Sacial partners/paracivers	Social partners/perceivers of autistic			
reispective.	Social partiters/percervers	presentations in western societies			
		Autistic presentation (written descriptions/visual			
Intervention	Autistic prosontation	representations/interactions with diagnosed			
	Autistic presentation	autistic individual/s) with/without diagnostic			
		information			
<u> </u>	Non-autistic individuals	Non-autistic individuals and/or diagnostic label			
Comparison.	and/or diagnostic information	and/or diagnostic information			
		Impressions/perceptions and/or any type of			
Evaluation:	Impressions	social outcomes (influenced by the impression)			
		of the perceiver (e.g., legal, relationships etc.)			
		Quantitative studies			
Additional inc	lusion criteria:	Peer-reviewed journal articles			
		English			
		Autism, ASD, Autistic, Asperger's, behavio#r,			
		communication, characteristic, presentation,			
Keywords:		manifest, attitude, perception, person perception,			
		impression, judgment, views, opinion, diagnostic			
		information, diagnostic disclosure, labels			

 Table 2. Inclusion criteria for eligibility of studies using SPICE categories

Inclusion and Exclusion Criteria

Studies were eligible for inclusion if they (1) met all the SPICE categories, (2) used quantitative data, (3) were peer-reviewed journal articles, and (4) written in English. The SPICE framework draws upon the PICO design for the study of epidemiology (Population, Intervention, Outcomes, Comparison), which encourages researchers to analyse these four common components within their research question. SPICE categories were developed to suit the social sciences which split the population component into setting (where) and perspective (for whom) (Booth & Brice, 2004). Furthermore, the 'outcomes' category was changed to 'evaluation' to include other which are less tangible (Booth, 2006).

The 'Setting' was defined by any form of social interaction that included the presence of autism-diagnosed and non-diagnosed target groups for comparison. These were defined across four social domains which included General, Education, Professional, and Legal. The 'General' category included studies that explored everyday scenarios involving generic social interactions and daily life activities; 'General' meaning there were no additional environmental social demand factors which would influence perceiver expectations of target behaviour. The 'Professional' category included studies that investigated perceptions of individuals within professional social contexts, such as employment hiring procedures. The 'Education' category encompassed studies that examined impressions formed in educational environments, such as collaboration on school or university projects with peers. Lastly, the legal context studies focused on impressions made in the forensic domain, such as police interviews, which were of particular interest to my thesis.

The 'Perspective' category included the perceivers of the presentation of comparison groups in the social interaction setting. This could include both the social partner of the target (through direct social interaction, e.g., face-to-face) or observing other forms of presentation modalities as defined in the 'Intervention' category.

'Intervention' was defined by modality type (stimulus) of the comparison groups (targets) presented to the evaluating participants (perceivers). Stimuli used within the studies could include

written descriptions (vignettes), visual representations (videos, images), or face-to-face interactions with the comparison groups. The stimulus could be accompanied with or without diagnostic information.

The primary purpose under 'Comparison' was to evaluate differences on the outcome measures against a non-diagnosed group (control group). The presence of diagnostic information was also of interest as a moderator which could be either in the form of diagnostic disclosure with or without further detail. The purpose was to discover and evaluate varying effects and the extent of additional information on impression ratings.

Evaluation included the terms impression and perception. Multiple terms exist in the study of impression formation such as person perception, implicit evaluations, and attitudes (Gawronski et al., 2016). Defined by Cambridge online dictionary (2024), impression is "an idea or opinion of what something or someone is like." Perceptions is defined by the "a thought, belief, or opinion, often held by many people and based on appearances" (Cambridge, 2024). As revealed in the search term discovery, these terms incorporate a variety of related concepts. For the purposes of this review, the outcomes included various terms within the concepts of impressions and perceptions which were a direct result from the comparison stimuli (autism-diagnosed and non-diagnosed) such as social favourability, attitudes, and judgements. Furthermore, outcomes measures could also include any social outcome that might be influenced by the impression such as readability and emotion recognition.

Design

A range of studies were suitable for inclusion such as cross-sectional, causal, and experimental designs which included within and between group conditions. Qualitative methods were excluded in the present analysis.

Additional Criteria

Perceivers were required to be from Western civilisations to minimise cultural influences that might be present, which was not a focus for this review and my thesis. Additionally, only peer reviewed journal articles published in English language were selected to reign in search outcomes due to the broad terms and descriptions required to return studies of interest.

Data Extraction

Data extraction was facilitated by using a data collection form which I adapted from the Cochrane Collaboration (Higgins et al., 2019). Authors were contacted via email with specific data requests if data were not available in the full text publication. When requests went unanswered, I extracted these data (M, SE) from the provided figures using an online graph reader tool (Graphreader, 2021). Where possible, I extracted the raw scores (M, SD) for individual impression measures. If individual items were not reported and authors did not respond to requests, I used the mean scores. Where effect size transformation was required, I used the methods explained in (Borenstein et al., 2021).

It was expected that multiple related concepts in the evaluation of social impressions were to emerge during data collection due to the broad range of terms developed in the search strategy. Four outcome themes were developed during this process which included the perceiver's *behavioural intentions* towards the target (e.g., I would hang out with this person), the *readability* of the target (e.g., emotion recognition), *discourse quality* of/with the target (e.g., ease of conversation, degree of engagement), and perceived *traits* of the target (e.g., awkward, attractive, intelligent). Individual items and overall mean scores within studies were allocated to the four outcome categories. In some cases, more than one outcome categories, I calculated the mean effect size by creating a total sum of the individual item's means and standard deviations, which was the method commonly employed by authors using the First Impressions Measure (Sasson et al., 2017). This measure includes two variables (behavioural intent and trait) and were used across several of the present review's included studies (e.g., Alkhaldi et al., 2019, Morrison et al., 2020; Scheerer et al., 2022). Items were reversed scored to align with majority of scales where higher scores indicated positive social evaluations (e.g., awkward, stubborn, social distance).

Methodological Quality

The methodological quality of included studies was assessed. Additionally, I conducted an overall assessment of the strength of the evidence and conclusions. Specifically, I utilised a checklist to assess the quality of survey studies in psychology (Q-SSP) to address the risk of bias in the included studies (Protogerou & Hagger, 2020). The Q-SSP consists of 20 questions designed to assess a study's quality across 4 different domains: Introduction (rationale, variables), Participants (sampling), Data (collection, analyses, measures, results, discussion), and Ethics (Appendix C). Dichotomous choice (yes/no) answers produce individual domain scores and an overall quality score by dividing the 'yes' answers by the total number of applicable items. Three of the 20 questions have a 'not applicable' option due to possible variations between studies (e.g., method for treating attrition only applies to prospective studies). A study's quality is deemed questionable if it fails to attain 5 items with a 'yes' score. Depending on the number of applicable items, the minimum percentage score can range from 70-75% for the study to be considered as having acceptable quality.

Publication bias or reporting bias refers to absence of information caused by either nonpublication of entire studies (missing studies), or selective outcome reporting in published studies based on their results (missing outcomes). The latter problem is also called outcome reporting bias. Studies that report a statistically significant result are more likely to be published, and published sooner, than studies that do not show a statistically significant result. Similarly, selective outcome reporting frequently occurs, which is biased and usually inconsistent with study protocols (Van Aert et al., 2019). Publication bias was assessed using funnel plot, Egger's regression test (Egger et al., 1997) and Kendall's rank correlation test (Kendall, 1938). Inconsistency was assessed via assessment of heterogeneity and overall direction and magnitude of effect, and imprecision was assessed via assessment of effect size, confidence intervals and overall number of participants contributing to the analyses.

Registration of Protocol

The review protocol was registered and published in the public domain (PROSPERO Registration CRD42020207509) before searches, data extraction and analysis were conducted.

Data Synthesis and Analysis

For each of the studies, a Cohen's d (d) effect size for the difference in impressions for autistic and non-autistic targets was computed. Data conversion was conducted in accordance with guidelines (Borenstein, 2009). Meta-analysis was conducted using JASP software, version 0.17.2.1 (JASP Team, 2023). The Hedges method, commonly used with the random effects model, was used to calculate the standardised effect size (g), which corrects for bias considering the sample sizes of the individual studies and provides a more accurate estimate of the population effect size (Borenstein, 2009).

Results

A comprehensive search across all seven databases yielded the following results: MEDLINE (N = 7,469), PsycINFO (N = 10,541), Web of Science (N = 3,339), ProQuest (N = 10,541)

3,612), CINAHL (N = 857), Scopus (N = 123), and PubMed (N = 77). After screening and full-text review for both searches, 47 studies met inclusion criteria. As shown in Figure 1, excluded studies were due to incorrect study design, inappropriate outcomes, or failure to remove duplicates.

Due to differing inclusion criteria regarding the presence or absence of diagnostic information in the SPICE intervention category, many of the studies could not be used for comparison purposes e.g., a study's comparison group included the presence/absence of a diagnostic label for an autistic target stimulus without a non-autistic target comparison group which was the primary focus of the present review. Therefore, I divided the studies into two separate reviews and meta-analyses. In the present review (n = 30), I will compare perceivers' impressions of autistic and non-autistic targets, which may or may not have the presence of diagnostic labels/information. See Table 3 for study characteristics and Appendix D for study measure properties. The second review (n = 25) not included in this thesis will focus on the effects of autism diagnostic labels/information on impressions, without requiring a comparison between autistic and non-autistic targets. Six studies fell into both categories and were included in both reviews. However, the data extraction and analysis methods differed across reviews.



Figure 1. PRISMA flow chart of screening and full-text review results

Study ID	Country	Social context	Stimulus Setting	Stimulus Type	Outcome	Category/s
<u>Alkhaldi 2019a</u>	United Kingdom	General	Interacting socially with experimenter	Silent video	Social Favourability Scale (adapted from Sasson et al., 2017)	Trait Behavioural Intent
<u>Alkhaldi 2019b</u>	United Kingdom	General	Interacting socially with experimenter	Silent video	Social Favourability Scale (adapted from Sasson et al., 2017)	Trait Behavioural Intent
<u>Alkhaldi 2021</u>	United Kingdom	General	Interacting socially with experimenter	Silent video	Social Favourability Scale (adapted from Sasson et al., 2017)	Trait Behavioural Intent
<u>Aube 2021</u>	France	General	Daily life situations	Still image	Explicit Stigma Measure	Behavioural Intent
Brewer 2016	United Kingdom	General	Still Images	Still image	Emotion Recognition	Readability
Butler 2011	United States	Education	Student peer	Vignette	Social Distance	Behavioural Intent
<u>Cage 2019</u>	United Kingdom	Professional	Mock job interview	Audio-visual video Transcript	First Impression Scale (adapted from Sasson et al., 2017)	Trait Behavioural Intent
<u>Cola 2020</u>	United States	General	Natural conversations	Live social interaction	Conversation Rating Scale	Discourse Quality
<u>de Boer 2016</u>	Netherlands	Education	Student peer	Vignette	Peer Acceptance/Rejection Measure Attitude Survey	Behavioural Intent
Debrabander 2019	United States	General	Audition	Audio-visual video	First Impression Scale (adapted from Sasson et al., 2017)	Trait Behavioural Intent
Dickter 2021	United States	Professional	Mock job interview	Vignette	Contact	Behavioural Intent
Geelhand 2021	Belgium	General	Speech	Audio	Social Discourse Rating Scale	Discourse Quality
<u>Gillespie-Lynch</u> <u>2021</u>	United States	Education	Student peer	Vignette	Social Distance	Behavioural Intent
Grossman 2015	United States	General	Telling stories	Audio-visual video Silent video Audio Still Image	Socially Awkward Ratings	Trait
Grossman 2019	United States	General	Telling stories	Audio-visual video	First Impressions Scale (adapted from Sasson et al., 2017)	Trait Behavioural Intent
Hubbard 2017	United States	General	Speech	Audio	Emotion Identification	Readability

Table 3. Continued

<u>Lim 2021</u>	Australia	Legal	Police interview	Audio-visual video	Perceived Deception and Credibility	Trait
<u>Maras 2019</u>	United Kingdom	Legal	Police interview	Audio-visual video	Credibility	Trait
<u>McMahon 2020</u>	United States	Professional	Mock job interview	Vignette	Hiring Recommendation Work Performance Ten Item Personality Inventory	Trait Behavioural Intent
Morrison 2020	United States	General	Natural conversations	Live social interaction	First Impressions Scale (adapted from Sasson et al., 2017)	Trait Behavioural Intent
Sasson 2017a	United States	General	Audition	Audio-visual video Silent video Audio Still image Transcript	First Impressions Scale	Trait Behavioural Intent
Sasson 2017b	United States	General	Still Images	Still image	First Impression Judgments (modified from Sasson 2017a)	Trait Behavioural Intent
Sasson 2017c	United States	General	Telling stories	Audio-visual video	First Impressions Scale (modified from Sasson 2017a)	Behavioural Intent
Sasson 2019	United States	General	Audition	Audio-visual video	First Impressions Scale (adapted from Sasson et al., 2017)	Trait Behavioural Intent
Sasson 2018	United States	General	Audition	Audio-visual video	Personality Item Scale	Trait Behavioural Intent
Scheerer 2022	Canada	General	Audition	Audio-visual video	First Impressions Scale (adapted from Sasson et al., 2017)	Trait Behavioural Intent
Smerbeck 2015	United States	General	Speech	Audio	Attributes	Trait
<u>Stagg 2014</u>	United Kingdom	General	Daily life situations	Silent video	Social Perception	Trait Behavioural Intent
Stockwell 2021	United States	Education	Student peer	Vignette	Social Distance Scale	Behavioural Intent
<u>Usher 2018</u>	United States	General	Natural conversations	Live social interaction	Perceptions Scale Observed Social Competence	Trait Discourse Quality

Participants

Across the 30 studies, there were 704 stimulus participants (targets) which included 350 autistic (male = 92.07%) and 354 non-autistic individuals (male = 82.65%)³. Some targets were used across multiple studies as italicised in Table 4 (Alkhaldi et al., 2021; Debrabander et al., 2019; Grossman et al., 2019; Sasson et al., 2017; Sasson & Morison, 2019; Sasson et al., 2018; Scheerer et al., 2022). Rating participants (perceivers, n = 5,321) were 186 autistic (male = 97.31%) and 2,153 non-autistic individuals (male = 40.46%)⁴ aged between 6 and 60 years. Both target and perceivers' ages were categorised for comparison purposes. The categories consisted of Child (< 9 years), Adolescent (9-12 years), Teenager (13-16 years), Young adult (17-25 years), Adult (26-40 years), Older Adult (> 40 years).

Participants were recruited mostly from educational establishments such as schools, colleges and universities across Australia, Belgium, Canada, France, United Kingdom, and United States. Autistic participants were additionally recruited from autism specialist schools, support groups and societies. All autistic participants' diagnoses were verified by assessment conducted by professionals which were described in various ways (e.g., mental health professional, clinician, certified clinician) and most studies confirmed the use of the Autism Diagnostic Observation Schedule (ADOS or ADOS-II) (Hus & Lord, 2014; Lord et al., 2000) and /or DSM-IV criteria (American Psychiatric Association, 2013). Additional measures were included in some studies such as the Autism Quotient (AQ) (Baron-Cohen et al., 2001a) and the Ritvo Autism Asperger Diagnostic Scale (RAADS/-R) (Ritvo et al., 2011; Ritvo et al., 2008), which were completed by non-autistic target participants to confirm significant differences of autistic traits between groups. Intelligence was also measured for most targets where means for both autistic and non-autistic groups fell into the average intelligence range. The exception was Aubé et al. (2021) where the

³ Estimated based on information in the publications that indicated the same stimulus participants were used across multiple studies.

⁴ Some perceivers may have participated across multiple studies due to similar recruitment locations, strategies and authors found across publications.

autistic group also had an intellectual disability. See Table 5 for participant recruitment and diagnostic assessment information.

Study Quality

The assessment of study methodological quality is outlined in Table 6 and Table 7. The most prevalent weaknesses were related to not providing rationales for the sample size (e.g., power analysis), limited information on the validity of measures, dates/duration of data collection, and a lack of ethics information such as debrief procedures. Due to the number of applicable items in the Q-SSP (n = 17), the overall score was required to be above 70% to be considered acceptable quality. The average score was 77.7% across studies with 3 failing to reach acceptable quality (Butler & Gillis, 2011; Maras et al., 2019; Smerbeck, 2015) However, these studies remained in the analyses as each one varied in moderator categories and did not present any outliers. Average individual domain scores were highest for introduction rationales and variables (99.3%), followed by data (81.8%), ethics (60.9%), and participant information (54%).

Table 4. Participant Characteristics for Targets and Perceivers

Targets						Perceivers					
Study ID	Autistic (N)	Non-autistic (N)	Sex Autistic (Male N)	Sex Non-autistic (Male <i>N</i>)	Age Group	Autistic (N)	Non-autistic (N)	Sex Autistic (Male N)	Sex Non-autistic (Male N)	Age Group	
Alkhaldi 2019a	20	20	20	20	Young adult	×	31	×	10	Young adult	
Alkhaldi 2019b	20	20	20	20	Young adult	\times	30	\times	3	Young adult	
Alkhaldi 2021	20	20	20	20	Young adult	×	30	×	5	Young adult	
Aube 2021	3	3	1	1	Child	\times	137	\times	67	Child	
Brewer 2016	15	12	12	12	NA	15*	13	14	13	Adult Older adult*	
Butler 2011	X	×	×	×	×	×	181	×	35	Young adult	
Cage 2019	20	20	10	10	Young adult	×	205	×	38	Young adult	
<u>Cola 2020</u>	40	53	25	28	Adolescent	×	21	×	10	Young adult	
de Boer 2016	X	×	×	×	×	×	465	×	232	Teenager	
Debrabander 2019	20(5)	20	17	17	Young adult	32	32	27	27	Young adult	
Dickter 2021	\times	\times	\times	\times	\times	\times	107	\times	40	Young adult	
Geelhand 2021	6	3	6	3	Older Adult	18	18	10	8	Adult	
Gillespie-Lynch 2021	\times	\times	\times	\times	\times	\times	633	\times	272	Young adult	
Grossman 2015	9	10	9	8	Adolescent	×	87	\times	23	Young adult	
<u>Grossman 2019</u>	7	7	7	7	Adolescent	22	30	18	21	Teenager	
Hubbard 2017	15	15	15	15	Adult	22	30	20	10	Young adult	
<u>Lim 2021</u>	31	29	22	14	Adult	\times	1410	\times	705	Older adult	
<u>Maras 2019</u>	17	17	16	16	Older adult	\times	125	\times	23	Young adult	
McMahon 2020	\times	\times	\times	\times	\times	\times	166	\times	78	Older adult	
Morrison 2020	67	58	67	58	Young adult	67	58	67	58	Young adult	
Sasson 2017a	20	20	17	17	Young adult	\times	214	\times	50	Young adult	
Sasson 2017b	12	10	16	9	Young adult	\times	37	\times	19	Young adult	
Sasson 2017c	9	9	10	8	Adolescent	\times	98	\times	53	Adult	
Sasson 2018	11	11	8	8	Adult	\times	412	\times	118	Young adult	
Sasson 2019	20	20	17	17	Young adult	\times	215	\times	62	Young adult	
Scheerer 2022	20	20	17	17	Young adult	\times	151	\times	49	Young adult	
Smerbeck 2015	14	16	14	16	Child	\times	10	\times	5	NA	
<u>Stagg 2014</u> a	4	4	2	2	Adolescent	\times	25	\times	8	Adult	
Stagg 2014b	4	4	2	2	Adolescent	×	44	\times	20	Adolescent	
Stockwell 2021	×	\times	\times	\times	\times	\times	289	\times	74	Adult	
<u>Usher 2018</u>	25	17	25	17	Teenager	25	17	25	17	Teenager	

Study ID	Target Recruitment	Perceiver Recruitment	Assessment Tool	Clinician Type
Alkhaldi 2019a	Educational establishments	Participant recruitment system and advertisements at the University of Nottingham	DSM-IV	Mental health professional
Alkhaldi 2019b	Educational establishments	Participant recruitment system and advertisements at the University of Nottingham	DSM-IV	Mental health professional
Alkhaldi 2021	Educational establishments	Participant recruitment system and advertisements at the University of Nottingham	DSM-IV	Mental health professional
<u>Aube 2021</u>	French associations working with children with ASD	Five regular classrooms of an elementary school located in a French city	Not specified	Verified with the parents
Brewer 2016	Not specified	Not specified	ADOS	Participants reported diagnosis
Butler 2011	Vignette	Undergraduate students enrolled in psychology courses at Auburn University	NA	NA
Cage 2019	Previous contacts, online advertisements, and university student support services	Recruited from Royal Holloway, University of London, where they were approached on campus facilities, through word-of-mouth, or participated as first-year psychology students for course credit	RAADS-14	Participants reported diagnosis
<u>Cola 2020</u>	Public advertising, word of mouth, and re-recruiting from previous studies	Undergraduate students from Philadelphia area schools or BA-level research assistants	ADOS-2	Expert PhD-level clinicians
de Boer 2016	Vignette	Dutch general secondary schools	NA	NA
Debrabander 2019	University of Texas at Dallas and nonPareil Institute (post- secondary, not for profit serving adults with ASD)	Southern Methodist University	ADOS	Not specified
Dickter 2021	Vignette	Introduction to Psychology course at a mid-size, public university in the mid-Atlantic United States for academic credit	NA	NA
Geelhand 2021	Autism in Context: Theory and Experiment (ACTE) register of volunteers and word-of-mouth	Autism in Context: Theory and Experiment (ACTE) register of volunteers and word-of-mouth	ADOS-2	Accredited professional clinicians and neuropsychologists with a formal ADOS-2 accreditation
Gillespie-Lynch 2021	Vignette	Undergraduate students at two urban universities, a university with unselective admissions criteria in New York and a more selective university in Lebanon	NA	NA
Grossman 2015	Local schools, advertisements placed in local magazines, newspapers, the internet, advocacy groups for families of children with autism, and word of mouth	Word of mouth and advertisements posted on campus	ADOS	Direct assessment and expert opinion

 Table 5. Target and Perceiver Participant Recruitment Details and Diagnosis Assessment Administrators and Measures

Table 5. Contin	ued			
Grossman 2019	Authors state that the recruitment method was the same as Sasson 2017c.	Emerson College	ADOS-2	Administrators who achieved research reliability with a certified trainer
<u>Hubbard 2017</u>	University of Texas at Dallas (UTD), Behavioural and Brain Sciences undergraduate participant pool and Autism Research Collaborative (ARC).	University of Texas at Dallas (UTD), Behavioural and Brain Sciences undergraduate participant pool and Autism Research Collaborative (ARC).	DSM-5 ADOS-2	Certified clinicians
<u>Lim 2021</u>	Flinders University autism research lab database of individuals on the autism spectrum living in the local area. Advertisement at a local psychology practice that specialises in working with people on the autism spectrum. Non-autistic participants recruited from Flinders University	Amazon Mechanical Turk	Not specified	Registered diagnostician
<u>Maras 2019</u>	London and the Southeast of the UK from autism support	First year undergraduate psychology students	ADOS	Experienced clinicians with
	groups and societies, and from word of mouth.	Royal Holloway, University of London	DSM-IV	local health authorities
McMahon 2020	Vignette	Amazon M-Turk Criteria: United States >18 years	NA	NA
Morrison 2020	Not specified.	Not specified.	ADOS-2	Not specified
Sasson 2017a	University of Texas at Dallas and nonPareil Institute (post- secondary, not for profit serving adults with ASD).	University of Texas at Dallas	ADOS	Certified clinician
Sasson 2017b	Not specified	Indiana University	ADOS-2	Research reliable personnel
Sasson 2017c	Not specified	M-Turk	ADOS	Trained clinicians
Sasson 2018	University of Texas at Dallas and nonPareil Institute (post- secondary, not for profit serving adults with ASD).	University of Texas at Dallas	ADOS-2	Certified clinician
Sasson 2019	University of Texas at Dallas and nonPareil Institute (post- secondary, not for profit serving adults with ASD).	University of Texas at Dallas	ADOS-2	Certified clinician
Scheerer 2022	University of Texas at Dallas and nonPareil Institute (post- secondary, not for profit serving adults with ASD).	High school students volunteered to participate while visiting Simon Fraser University campus	ADOS	Not specified
Smerbeck 2015	Cognitive behavioural summer treatment program. Word-of-mouth and flyers distributed through local agencies.	Undergraduate and graduate students who volunteered to assist the primary investigator to obtain research experience.	Not specified	Records review by two licensed psychologists
<u>Stagg 2014</u> a	School for children with autism.	Surrey Education Authority Primary School	Not specified	Clinician
<u>Stagg 2014</u> b	School for children with autism.	Staff and students recruited from Royal Holloway, University of London	Not specified	Clinician
Stockwell 2021	Vignette	Undergraduates enrolled in psychology courses at large, mid-Atlantic university recruited through an online system	NA	NA
<u>Usher 2018</u>	Emails sent to families registered with the Center for Autism and Related Disabilities (CARD) at the University of Miami.	Registered families in the community, Miami- Dade County Public Schools system, community groups. Families who had previously participated in research at the University of Miami.	Community diagnosis ADOS-2 SCQ ASSQ	Not specified

Note. Social Communication Questionnaire (Berument et al., 1999). Autism Spectrum Screening Questionnaire (Ehlers et al., 1999)

Study		Introc	luction]	Participar	its					Da	nta						Ethics	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Alkhaldi 2019a	\sim	\sim	\sim	\sim	\sim	\checkmark	\times	NA	NA	\checkmark	\checkmark	\checkmark	NA	\checkmark	\checkmark	\checkmark	\times	\sim	×	\sim
<u>Alkhaldi 2019b</u>	\sim	\sim	\sim	\sim	\sim	\sim	×	NA	NA	\sim	\sim	\sim	NA	\sim	\sim	\sim	\times	\sim	\times	\sim
Alkhaldi 2021	\sim	\sim	\sim	\sim	\sim	\sim	\times	NA	NA	\sim	\sim	\times	NA	\sim	\times	\sim	\sim	\times	\times	\sim
<u>Aube 2021</u>	\sim	\sim	\sim	\sim	\sim	\sim	×	NA	NA	\sim	\sim	\sim	NA	\sim	\sim	\sim	\sim	\sim	\sim	\sim
Brewer 2016	\sim	\sim	\sim	\sim	\sim	×	\sim	NA	NA	\sim	\sim	\sim	NA	\sim	\sim	\sim	\sim	\sim	×	\sim
Butler 2011	\sim	\sim	\sim	\sim	\times	\sim	\times	NA	NA	\sim	\sim	\times	NA	\sim	\sim	\sim	\sim	\times	\times	\times
Cage 2019	\sim	\sim	\sim	\sim	\sim	\sim	×	NA	NA	\sim	\sim	\times	NA	\sim	\sim	\sim	\sim	\sim	\times	\sim
<u>Cola 2020</u>	\sim	\sim	\sim	\sim	\sim	\sim	\times	NA	NA	\sim	\sim	\times	NA	\sim	\sim	\sim	\sim	\sim	×	\sim
<u>de Boer 2016</u>	\sim	\sim	\sim	\sim	\times	\times	\times	NA	NA	\sim	\times	\sim	NA	\sim	\sim	\sim	\sim	\sim	\sim	\times
Debrabander 2019	\sim	\sim	\sim	\sim	\sim	\sim	×	NA	NA	\sim	\times	\sim	NA	\sim	\times	\sim	\sim	\sim	\times	\sim
Dickter 2021	\sim	\sim	\sim	\sim	\sim	\sim	\times	NA	NA	\sim	\sim	\times	NA	\sim	\times	\times	\sim	\sim	\sim	\times
Geelhand 2021	\sim	\sim	\sim	\sim	\sim	\sim	\sim	NA	NA	\sim	\sim	\sim	NA	\sim	\times	\sim	\sim	\sim	\times	\sim
Gillespie-Lynch 2021	\sim	\sim	\sim	\sim	\times	\sim	\sim	NA	NA	\sim	\sim	\sim	NA	\sim	\times	\sim	\sim	\sim	\times	\sim
Grossman 2015	\sim	\sim	\sim	\sim	\sim	\sim	×	NA	NA	\sim	\sim	\sim	NA	\sim	×	\sim	\sim	\times	×	\sim
Grossman 2019	\sim	\sim	\sim	\sim	\sim	\times	\times	NA	NA	\sim	\sim	\sim	NA	\sim	\times	\sim	\sim	\sim	\times	\sim
Hubbard 2017	\sim	\sim	\sim	\sim	\sim	\sim	\times	NA	NA	\sim	\sim	\times	NA	\sim	\sim	\sim	\sim	\sim	\times	\sim
<u>Lim 2021</u>	\sim	\sim	\sim	\sim	\sim	\sim	\sim	NA	NA	\sim	\sim	\sim	NA	\sim	\times	\sim	\sim	\sim	\sim	\sim
<u>Maras 2019</u>	\sim	\sim	\sim	\sim	\sim	\times	\sim	NA	NA	\sim	\sim	\times	NA	\sim	\times	\sim	\sim	\sim	\times	\sim
McMahon 2020	\sim	\sim	\sim	\sim	\sim	\sim	\times	NA	NA	\sim	\sim	\sim	NA	\sim	\times	\sim	\sim	\sim	\times	\sim
Morrison 2020	\checkmark	\checkmark	\checkmark	\checkmark	\sim	\checkmark	\checkmark	NA	NA	\checkmark	\checkmark	\checkmark	NA	\checkmark	\checkmark	\checkmark	\checkmark	\sim	×	\checkmark
Sasson 2017a	\sim	\sim	\sim	\sim	\times	\times	\sim	NA	NA	\sim	\sim	\times	NA	\sim	\times	\sim	\sim	\sim	\times	\sim
Sasson 2017b	\sim	\sim	\sim	\sim	\times	\times	\sim	NA	NA	\sim	\sim	\times	NA	\sim	\times	\sim	\sim	\sim	\times	\sim
Sasson 2017c	\checkmark	\checkmark	\checkmark	\checkmark	\times	×	\checkmark	NA	NA	\checkmark	\checkmark	×	NA	\checkmark	×	\checkmark	\checkmark	\sim	×	\sim
Sasson 2018	\sim	\sim	\sim	\sim	\sim	\sim	\times	NA	NA	\sim	\sim	\times	NA	\sim	\times	\sim	\sim	\sim	\times	\sim
Sasson 2019	\sim	\sim	\sim	\sim	\times	\times	\sim	NA	NA	\sim	\sim	\times	NA	\sim	\times	\sim	\sim	\sim	\times	\sim
Scheerer 2022	\checkmark	\checkmark	\checkmark	\checkmark	\sim	\sim	X	NA	NA	X	\checkmark	\checkmark	NA	\sim	\checkmark	\checkmark	\checkmark	\sim	×	\checkmark
Smerbeck 2015	\sim	\sim	\sim	\sim	\sim	\sim	×	NA	NA	×	\sim	\sim	NA	\sim	\times	\sim	\sim	\times	\times	X
Stagg 2014a	\sim	\sim	\sim	\sim	\sim	\sim	×	NA	NA	\sim	\sim	\sim	NA	\sim	\times	\sim	\sim	\sim	×	\sim
<u>Stagg 2014</u> b	\checkmark	\checkmark	\checkmark	\checkmark	\sim	\sim	×	NA	NA	\checkmark	\checkmark	\times	NA	\checkmark	\checkmark	\checkmark	\checkmark	\sim	\sim	\sim
Stockwell 2021	\sim	\sim	\sim	\sim	\sim	\sim	×	NA	NA	\sim	\sim	\sim	NA	\sim	\sim	\sim	\sim	\sim	×	\sim
Usher 2018	\sim	\sim	\sim	\sim	\sim	\sim	\times	NA	NA	\sim	\sim	\sim	NA	X	\sim	\sim	\sim	\sim	\sim	\times

Table 6. Quality Assessment Checklist for Survey Studies in Psychology (Q-SSP)

 \checkmark = Yes (item adequately addressed); \checkmark = No (item not adequately addressed); NA = Not applicable

Study	Introduction	Participants	Data	Ethics	Total
Alkhaldi 2019a	100	66.7	85.7	66.7	82.4
Alkhaldi 2019b	100	66.7	85.7	66.7	82.4
Alkhaldi 2021	100	33.3	71.4	33.3	70.6
<u>Aube 2021</u>	100	66.7	100	100	100
Brewer 2016	100	66.7	100	66.7	88.2
Butler 2011	100	33.3	85.7	0	64.7
Cage 2019	100	66.7	85.7	66.7	82.4
<u>Cola 2020</u>	100	66.7	85.7	66.7	82.4
<u>de Boer 2016</u>	100	0.0	85.7	66.7	70.6
Debrabander 2019	100	33.3	71.4	66.7	70.6
Dickter 2021	100	100	85.7	66.7	88.24
Geelhand 2021	100	66.7	57.1	66.7	70.6
Gillespie-Lynch 2021	100	66.7	85.7	66.7	82.4
Grossman 2015	100	66.7	85.7	33.3	76.5
Grossman 2019	100	33.3	85.7	66.7	76.5
Hubbard 2017	100	66.7	85.7	66.7	82.4
<u>Lim 2021</u>	100	66.7	85.7	100	88.2
<u>Maras 2019</u>	100	33.3	71.4	33.3	64.7
<u>McMahon 2020</u>	100	66.7	85.7	66.7	82.4
Morrison 2020	100	100.0	100	66.7	94.1
Sasson 2017a	100	33.3	71.4	66.7	70.6
Sasson 2017b	100	33.3	71.4	66.7	70.6
Sasson 2017c	100	33.3	71.4	66.7	70.6
<u>Sasson 2019</u>	100	33.3	71.4	66.7	70.6
<u>Sasson 2018</u>	100	33.3	71.4	66.7	70.6
Scheerer 2022	100	66.7	85.7	100	88.2
Smerbeck 2015	100	66.7	71.4	0	64.7
<u>Stagg 2014</u>	80	33.3	85.7	66.7	76.5
Stockwell 2021	100	66.7	85.7	66.7	82.3
<u>Usher 2018</u>	100	66.7	100	66.7	88.2
Mean	99.3	54	81.8	60.9	77.7

 Table 7. Q-SSP domain and overall percentage (%) scores

When (T) = 17, then a score of $Y/T \ge 70\%$ may be considered acceptable quality. If Y/T < 75% or < 73% or < 72%, or < 70% (depending on number of applicable items), then study is of questionable quality.

Outcome Quality

Selection model analyses revealed significant heterogeneity among the studies suggesting that the effect sizes vary beyond what would be expected by chance, Q(74) = 460.15, p < .001. The test of publication bias was significant, $X^2(2) = 9.90$, p = .007. The adjusted estimate indicated the presence of moderate publication bias T(2) = .422, z = 4.48, p < .001, 95% CI [.317; .506]. Therefore, the random effects model was employed for the meta- analysis, allowing for variation of the true effect size due to sampling error and genuine differences in effect sizes among the studies (Borenstein et al., 2007). Hedge's g, which incorporates both within-study and between-study variability, was suitable due to the presence of heterogeneity in the results (Borenstein, 2009). The Wald test (Wald, 1943) was used to estimate the regression coefficients that represent the relationship between the independent variables and impression outcomes.

Publication Bias

The Egger's (z = -2.82, p = .005) and Kendall's tests ($\tau = -.285$, p < .001) for funnel plot asymmetry supported the presence of bias, as indicated by a significant regression asymmetry (Figure 2). This suggests that the observed effect sizes may be influenced by factors other than the true underlying effects, and caution should be exercised when interpreting the results due to the potential impact of publication bias or other sources of bias. Variances in heterogeneity across studies will be reported in the moderator analyses.

Autism vs No-autism Impression Ratings

As depicted in Figure 3, autistic targets received less favourable impression ratings than non-autistic targets, g = -.475, SE = .04, p < .001, 95% *CI* [-.56, -.39]. The estimated variance $\tau^2 =$.235, indicates significant variability in impressions between groups. However, the I^2 statistic of 89.1% suggests that the majority of variation in effect sizes reflects genuine differences in the population means, Q(1) = 122.20, p < .001).



Figure 2. Funnel plot demonstrating publication bias



Figure 3. Forest plot displaying individual effect sizes and 95% confidence intervals for autistic vs non-autistic targets on impression ratings using the random-effects regression model grand mean

Participant Co-variates: Sex and Age

To explore the impact of participant sex on impression outcomes for target groups, the effect size was computed based on the proportion of male and female perceivers and targets. Females were coded as 0, and males were coded as 1. Perceiver sex was introduced into the random-effects model, revealing a slightly greater effect on target group differences for females (g = -.24, SE = .03, 95% CI [-.31, -.17], p < .001) compared to males (g = -.17, SE =

.03, 95% CI [-.24, -.10], p <.001). This indicated less favourable impressions for autistic targets by both female and male perceivers. However, differences in perceiver sex were not significant when using female perceivers as the intercept in the model, Q(1) = 2.09, $\tau^2 = .046$, $I^2 = 61.43\%$, p = .149.

When considering target sex as a predictor, the impression gap between target groups appeared narrower for female targets (g = -.07, SE = .04, 95% CI [-.15, -.02]) compared to male targets (g = -.40, SE = .04, 95% CI [-.49, -.32]). The significant intercept model indicated that variability in impressions for the target group (autistic vs non-autistic) increased when the autistic target was male ($\beta^{-} = -.38$, 95% CI [-.45, -.22]), Q(1) = 31.53, $\tau^2 = .073$, $I^2 = 69.6\%$, p < .001. These findings suggest that perceivers are more inclined to judge autistic male targets less favourably in social impressions.

Perceiver age categories (0 = Child, 1 = Adolescent, 2 = Teenager, 3 = Young adult, 4 = Adult, 5 = Older adult) were introduced as predictors to assess their impact on target group impressions. Young adults (g = -.58, SE = .05, 95% CI [-.66, -.46]) and adults (g = -.43, SE = .12, 95% CI [-.66, -.20]) demonstrated the most significant target group differences. Children and adolescents showed moderate effects (g = -.39, p = .137 and g = -.34, p = .329), followed by teenagers and older adults with weaker effects (g = -.10, p = .514 and g = -.14, p = .479). Given the largest effect observed for young adults, used as the baseline (participated in 69.2% of studies) the intercept model yielded significant results, Q(5) = 11.48, $\tau^2 = .228$, $I^2 = 88.65\%$, p = .043. Older adults ($\beta^{\wedge} = .42$, 95% CI [.06, .82]) and teenagers ($\beta^{\wedge} = .46$, 95%, CI [.13, .78]) significantly reduced variability in impression ratings for target groups. The remaining categories had no effect on target

group differences (p > .30).

Target age group categories were also assessed. Adolescents (g = -.63, SE = .17, p < .001) teenager (g = -.77, SE = .19, p < .001), and young adults (g = -.39, SE = .11, p < .001) emerged as significant predictors in the model. Nearly half of the studies featured young adult target participants (44.8%), which was utilised as the baseline in the subgroup analysis. However, the model was no longer significant, indicating that target age did not significantly predict variability in target group impressions, Q(5) = 4.17, $\tau^2 = .713$, $I^2 = 95.6\%$, p = .526.

Year of Study

To investigate changes in impressions of autistic individuals over time, a correlation test revealed a positive association between study year and effect size in impressions across studies (r(28) = .46, p < .001). The intercept model indicated that the variability in impressions of target groups slightly decreased ($\beta^{\circ} = .094, SE = .02$) every 2.25 years (*SD*) (95% *CI* [.06, .13], *Q* (1) = 29.65, *p* <.001. These results suggest that social impressions have improved for autistic individuals over the years, leading to reduced differences compared to non-autistic individuals. A correlation test was performed on study year and the number of autistic female targets to explore whether reduction in impression differences were influenced by variations in target sex, given increased diagnosis rates for females (Russell et al., 2022). Year was positively correlated with the number of autistic female targets (*r* = .23, *p* .007) indicating a rise in diagnosed females participating in autism impression research over time. When year of study was added as a predictor in the random-effects model with target sex (female) as the intercept, year of study lost significance ($\beta^{\circ} = .02, p = .453$), suggesting that reduced target group variability in impressions over the years was significantly influenced by target sex, $Q(2) = 31.24, \tau^2 = .515, I^2 = 94.7\%, p < .001$.

Relationships Between Impression Outcomes

To assess whether target readability mediated the relationship between target group and impressions, variations in effect sizes were examined across different impression measures (1 = Behavioural intent, 2 = Discourse quality, 3 = Readability, 4 = Trait). Discourse quality (g = -.57, p

= .004), trait (g = -.49, SE = .06) behavioural intent (g = -.48, SE = .07), and readability (g = -.33, SE = .17) significantly contributed to target group differences. However, when readability was introduced as the intercept to evaluate variability in the remaining outcome variables, the model lost significance, rejecting the mediation hypothesis, Q(3) = 1.06, p = .788.

Perceiver Group Differences

To assess the impact of perceiver group on impressions of target groups, the model incorporated the following variables (0 = non-autistic, 1 = non-autistic). Non-autistic exhibited larger differences in impression ratings between target groups (g = -.51, SE = .05) compared to the autistic perceiver group (g = -.26, SE = .12), both favouring non-autistic targets over autistic targets. Introducing the non-autistic perceiver group as the intercept rendered a significant model, Q(1) =3.90, $\tau^2 = .218$, $I^2 = 88.29\%$, p = .048. This difference between group impression ratings decreased when the perceivers were autistic, indicating that autistic individuals judged the autistic target group more favourably than non-autistic perceivers ($\beta^{\wedge} = .24$, SE = .12), 95% CI [.00, .49]. This effect slightly increased when controlling for target sex ($\beta^{\wedge} = .31$, SE = .18), 95% CI [.04, .67], Q(2) =34.25, p < .001.

Presence of Diagnostic Information

Diagnostic label categories (0 = No label, 1 = Autism, 2 = Schizophrenia, 3 = Typically developing) were entered into the model to assess their impact on differences between target groups. Label conditions were comparing the autistic group with the non- autistic group using the same labels. Schizophrenia (g = -.81, SE = .26) and typically developing (g = -.84, SE = .26) labels exhibited the most substantial effects on impression between targets groups, resulting in less favourable ratings for autistic targets. Moderate effects were observed for no label (g = -.47, SE = .05) and autism label (g = -.38, SE = .11) in the same direction. By utilising 'no label' as the intercept, the model no longer achieved significance, Q(3) = 4.52, p = .229, implying that the presence of diagnostic labels did not significantly influence target group differences.

Social Context

An analysis of the influence of social context on differences in perceiver impressions of target groups was conducted. Social context categories (0 = General, 1 = Education, 2 = Professional, 3 = Legal) were introduced as predictors in the model. Among these, education exhibited the most pronounced effect on target group impression ratings (g = -.89, SE = .15), followed by general (g = -.51, SE = .05), professional (g = -.20, SE = .11), and legal (g = -.12, SE = .16). Initial analyses were performed using the general context as the intercept to gauge the impact of sociodynamic changes in the other social categories. The model was significant, demonstrating that education environments amplified variability in impression ratings between target groups, with the autistic group receiving less favourable judgments ($\beta^{\wedge} = -.38$, SE = .16, p = .016), 95 % CI [-.70, -.07]. Conversely, professional ($\beta^{\wedge} = .31$, SE = .12, p =

.012) 95% CI [.07, .55] and legal contexts (β^{-} = .39, SE = .17, p = .024) 95% CI [.05, .72]

exerted similar effects in the opposite direction, diminishing variability in target group differences, Q(3) = 19.23, $\tau^2 = .186$, $I^2 = 86.16\%$, p < .001. The model remained significant, even when controlling for target sex, with most categories retaining significance (p < .05), except for legal, which trended towards significance (p = .08).

Stimulus Modality

Investigation into stimulus modalities (0 = Silent video, 1 = Still image, 2 = Vignette, 4 = Transcript, 5 = Live social interaction, 6 = Audio) aimed to uncover potential variances in modes of self-presentation across specific social contexts (e.g., professional, legal). This exploration sought to determine if autistic individuals encounter challenges in particular contexts and if alternative modes of presentation might be preferable. Silent video displayed the most prominent effect (g = -.77, SE = 06), followed by vignette (g = -.62, SE = .11), still image (g = -.40, SE = 14), audio (g = -.59, SE = .16), live social interaction (g = .41, SE = .14), and audio-visual (g = -.38, SE = .06). Live social interaction was adopted as the intercept for assessing variations in the other categories, chosen for its ecological validity in face-to-face judgements. The model retained significance, Q(6) = 17.33, p

= .008. Silent video significantly augmented variability between target groups, leading to less favourable impressions of the autistic group ($\beta^{\wedge} = -.36$, SE = .15, p = .039) 95% *CI* [-.70, -.02,]), suggesting that an audio-context improves ratings for the autistic group. Audio-visual video, expected to closely resemble the modality combining visual and audio elements, did not differ significantly ($\beta^{\wedge} = .03$, SE = .15, p = .810). Still images also exhibited no significant difference from these modalities, implying that appearance contributes to variability in target impressions ($\beta^{\wedge} = .02$, SE = .20, p = .937). Audio slightly increased variability between target groups ($\beta^{\wedge} = .18$, SE = .21, p= .397). while vignettes ($\beta^{\wedge} = .20$, SE = .18, p = .249) exhibited a similar trend, yet neither were statistically significant. Of all modalities, transcript was the only reducing variances in impressions to the extent of eliminating group differences ($\beta^{\wedge} = .45$, SE = .28, p = .101), although this predictor's lack of significance was likely influenced by low frequencies across studies.

Discussion

The primary objective of this systematic review and meta-analysis was to build on the limited studies conducted by Allely and Cooper (2017) regarding the evaluation of autistic individuals in forensic settings. This research aimed to determine whether perceptions of autistic individuals vary across different social contexts and to understand the underlying factors driving these differences. Specifically, I sought to investigate potential disparities in social perceptions between individuals on the autism spectrum and those without autism. Additionally, I aimed to explore how factors such as the characteristics of both the perceiver and the target, social context, diagnostic information, and the mode of target presentation might influence these perceptions. The findings revealed significant discrepancies in impression ratings between the two groups, with the autism group generally receiving less favourable assessments. Importantly, the degree of these group differences was influenced by several moderating variables.

Impression Outcomes

Across the diverse studies included in this analysis, distinct patterns of impression themes emerged that are particularly relevant to the forensic context of evaluating autistic individuals. Notably, discourse quality was identified as the most influential moderator affecting group differences, while readability had a minimal impact and was excluded as a potential mediator of impressions. Traits and behavioral intent exhibited similar moderate effects on variations between target groups, serving as crucial metrics across many studies.

Although individual items within these categories were not subjected to regression analysis due to their volume and inherent variations, common threads in perception emerged consistently. Targets in the autism group were often appraised as less physically attractive compared to their nonautistic counterparts, a finding that recurred across multiple studies. Additionally, autistic individuals were frequently perceived as more socially awkward - an attribute that significantly distinguished the two groups and could influence evaluations in a forensic setting, where social competence and emotional responsiveness may be closely scrutinised.

For instance, perceptions of autistic individuals as socially awkward could lead to judgments that they lack remorse or emotional engagement, traits often evaluated in legal contexts. Sasson et al. (2017) found that reduced awkwardness ratings correlated with higher perceived likelihoods of engaging in conversations and forming friendships, both essential for positive social evaluations. In contrast, autistic targets were often associated with lower perceived self-esteem and were viewed as less expressive, less dominant, and less likable.

These perceptions can contribute to negative stereotypes in high-stakes environments like criminal court, where jurors may interpret a lack of expressiveness as indicative of guilt or a deficiency in moral understanding.

Furthermore, other dimensions of perception such as warmth, dominance, and competence further contributed to the formation of less favourable impressions of autistic individuals. Sasson et al. (2018) identified significant disparities across 20 personality traits, with autistic individuals receiving notably lower scores in traits such as articulateness, enthusiasm, openness, and extroversion. This could exacerbate biases in forensic evaluations, where judges might equate lower social skills with a lack of empathy or remorse, potentially impacting their judgments of credibility
and character.

While findings regarding trustworthiness and intelligence were mixed, studies indicated that autistic individuals were sometimes viewed as less trustworthy or more prone to deception (Lim et al., 2022b; Maras et al., 2019). Such negative impressions can have serious implications in a legal context, particularly when judges are tasked with assessing the motives and reliability of autistic defendants. Perceptions that an autistic individual lacks remorse or the ability to relate emotionally to others may influence verdicts significantly.

The interplay of perceived traits and behavioral intentions shared similar overall effects, with studies measuring these outcomes indicating positive relationships.

Understanding these perceptions requires a closer examination of the personality traits, interests, and behavioral intentions of both perceivers and targets. Shared traits like extroversion or introversion between perceiver and target could either amplify or mitigate impression differences, which is critical in contexts like criminal court where first impressions can heavily influence judgments.

Of particular interest is the emergence of social discourse quality as the most significant group difference among impression outcome measures. This aligns with previous research showing that conversations vary markedly between introvert-matched and extrovert- matched partners (Thorne, 1987), highlighting how personality traits shape interaction dynamics and perceptions. In forensic contexts, where effective communication can be pivotal, these factors are crucial.

Age, Sex, and Year

The influence of target sex, age, and the study year on perceiver impression ratings revealed intriguing dynamics relevant to forensic evaluations. Target sex was a significant factor in shaping impression ratings, with female targets yielding fewer discernible disparities between autistic and non-autistic individuals. This suggests that perceivers are less likely to identify social discrepancies in autistic females, while autistic males are often judged less favourably. This aligns with previous studies indicating that autistic females may better camouflage their difficulties in social interactions,

potentially making them less vulnerable to negative perceptions in court (Belcher et al., 2022; Dean et al., 2017; Hull et al., 2017).

Perceived awkwardness and attractiveness consistently stood out as prominent differences in trait ratings between the groups. The success of camouflaging strategies among autistic females may explain the challenge of detecting overt markers that typically lead to negative impressions. These strategies include mimicking others or rehearsing conversations before engaging in social interactions (Hull et al., 2020), which could mitigate negative perceptions in forensic evaluations.

The age of perceivers also influenced impressions, with younger adults rating autistic individuals less favourably compared to older adults, who exhibited fewer disparities. This variation may reflect the increased likelihood of negative judgments among younger perceivers, highlighting the potential for age-related biases in legal contexts particularly relevant for jury selection.

Interestingly, a correlation between target sex and study year emerged, indicating gradual improvement in impressions of autistic individuals over time. This suggests that increased representation of autistic females in research may have contributed to reduced variability in perceptions. However, the impact of growing autism awareness in society was not fully explored and may also play a role in diminishing perceived social differences over time.

In conclusion, the findings underscore the complex interplay between individual characteristics, social behaviour, and perception, particularly regarding how autistic individuals are evaluated in forensic contexts. By understanding these dynamics, we can better address the biases that may affect legal outcomes for autistic defendants, especially concerning perceptions of emotional engagement and remorse.

Diagnostic labels

The significance of diagnostic labels in shaping impressions emerged as a pivotal aspect of this investigation, particularly in contexts such as forensic evaluations where perceptions can profoundly impact legal outcomes. Notably, the results of this study contrasted with those reported in the systematic review by O'Connor et al. (2022), where the presence of autism labels was

associated with improved impressions. However, O'Connor et al.'s research primarily focused on studies employing vignettes, while this review compared autistic and non-autistic targets with diagnostic labels as optional predictors in the analysis. The forthcoming data from a second metaanalysis, which will assess the impact of autism labels across various stimuli, is expected to provide a deeper exploration of this phenomenon.

These findings challenge traditional assumptions and underscore the intricate interplay between labels, perceptions, and social expectations. Surprisingly, the inclusion of an autism label did not yield significant variability in impression ratings between autistic and non-autistic groups, contrasting with scenarios where no diagnostic information was provided. This suggests that increased awareness of autism does not necessarily lead to improved social impressions for autistic individuals. This notion was further supported by (Scheerer et al., 2022) where ratings did not significantly differ based on whether perceivers viewed an autism education presentation before or after forming their impressions.

Interestingly, my findings indicate that the autism label does not exert a negative impact on impressions, possibly reflecting its relatively lower stigma compared to other diagnostic labels. Exploring further, diagnostic labels such as schizophrenia and "typically developing" introduced intriguing dynamics. Although these results did not achieve statistical significance, potentially due to a limited number of studies incorporating these labels, they hinted at distinct patterns. Both schizophrenia and typically developing labels contributed to increased variability in effect sizes, resulting in less favourable ratings for autism targets compared to scenarios where no label was present. This indicates that validating the absence of a disability may exacerbate differences in impression ratings as the demands for socially appropriate responses become more explicit. Moreover, the application of the discounting principle was not applicable with the explicit "typically developing" label, meaning that any behavioural group differences could not be attributed to justifiable explanations that might mitigate negative judgments.

Delving into specific studies, Sasson and Morrison (2019) revealed how accurate diagnostic

labels influenced impressions. Mislabelling the autism group as typically developing or assigning no label resulted in less favourable impression ratings compared to the use of an accurate diagnostic label. Notably, targets without autism received significantly better ratings only when mislabelled as autistic, contrasting with scenarios where no label was present. Similarly, DeBrabander et al. (2019) found that correct diagnostic labels led to more positive evaluations of targets, particularly in areas such as likability, trustworthiness, and the desire to engage in social activities. This implies that accurate labeling such as diagnostic information presented by an expert witness could counteract negative stereotypes that might arise in legal contexts, where perceptions of guilt or lack of remorse could hinge on misinterpretations of social behavior.

Interestingly, autistic targets were rated as less awkward when labelled as autistic compared to scenarios where no label was provided. However, this pattern reversed for autistic perceivers, who rated autistic targets as less awkward when no label was present. This may suggest that autistic perceivers feel more comfortable attributing weight to common characteristics without the fear of societal scrutiny associated with the autism label.

Our study also examined the impact of diagnostic labels on perceptions of schizophrenia. DeBrabander et al. (2019) indicated that labelling autistic individuals with schizophrenia resulted in lower ratings for trustworthiness, likability, intelligence, and the likelihood of social interactions. Intriguingly, non-autistic individuals mislabelled with schizophrenia did not show significant differences in ratings. In contrast, the autism label appeared to evoke more positive ratings, reinforcing findings from other studies (Sasson & Morrison, 2019). This pattern aligns with research highlighting the varying levels of stigma associated with different diagnostic labels, suggesting that perceptions of dangerousness consistently influence behavioural intentions toward targets.

These findings support established research on the stigma associated with schizophrenia, corroborating earlier studies that noted perceptions of dangerousness (Penn et al., 1999; Vahabzadeh et al., 2011). Notably, dimensions such as dangerousness and related behavioural intentions, such as willingness to talk or socialise, may intertwine with notions of trust. This connection could shape

impressions and judgements in legal settings, potentially leading to assumptions that a defendant lacks remorse or poses a threat.

The distinct nature of stigma attached to schizophrenia versus autism may lead to differing societal expectations for favourable responses. The stigma surrounding schizophrenia is often more socially sanctioned, creating divergent assumptions and perceptions that could explain the variations in social responses observed between individuals labeled with schizophrenia and those labeled with autism.

Furthermore, the influence of mislabelling autistic individuals with schizophrenia extended beyond the label itself. The broader array of affected traits and behavioural intentions suggests that the label accentuated existing differences in appearance and behaviour, particularly traits such as awkwardness and attractiveness. These characteristics might have been highlighted due to their association with the label, contributing to a more pronounced impact on impressions when compared to the non-autistic group. This nuanced interplay between label, traits, and perceptions underscores the intricate and multifaceted nature of how diagnostic labels shape social impressions, particularly in high-stakes environments like the courtroom, where perceptions can have serious consequences.

Perceiver Group

The exploration of perceiver group effects has unveiled intriguing nuances in how autistic and non-autistic individuals perceive each other, which is particularly relevant in forensic contexts where social impressions can significantly impact legal judgments. The findings indicate modest effects on impression variability; notably, when perceivers were also autistic, their impressions of autistic targets improved slightly. However, even among autistic perceivers, the average impression ratings for autistic targets remained less favourable compared to non-autistic targets. Consequently, these results only partially support the double empathy problem, which posits that social interactions improve when both parties share similar neurodiverse traits (Milton, 2012).

Disparities within studies have come to the forefront. In Morrison et al.'s (2020) live social

interaction study, both autistic and non-autistic groups displayed varying correlations between first impression traits, behavioural intentions, and interaction quality. Non-autistic individuals exhibited strong relationships between warmth, the desire to socialise, and interaction quality, while these correlations were weaker and less statistically significant among autistic perceivers. Such differences could have critical implications in legal settings, where non-autistic jurors may perceive autistic defendants as lacking warmth or remorse, potentially influencing judgments about their character and credibility.

Moreover, preferences for interaction partners highlighted significant contrasts. Nonautistic perceivers favoured interactions with non-autistic partners, while autistic perceivers showed a higher intention to interact with fellow autistic individuals. Autistic participants also reported greater self-disclosure during conversations with autistic partners and a stronger sense of closeness after interactions, regardless of the partner's diagnosis. This suggests that in forensic evaluations, autistic defendants may feel more understood and comfortable when interacting with peers who share similar experiences, such as the support of an autism advocate. This sense of connection could positively influence their self-presentation during legal proceedings.

Consistent with numerous studies, both autistic and non-autistic participants rated autistic partners as more awkward, less attractive, and less warm than non-autistic partners. An interesting observation was the lack of correlation between perceived warmth and positive social intentions in the autistic group, indicating that different personality qualities may drive social intentions for this group. In DeBrabander et al. (2019), autistic perceivers evaluated all targets more favourably than non-autistic perceivers regarding attractiveness, intelligence, and the desire to engage socially. These effects were particularly pronounced for autistic targets, who were often perceived through a lens that could amplify their perceived shortcomings in social situations, potentially leading to negative assumptions in forensic evaluations, such as being perceived to lack remorse.

Non-autistic perceivers felt more comfortable sitting near non-autistic targets than autistic perceivers did. However, there were no differences in the desire to sit next to autistic targets.

Intriguingly, the inclusion of the autism label increased the perceived awkwardness of the autistic targets when the perceiver was also autistic, suggesting a form of self- identification with this trait. Geelhand et al. (2021) found that autistic perceivers rated both autistic and non-autistic targets similarly in terms of social discourse, whereas non-autistic perceivers rated non-autistic targets more favourably regarding communication ease and likelihood of forming friendships. Such dynamics can be crucial in forensic contexts, where perceptions of social competence may influence judgments about an individual's intentions and credibility.

The absence of correlations between perceived warmth and positive social intentions in the autistic group suggests that other personality traits may drive social intentions for this group. Warmth and dominance ratings aligned with the Big Five personality traits of agreeableness and extraversion (Myers, 1962), traits associated with friendliness and likability (Brambilla et al., 2012). This may explain why non-autistic partners were deemed more likable by autistic perceivers, as positive social interactions could lead to more favourable assessments in legal settings, such as being perceived as trustworthy or remorseful.

Enhanced self-disclosure among autistic individuals suggests that shared interests improved conversations, encouraging partners to reveal more about themselves. Autistic individuals rated autistic partners higher on behavioral intentions, indicating a preference for increased contact and potential friendship. Furthermore, the sense of closeness was significantly greater for autistic partners, influencing the autistic group's behavioural intentions towards one another, which could further complicate how they are perceived in forensic situations.

Meta-perception measures may provide further insight when comparing target groups, as how one believes they are perceived can indirectly affect their social behaviour, thus impacting how others perceive them. For instance, if an individual believes they are viewed unfavourably, they may exhibit awkward social behaviours, which in turn influences others' feelings about the interaction, resulting in negative social judgments. While Usher et al. (2018) found no significant group differences in impressions between autistic and non- autistic social partners, they identified interesting relationships between meta-perception and observed social behaviour through video recordings of dyad interactions. Those who believed their peers liked them more displayed higher levels of social reciprocity and initiative, while those who perceived greater dislike exhibited lower levels of social engagement.

Interestingly, perceptions of being disliked during interactions impacted conversational flow, although they did not affect aspects such as response latency and initiative latency. Given the limited research in this area, further investigation into meta- perception is warranted to provide deeper insights into its effects on social behavior, especially in contexts where first impressions can significantly influence outcomes, such as criminal court evaluations.

Social Context

The examination of interactional context settings revealed significant disparities in impression outcomes between autistic and non-autistic individuals. Educational environments intensified the differences in social perceptions, while professional and legal contexts diminished them, resulting in nearly negligible distinctions.

Each social context employed distinct stimuli and modalities for evaluating perceptions. General environments encompassed a diverse array of perceiver characteristics and settings, including casual conversations and emotional expressions. This broad scope established a baseline for comparison and facilitated an assessment of how social dynamics shift across different contexts. *Education*

In educational contexts, studies utilised vignettes to illustrate behavioral intentions toward peers. Perceivers, primarily female and within the teenage and young adult age brackets, aligned with the age of the peers portrayed. Diagnostic information was included in about 20% of comparisons. Descriptions of autistic and non-autistic targets varied, highlighting characteristics such as social interaction difficulties, rigidity, and sensory sensitivities.

For example, de Boer and Pijl (2016) depicted autistic targets struggling to adapt to new situations and requiring support to manage anxiety, while Stockwell et al. (2021) illustrated a lack

of social reciprocity. Consistently, themes of rigidity and inflexibility emerged across studies, with descriptions often leaning towards negative portrayals. These perceptions can be particularly relevant in forensic evaluations, where autistic defendants might be perceived as lacking remorse or emotional responsiveness; traits that could adversely influence judgments about their credibility or intentions.

Professional

Contrary to expectations, professional contexts did not heighten scrutiny of autistic traits. Studies focused on employment applications, using videos and vignettes assessed by young adult and adult demographics. These studies included diverse diagnostic characteristics, with some vignettes incorporating autism-related traits.

McMahon et al. (2021) found that autism traits negatively affected perceptions of all job candidates, though disclosing the diagnosis mitigated these effects. Notably, traits such as inflexible adherence to routines were particularly detrimental. In forensic settings, similar dynamics may emerge, where the presence of autism labels could lead to biases against defendants, influencing perceptions of their trustworthiness or likelihood of rehabilitation.

Legal

In legal contexts, expectations of heightened scrutiny also proved unfounded, as group variability diminished. Two studies focused on credibility assessments in police interviews, with participants of similar age demographics evaluating male targets. Both studies included diagnostic information but yielded nuanced outcomes regarding how autism affected perceived credibility.

For instance, Lim et al. (2022) found that autistic targets were often seen as less competent or trustworthy, with their perceived emotional responses (or lack thereof) influencing judgments. This aligns with concerns in forensic evaluations, where perceptions of lacking remorse or empathy can significantly impact legal outcomes. Interestingly, when diagnostic information was disclosed, perceptions shifted, indicating that understanding an individual's autism diagnosis could lead to more favourable impressions regarding their intent and emotional state. Overall, these findings underscore the importance of context in shaping perceptions of autistic individuals, particularly in forensic settings, where biases about traits like remorse and emotional responsiveness may have significant implications for justice and rehabilitation. Further research is essential to explore these dynamics and their effects on social judgments within legal frameworks.

Stimulus Modality

The investigation into stimulus modalities aimed to uncover potential variations in selfpresentation among autistic individuals across specific social contexts, such as professional and legal settings. This exploration sought to determine whether autistic individuals face challenges in these contexts and if alternative modes of presentation, such as written testimony rather than live appearances in court, might be more effective. Utilising live social interaction as the benchmark for assessing variations, given its ecological validity in face-to-face judgments, yielded a moderate effect size for group differences. The study primarily involved teenage and young adult perceivers rating mainly male peers.

The evaluation of various stimulus modalities provided intriguing insights. Audio-visual videos, expected to closely resemble real-life interactions, did not reveal significant differences. Still images also showed no notable divergence, suggesting that visual appearance alone contributes to impression variability. In contrast, audio slightly increased variability between target groups, while vignettes exhibited a similar trend without reaching statistical significance. However, silent video modalities significantly magnify variability, indicating that audio inclusion generally improves ratings for autistic individuals.

Interestingly, transcripts were the only modality that substantially reduced impression variability, even eliminating group differences altogether. This lack of significance might stem from the low frequency of transcript comparisons across studies (just 2.6%), alongside the fact that 50% of the targets were female, potentially contributing to reduced variability.

Silent video stimuli predominantly involved young adult perceivers rating mostly male target

groups within adolescent and teenage categories. These studies encompassed diverse scenarios, such as reactions to greetings and storytelling, which could introduce variations in participant reactions and subsequent judgments. For instance, Alkhaldi et al. (2019, 2021) captured target responses to different greeting situations using silent clips, while Stagg et al. (2014) used silent videos from extended recordings of target responses to questions about their lives. Grossman (2015) employed silent videos for storytelling, eliciting both positive and negative emotions.

These findings have important implications in forensic settings, where autistic defendants might face heightened scrutiny during live testimonies. The preference for written testimony or silent video formats could alleviate some challenges, as these modes may allow for more accurate self-presentation without the immediate pressures of face-to-face interaction. Autistic individuals may struggle to convey emotions or remorse in live settings, which can be detrimental in legal evaluations where perceptions of empathy and emotional engagement are crucial.

However, several limitations must be acknowledged. The limited number of studies within this category, particularly those with the largest effect sizes, may affect the generalisability of results. The predominance of young adult participants in this modality suggests that the findings may not apply universally. The observation that an audio context improves ratings for autistic individuals might not hold true across all scenarios. Additionally, varied content in stimulus scenarios could influence participant reactions and judgments, complicating the interpretation of results. Moreover, the lack of significant variances in group differences may arise from using the same target participants across multiple studies, potentially skewing perceptions. Factors unrelated to autism, which were not measured, could further influence impression variability. Given that the target participants were predominantly male, this demographic composition significantly contributed to group variances.

Limitations

Several limitations should be noted. First, only one author conducted the quality assessment of studies, which may introduce bias in the evaluation process. Future research should involve multiple independent assessors to enhance reliability and reduce subjective influence. Second, the diversity of methods, contexts, and modalities across studies posed challenges for synthesis, requiring cautious interpretation of the findings. While this review incorporated a wide range of studies, it primarily focused on published journal articles. This reliance increases the risk of publication bias, as studies with non-significant or negative findings are often underrepresented. Addressing this limitation in future research is essential to ensure a more comprehensive understanding of the subject matter. Finally, the scope of social context studies was narrow, particularly in forensic settings where perceptions can have serious implications. Expanding research in these areas is critical to gaining a deeper understanding of how autism-related perceptions influence key decision-making processes.

Conclusion

This systematic review and meta-analysis revealed the complex landscape of impressions formed about autistic individuals, shaped by a range of factors, contexts, and modalities. A recurring theme emerged: autistic individuals often receive less favorable impressions compared to their non-autistic counterparts. Key traits, including social skills, warmth, dominance, and competence, significantly influenced these perceptions, highlighting the distinct characteristics of autistic social interactions.

Modest improvements were observed when autistic perceivers evaluated autistic targets, providing partial support for the double empathy problem theory, which suggests that shared neurodiverse traits enhance mutual understanding. However, the overall impression of autistic individuals remained less favorable than that of non-autistic individuals.

The study also challenged assumptions about label awareness, showing that simply adding an autism label does not dramatically alter impressions. Labels such as schizophrenia negatively impacted perceptions of both autistic and non-autistic individuals, while the autism label had a more nuanced effect. These findings underscore the pervasive influence of stigma, particularly in contexts where perceived dangerousness plays a role. Context was another pivotal factor in impression formation. Educational settings often amplified disparities, whereas professional and legal contexts tended to mitigate these differences. However, the limited exploration of social contexts in the studies reviewed highlights the need for further investigation, especially in forensic settings where judgments have far-reaching consequences.

Modality also shaped perceptions. Silent-video formats provided unique insights, with audio inclusion improving ratings for autistic individuals. Transcripts reduced variability, presenting a promising avenue for further exploration, though additional research is needed to validate these findings.

This thesis serves as a foundational resource for understanding the interplay of factors that shape perceptions of autistic individuals. By identifying key gaps in literature, it highlights the necessity of continued research to unravel the nuanced dynamics of impression formation across diverse settings. The subsequent chapters aim to address these gaps by focusing on perceptions within forensic contexts, offering the potential to inform practices and interventions in legal frameworks. Through these efforts, a more equitable and comprehensive understanding of autismrelated perceptions can be achieved.

CHAPTER 3: Sentence Severity in Offender Cases

Although research on the effects of individual characteristics such as race and gender on prison sentences is well-established (Demuth & Steffensmeier, 2004; Fernando Rodriguez et al., 2006), the impact of mental health considerations on sentence length is still emerging. This study aims to investigate whether sentencing outcomes for offenders on the autism spectrum are fair and just by conducting a comparison case study with national sentencing records. As far as I am aware, this is the first study to compare the sentences of autistic offenders to the general population.

This investigation focuses on Australian court cases where defendants on the autism spectrum were found or pleaded guilty to a criminal offence and received a custodial sentence. Specifically, we compared the sentence lengths imposed by judges for cases of offenders linked to an autism diagnosis with data from the Australian Bureau of Statistics (ABS). I predicted that autistic defendants found guilty of an offence, whether by plea or trial, receive disproportionate penalties due to evaluations or potential misinterpretations of common characteristics associated with autism in the application of sentencing law (e.g., offenders perceived to lack remorse).

This chapter presents the preliminary findings of a larger investigation into criminal court cases involving autistic offenders. A version of this chapter has been published in the Journal of Autism and Developmental Disorders (JADD):

Foster, T. R., & Young, R. L. (2022). Brief report: Sentencing outcomes for offenders on the autism spectrum. Journal of Autism and Developmental Disorders, 52(7), 3314-3320.

My own contributions included writing the manuscript, method development, data collection, and statistical analyses. My supervisor, Professor Robyn Young, provided additional data and assisted with editing and reviewing the manuscript. Both authors reviewed the final manuscript. While adaptations were made for publication, there is direct overlap in content and phrasing found in this chapter. Please see Appendix E for the publication.

Method

A search in databases accessing Australian legal case information (LexisNexis and Australasian Legal Information Institute) in March 2020, using the terms 'Autism' OR 'Asperger' resulted in data from 51 court cases that met criteria for selection. Inclusion criteria consisted of offenders diagnosed or suspected to be on the autism spectrum determined by reports submitted as evidence from a psychologist and/or psychiatrist referenced in sentencing/appeal remarks. Furthermore, the offender pleaded or was found guilty of an offence that resulted in a custodial sentence in Australian Higher Courts⁵.

Sentences handed down by the original sentencing judge were used for the analyses. Additional cases were added to the dataset (n = 2) where sentencing information and diagnosis of ASD (confirmed by psychological assessment) were sourced by the authors. To make offence information comparable, the ABS employs the National Offence Index, which enables a single offence to represent a person in custody (ABS, 2018). When an offender has two or more offences that fall into various offence categories, the most serious offence according to the National Offence Index (NOI) is used to represent the defendant. The present study employed the same method to determine the representative offence for offenders in the present study.

The most detailed data determined for comparison were the 2018-19 national sentence length data in Australian Higher Courts (ABS, 2020). As the publicly available data from the ABS were limited, a customised report was requested containing sentencing distribution percentiles for refined offence categories which permitted a more meaningful comparison of the much smaller sample of autistic offender sentences for offence type. Due to data confidentiality, the minimum and maximum sentence lengths were restricted. Instead, the 5th and 95th percentiles were provided (in addition to the 25th, 50th, 75th percentiles) therefore we used those figures to represent the minimum and maximum sentence lengths for the 2018-19 records for comparison purposes. Furthermore, life

⁵ The most serious offence convictions that can result in custodial sentences are dealt with by Higher Courts in Australia. High Courts are the highest in the hierarchy of courts within each state and territory within the Australian judicial system (ABS, 2012).

sentences were not included in the ABS data therefore life sentences (n = 4) were removed from the autistic offender sample.

The Australian and New Zealand Standard Offence Classification (ANZSOC) was used to place the autistic offender data into the same offence categories as the ABS (ABS, 2011). The ANZSOC was developed for the compilation and analysis of criminal justice statistics. Similar data quality frameworks are employed internationally such as the 'User Guide to Crime Statistics for England and Wales' (ONS, 2021), and 'Use of Guidelines and Specific Offense Characteristics' in the United States (USSC, 2021). The ANZSOC is defined by 3 levels of crime classification: Divisions (the broadest level), Subdivisions (the intermediate level) and Groups (the finest level). The division level provides a broad picture of offence types within a limited number of categories (e.g., all offences relating to illicit drug offences). More refined offence categories can be found within the subdivision levels (e.g., importing and exporting illicit drugs) and group levels (e.g., importing illicit drugs). As shown in Table 8, The most detailed comparative data available were determined at the sub-division level where 36 of 53 autistic offenders had offences comparable at this level.

	Autistic offender			National data		
Offence	N	Mdn	Range	N	Mdn	Range*
Murder	9	315	213 - 552	65	276	188 - 482
Manslaughter	7	93	60 - 111	174	72	20 - 144
Assault	8	37	14 - 117	1816	30	7 - 78
Sexual assault	12	72	40 - 126	56.3	48	9 - 132
Robbery	1	126	-	1165	36	10 - 72
Deal/traffic drugs	1	180	-	2132	30	9 - 90
Property damage	1	174	-	211	27	5 - 60

 Table 8. Autistic Offender Sentence Length and Australian Higher Courts Median and Range

 Sentence Length (months) for Subdivision Offence Classification

*National data range are represented by 5th and 95th percentiles. Life sentences excluded.

The remaining 13 cases could only be classified at the division level and were excluded from the analyses in addition to the 4 life sentences. Three cases with single offence classifications were identified for sub-division level and, therefore, inferential analyses could not be performed. Four offence classifications were eligible to perform analyses for comparative datasets: murder, manslaughter and driving causing death, assault, and sexual assault. Non-parametric tests were utilised due to the resulting small samples sizes within the autistic offender offence categories: murder (n = 9), manslaughter and driving causing death (n = 6), assault (n = 8), and sexual assault (n = 11), and thus the median sentence lengths were used to compare datasets. Limited demographic data for both datasets were available (age, sex), in addition to the national ABS (2021) 2018-19 guilty outcome data (proportion of guilty verdicts resulting in custodial sentence and similar autistic offender offences). These data are reported in the results.

Results

The autistic offender sample were predominately male (97.2%) aged between 19-60 years (M = 30.81, SD = 11.79). The limited accessible national data showed that offenders found guilty of an offence in Higher Courts were predominately male (85.53%), had a mean age of 35.1 years, and 65.9% were aged between 20-39 years (ABS, 2020). Additionally, guilty verdicts resulted in 78.79% receiving a custodial sentence. The percentage of guilty verdicts for subdivision offence categories in the autistic offender sample were 10.43% for assault, 5.73% for sexual assault, and 1.21% for division level 'homicide and related offences', which includes subdivision levels of murder and manslaughter and driving causing death.

Inferential analyses were performed on the autistic offender sample where multiple cases had the same offence classification to examine whether these differed significantly compared to the 2018-19 national data. Outliers in the autistic offender sample were identified for manslaughter (n =1) and sexual assault (n = 1) and were removed from the analyses. A one-sample sign test showed no significant differences for sentence length between the autistic offenders and national data for murder (n = 9, Z = -.667, r = .22, p =

.508), manslaughter and driving causing death (n = 7, Z = -.408, r = .17, p = .688), and assault (n = 8, Z = -1.061, r = .38, p = .289). For sexual assault (n = 11), autistic offenders (Mdn = 72 months) received significantly longer sentence lengths than the national data (Mdn = 48 months, Z = -2.214, r = .67, p = .021). See Figure 4 for distribution comparisons.



Figure 4. Box plots (mean = x; outlier = °) of sentence length distribution (months) for autistic offenders and Australian Higher Courts data for murder (excluding life sentences), manslaughter (and driving causing death), assault, and sexual assault

Discussion

Sentence length outcomes for autistic offenders were investigated to explore whether these individuals receive harsher penalties from the judiciary. Preliminary findings showed 36 subdivision comparable offences in the autistic offender sample had greater sentence lengths compared to median national sentences for similar offences (ABS, 2020). No significant differences were found for murder, manslaughter and driving causing death, and assault offence categories. Sexual assault revealed a large significant effect with greater sentence lengths in the autistic offender sample.

There are several limitations to consider when interpreting these results. Restrictions associated with these data and small sample sizes in offence categories limit the statistical power for these comparisons. Furthermore, although the most detailed data available were subdivision level offence descriptions, they still included different group levels within categories where offences may be seen as more or less severe by the judiciary. For example, the large effect found for sexual assault may be due to the fact that 73% of the autistic offender cases were committed against persons under the legal age of consent. Offences such as these may be judged more harshly by the judiciary compared to other types of sexual assault offences. Large sample size differences between the autistic offender sample and national data may reflect significant differences in the proportion of sexual assault offences committed against underage victims between the two groups resulting in a large effect.

However, sexual assault maximum penalties vary across jurisdictions from 12 years to life and vary within jurisdictions dependent on offence definition (AIFS, 2011). Similarly, sexual assault maximum penalties against victims under the age of consent vary considerably across and within jurisdictions. Inconsistencies exist regarding the age of consent and graduation tends to reflect the seriousness of the offence. For example, s. 66 of the *Crimes Act* 1900 (NSW) set maximum penalty ranges for victims aged 14-16 years (10-12 years), aged 10-14 years (16-20 years), and under 10 years (life). Section 49 of the Crimes Act 1958 (Vic) sets maximum penalties for victims aged

under 12 (10-25 years) and under 16 years (4-15 years). The autistic offender cases included 6 offences classified under 16 years, 1 offence under 13 years, and 1 offence under 10 years. The remaining sexual assaults were committed against adults including the identified outlier.

Additional limitations exist such as the comparison of the autistic offender cases to national data. The validity of results is limited due to differences in severity of penalties across jurisdictions as shown in the previous example. The autistic offender cases ranged from years 2003 to 2020 where sentencing trends and knowledge about autism are likely to have changed over this period; cases from earlier years may have attracted harsher penalties compared to the 2018-19 data. It is difficult to determine whether the retrieved data are representative of sentenced autistic offenders during this period as in some instances the diagnosis of the offender may be unknown or undisclosed. When the diagnosis is known, the research suggests this leads to reduced sentences (Berryessa, 2019; Berryessa et al., 2015; Maras et al., 2019). Based on the limited research, it is unlikely the diagnosis has contributed to harsher penalties. Finally, there is no consistency or standardised protocol in the way autism is presented in court. We acknowledge that the amount of information presented may have impacted the outcome in these cases. Future research may need to consider and develop such protocols. Overall, this is certainly an area of investigation worth pursuing.

Despite these limitations, the data suggest it is possible autistic offenders receive harsher penalties than their counterparts whose diagnostic status has not been indicated. It should be noted that the majority of these data only include cases where the diagnosis was presented to the court as a potential mitigating factor to explain autism-related difficulties that may have influenced crime commission or other relevant sentencing factors. There are limited data available for cases where autism was not identified or explained. The available information in the current dataset revealed judicial remarks on offender remorse. Explicit references of remorse revealed that in many of these cases, the offender was judged as lacking these attributes. Interestingly, some judges attributed the absence or lack of remorseful expressions to the autism diagnosis. However, as it is the presence of remorse that contributes to mitigation in sentencing, it is not clear whether these judges considered their autism-remorse conjectures into their decisions. Furthermore, autism was referenced in remarks considering other purposes and principles of sentencing. Although these data are preliminary, it appears the outcomes for people on the autism spectrum who encounter the criminal judicial system are less favourable. It is important to consider situations where an autism diagnosis is unknown or undisclosed and how this may further impact the outcomes for these individuals. Further investigation into the interactions of autism and the judicial system will be explored in the following chapters to discover what could be driving this trend.

CHAPTER 4: Remorse in Offender Cases

To further investigate the preliminary findings of the pilot study presented in Chapter 3, I conducted a detailed content analysis of the sample of sentencing transcripts. To build on the preliminary findings of the pilot study presented in Chapter 3, I conducted a detailed content analysis of the sentencing transcripts. Content analysis is based on the premise that texts are a valuable data source for uncovering significant insights into specific phenomena. As outlined by Kleinheskel et al. (2020), this method involves analysing texts with consideration of both the participant and the context. It entails organising the content into related categories to identify similarities, differences, patterns, and associations, encompassing both explicit and implicit elements.

The study presented in this chapter aimed to explore and determine how judges established offender remorse in these cases. Several indicators of remorse were examined including the offender's presentation, admission of guilt, cooperation with authorities, and expert witness evidence. Further, I was interested in determining the judge's overall consideration of offender remorse (present/absent) and whether there was a disproportionate number of unfavourable judgements of remorse (remorse-absent). I hypothesised that there would be more cases where the offenders were judged to lack remorse compared to cases where offenders were judged to be remorseful. Additionally, I predicted that offenders judged as unremorseful would more likely be indicated by the offender's presentation compared to other remorse- indicating variables. Offenders judged as remorseful were predicted to be indicated by expert witness evidence more so compared to other remorse-indicating variables. Finally, I predicted that offenders considered to lack remorse would receive longer sentences compared to offenders considered remorseful.

Method

The complete sample retrieved from the search described in Chapter 3 was used for this study (n = 54). The inclusion criteria comprised of offenders diagnosed or suspected to be on the autism spectrum, as determined by reports submitted as evidence from psychologists and/or psychiatrists referenced in the sentencing/appeal remarks. Other conditions or diagnoses in addition

to autism may or may not have been present. Furthermore, the offenders either pleaded guilty or were found guilty of an offence resulting in a custodial sentence in Australian Higher Courts. The previous study in Chapter 3 details the procedure for the categorisation of offences. The autistic offenders were predominantly male (97.2%) and aged between 19-73 years (M = 33.34, SD = 13.77).

I developed the coding protocol based on how judgements of remorse are evaluated in the criminal judicial system identified in Chapter 3 and the identification of common themes in sentencing transcripts during the data collection process. The objective of this procedure was to qualitatively evaluate how the sentencing judge considered offender remorse. See Appendix F for Coding Protocol. Two independent raters used the coding protocol to analyse the court case transcripts (sentencing and/or appeal remarks). Two raters studying psychology at Flinders University took part in this study. One rater volunteered as part of their course requirements for research experience and the other rater was employed as a Research Assistant. Before coding, they underwent a training session that included familiarising themselves with the coding scheme, practicing coding exercises and discussing to clarify any ambiguities. An interrater analysis was conducted to assess the agreement between the raters. The variables were categorised into two parts, aligning with the studies objectives; that is, evaluation of offender remorse (Chapter 4), and the impact of autism on sentencing decisions (Chapter 5). As shown in Table 9, Part A focused on examining whether and how the judge evaluated the offender's remorse. This involved identifying indicators related to the offender's presentation, guilty plea/cooperation with police, whether the diagnosis influenced the judgment of remorse (if known at sentencing), and third-party evidence (e.g., expert witness testimony). An overall conclusion was then drawn by the raters regarding the judge's impression of remorse, categorising it as either present, absent, or unable to determine.

Table 9. Part A coding descriptions to identify judicial evaluations of remorse by the presence or absence of indicating variables and the overall conclusion of the presence or absence of remorse (or inconclusive).

Indicators for remorse	Description	Code
Presentation	The judge used adjectives such as displayed, shown, expressed, demonstrated in	0 = Disagree
	conjunction with remorse. Not associated with expert witness/prosecution evidence.	1 = Agree
Plea/level of	Guilty/Not guilty plea, early/late plea, assisted police with investigations/uncooperative	0 = Disagree
cooperation with police	with police.	1 = Agree
Diagnosis influenced	The judge referred to the offender's remorse with reference to the offender's diagnosis i.e.,	0 = Disagree
judgement of remorse	understood that the presentation of remorse differed due to the diagnosis/believed diagnosis would prevent the offender experiencing emotion (e.g., lack of empathy). Diagnosis (or general reference to diagnosis) such as associated characteristics/mental problems must be explicitly referenced with the remorse evaluation.	1 = Agree
Third party evidence	The judge relied on evidence to influence judgement of remorse e.g., opinion of	0 = Disagree
(expert witness/prosecution)	psychologist/psychiatrist with reference to offender's remorse.	1 = Agree
Overall conclusion of	Overall, the judge perceived the offender to be unremorseful.	0 = Remorse-absent
the judge's evaluation	Overall, the judge perceived the offender to be remorseful.	1 = Remorse-present
of the offender's remorse	It is not clear whether the judge perceived the offender to be remorseful or unremorseful	2 = Remorse- inconclusive

An interrater analysis was conducted to assess the agreement between the raters. Due to the time required to read and code the transcripts, only a sample of the cases were included in the coding procedure (n = 19). The cases were organised by offence type and randomly ordered on an excel spreadsheet for coding. Offence categories included Murder and Manslaughter. Raters independently coded the sample, beginning with a subset (n = 5) to ensure the protocol was understood.

Cohen's Kappa was employed to assess the inter-rater reliability of the rating scheme (Cohen, 1960). Kappa statistics assess the agreement level among coders for a set of nominal ratings while adjusting for chance agreement, offering a standardised measure of inter-rater reliability applicable across different studies. It involves cross-tabulating ratings from two coders to determine observed agreement, while the agreement expected by chance is calculated from the marginal frequencies of each coder's ratings (Hallgren, 2012). Table 10 presents Landis (1977) definitions of Kappa strength of agreement which were used to provide additional interpretation of results.

Description	Range (Kappa)		
Poor	< 0.00		
Slight	0.00 - 0.20		
Fair	0.21 - 0.40		
Moderate	0.41 - 0.60		
Substantial	0.61 - 0.80		
Almost perfect	0.81 - 1.00		

Table 10. Kappa Statistic Strength of Agreement

The inter-rater analysis was performed in SPSS (Version 29.0.2.0) using the crosstab function. A substantial agreement (n = 19) was achieved for overall judgements of remorse (κ = .75, p = .001, 95% CI [.45, 1.04]) and a moderate agreement for diagnosis influenced judgements of remorse ($\kappa = .60$, p = .012, 95% CI [.12, 1.07]). However, a lack of interrater agreement returned for the remaining indicators for remorse judgements making it difficult to reliably explain remorse judgements (presentation, $\kappa = .04$, p = .876, 95% CI [.43, .50]; plea/cooperation with police, $\kappa = .31$, p = .099, 95% CI [.00, .62]; and third-party evidence, $\kappa = .09$, p = .714).

Sentence length data presented in the previous chapter were used to analyse remorse considerations and sentence length. To investigate the impact of remorse on sentence length, I used an independent t-test to compare cases where remorse was present versus cases where remorse was absent. This analysis aims to determine whether there was a statistically significant difference in sentence lengths between these two groups. Specifically, I examined whether offenders who were perceived as remorseful receive different sentence lengths compared to those who are not. The independent t-test will allow the assessment of the mean differences in sentence length between the two groups, providing insight into how the presence or absence of remorse influences judicial decisions regarding sentencing. This approach will help elucidate whether remorse is a significant factor in the determination of sentence length and contributes to a more nuanced understanding of its role in the judicial process.

Results

The total sample (n = 53) resulted in 38.9% of cases where the judge indicated in their sentencing remarks that the offender was noted to lack remorse and in 40.7% of cases the offender was judged to be remorseful. The remaining cases (20.4%) were unable to be determined. In nine cases (15.5%), the offender's diagnosis influenced judgements of remorse. Five of these cases resulted in the offender being considered remorseful and in the remaining four cases the offender was considered to be unremorseful by the judges. Although the presence or absence of remorse was clearly identified for most cases, no further analyses were conducted due to the lack of agreement

on specific indicators for remorse judgments.

An independent t-test was conducted to assess differences in sentence length based on the documented presence or absence of remorse. The results were significant, indicating that offenders considered unremorseful by judges received a significantly longer mean sentence in months (M = 183.5, SD = 163.94) compared to those deemed remorseful (M = 74.29, SD = 61.31), t(21.06) = 2.67, p = .007, 95% *CI* [24.19, 194.24], Cohen's d = .88.

Discussion

The present study builds upon previous research that explored the original sentence lengths imposed on a sample of offenders suspected or diagnosed with autism to discern how judges assessed offender remorse. Various indicators of remorse were examined, including the offender's testimony, admission of guilt, cooperation with authorities, and reports from expert witnesses. Contrary to my predictions, it appears equally likely an autistic offender will be judged to be remorseful or not remorseful. Although the presence or absence of remorse was clearly identified in most cases, the lack of agreement between raters on specific indicators highlights the challenge in identifying and explaining remorse considerations in court proceedings. Only one of the indicators for remorse achieved inter-rater reliability where the diagnosis influenced the judge's conclusion of offender remorse. However, this indicator was also equally likely to arise in cases where the judge considered the offender to have or lack remorse. Without delving into the context of these conclusions, it is difficult to determine whether the judge's reference of the offender's diagnosis to explain the presence or absence of remorse impacted the sentence and, if so, whether these factors were considered mitigating or aggravating.

Consistent with Proeve (2024), who found that variations in sentencing severity due to remorse were often linked to the offender's plea (a common marker of remorse), these findings suggest that remorse assessments may be shaped more by procedural factors, such as plea bargaining, than by genuine expressions of remorse. However, the present study could not confirm this, as raters lacked consensus on whether a 'guilty plea' reliably indicated remorse. Given a judge's conclusions on offender remorse significantly affects their sentencing decision as was supported by the results showing unremorseful offenders receive longer sentences compared to remorseful offenders, it is concerning that the process involved lacks transparency and is vague/poorly operationalised. Moreover, the lack of consensus on how to identify and interpret remorse underscores the need for further research and evidence-based guidelines to inform judicial decision-making.

Despite the inability to conduct inferential analyses on the indicators for explaining judgments of remorse, the following narrative analysis will delve into some of the cases where there was agreement that the judge determined the offender to have or lack remorse. References to remorse were identified within the transcripts using the coding protocol developed for this study. The protocol and the cited transcripts can be found in Appendix F and Appendix G, respectively. This enabled the transcripts referencing remorse to be presented in themes: Diagnostic Considerations; Testimony Before the Judge (presentation); Guilty Plea; and Third-Party Evidence. **Diagnosis Considerations**

Judges often mentioned the diagnosis of autism alongside evaluations of an offender's remorse, typically focusing on its impact on the offender's ability to express emotions and rigid thought patterns. It was frequently noted that autism can impede an individual's ability to express traditional forms of remorse, significantly influencing how remorse (or the lack thereof) was interpreted in sentencing. In R v Hemming (2014), the judge acknowledged Hemming's limited emotional understanding due to his autism, which impacted his ability to show remorse. Despite this, Hemming received a sentence reduction reflecting his early plea and limited remorse. However, the judge emphasised the poor prospects for Hemming's rehabilitation due to his lack of emotional connectedness and considered community protection a priority, potentially outweighing any reduction for remorse Similarly, in R v Hladik (2015), the judge recognised several mitigating factors, including Hladik's willingness to plead guilty early and cooperate with the police. Despite his autism-related difficulties in accepting his wrongdoing, some limited indication of remorse was

noted and considered in the sentencing.

Even in the absence of traditional emotional remorse, many offenders demonstrated acknowledgment of responsibility through actions such as early guilty pleas, cooperation with authorities, and admissions of wrongdoing. This acknowledgment was often regarded as a form of remorse or a mitigating factor. For instance, in R v Bailey (2018), despite Bailey's autism making it difficult for him to identify and discuss emotions, the judge considered his acceptance of responsibility for the death and acknowledgment of the harm caused as an indication of remorse, resulting in a mitigating factor towards the sentence. In R v Stanford (2016), the judge attributed Stanford's lack of emotion and remorse to his autism. The judge noted that Stanford accepted responsibility for his actions, confessed voluntarily, and pleaded guilty, interpreting his lack of remorse as a function of his autism rather than an indicator of character. In R v Chapman (2018), Chapman did not testify but cooperated fully with authorities, admitted his role in the offence, and pleaded guilty early. Despite his social skills issues, which justified his reasoning for not testifying, the judge accepted his acknowledgment of responsibility and remorse. In R v Van Zoelen (2016), the judge noted that Van Zoelen was unable to express true remorse due to Asperger's disorder but acknowledged his responsibility and regret for his actions, considering this acknowledgment in sentencing. Similarly, in Mack v The State of Western Australia (2014), the judge dismissed the prosecution's argument about Mack's lack of remorse, recognising that his autism precluded such an abstract emotion. This aligns with findings by Proeve and Tanvir (2022), who reported that, in cases where remorse was judged absent or not under consideration, key indicators of this absence included failure to accept responsibility, lack of consideration for the victim, failure to understand the harm caused, and no change in behavior. In contrast, offenders who demonstrated acknowledgment of responsibility, such as through guilty pleas or cooperation, were more likely to have their actions interpreted as remorse or at least as mitigating factors, even when emotional remorse was not overtly expressed.

In some cases, the offender's lack of remorse was linked to rigid personality traits or

obsessive-compulsive characteristics rather than autism alone. The recognition of autism's impact on emotional and social understanding often led judges to consider the diagnosis as a mitigating factor, resulting in sentence reductions or more lenient sentences. There was an emphasis on ensuring that the lack of traditional emotional remorse due to autism was not misunderstood or unfairly penalised, aligning with principles of justice and fairness in sentencing. For example, in *R v Bretherton* (2013), Bretherton admitted responsibility for his actions but did not show evidence of remorse, which the judge attributed to his personality traits that impaired his ability to understand different viewpoints. The judge noted that Bretherton's lack of remorse was not an aggravating factor and should not be misinterpreted against him.

The judicial consideration of autism emphasises the need to recognise that traditional expressions of remorse may be affected by the offender's neurodiversity. This understanding allows for a fairer assessment of responsibility, ensuring that individuals are not unduly penalised for traits associated with their condition.

Testimony Before the Judge

Sentencing remarks about the offender and the judge's conclusion of their remorse were sometimes linked to how and whether the offender provided evidence before the judge on the witness stand. Such testimony has been considered weightier than other forms of remorse evidence as it allows the judge to evaluate the offender's remorse firsthand (See *DPP v Blackman*, 2014). In the case of *R v Barrett* (2017), Barrett demonstrated remorse by testifying directly before the judge. The judge relied on the offender's testimony and presented an analytical argument to support his decision. Although the judge's decision may have been somewhat subjective, partially influenced by the offender's conduct during the testimony, the assessment of the offender's overall conduct throughout the criminal justice process (addressed later) was critical in determining the genuineness of the offender's assessment of remorse. The offender's diagnosis was not mentioned in relation to the judge's assessment of remorse. Similarly, In *R v Holder* (2018), Holder was deemed to lack remorse on the witness stand which may or may not have contributed to her disregard for the

credibility of his overall testimony or the expert's testimony.

The option to decline presenting evidence before a judge is available to the defence. As seen in R v Monfries (2012), the offender declined to testify in court whereby the evidence of remorse presented in police interviews and the pre-sentence report was seemingly disregarded by the judge as a result. The judge did not mention the offender's diagnosis in their remorse considerations. Conversely, in R v Chapman (2018), the judge did not see the offender's decision not to testify as affecting his assessment of remorse when considering the offender's impaired social skills. The judge gave more weight to the offender's guilty plea, cooperation with police, and acceptance of responsibility in the absence of any direct expressions of remorse by taking the stand. In R vBretherton (2013), the offender declined to testify although he had admitted responsibility through his plea and cooperation with the police. The judge did not consider these factors as indicators of true remorse. Instead, the offender's decision not to testify was seen as an indication of his lack of remorse. However, an expert witness testified that the offender displayed traits consistent with an autism diagnosis, which might explain his difficulty in expressing remorse. Although the judge clarified that remorse was not considered an aggravating factor, he emphasised the importance of explaining the absence in the offender's case to avoid any misunderstanding and that could potentially be used against any appeal. Given the judge in this case commented on the offender's lack of remorse, it is unclear how it impacted his decisions regarding the sentence outcome. Similarly, the judge in R v Giles (2014) made it clear that remorse would not be a mitigating factor in the sentence, but the absence of the offender's remorse would not be used against him either.

The manner in which offenders provide testimony before the judge plays a crucial role in shaping perceptions of their remorse, with direct testimony often weighing more heavily than other forms of evidence. This highlights the complexity of assessing genuine remorse, as judges must navigate the nuances of each case, including the impact of neurodiversity and the decision to testify or not.

Guilty Plea

Guilty pleas can be used as evidence of the offender's remorse (Proeve et al., 1999). As has been described, in many cases the guilty plea was taken into account when other forms of remorse were unclear. However, in *R v Barrett* (2017), the guilty plea was not seen as an indication of remorse due to the plea's delayed timing, as the judge denied the offender's account of amnesia and unawareness of the committed offence. Similarly, in *R v Monfries* (2012), the guilty plea did not benefit the judge's assessment of remorse as the judge concluded the plea was a result of the evidence against the offender, and not a genuine expression of their remorse.

While guilty pleas can often be interpreted as indicators of remorse, their timing and context significantly influence judicial perceptions. Cases like *R v Barrett* and *R v Monfries* illustrate that a delayed or strategically motivated plea may not be regarded as a sincere expression of regret, complicating the relationship between plea and remorse in sentencing outcomes.

Third-party Evidence

Evidence presented by third parties of the defence or prosecution such as forensic experts may be considered by the judge in their assessment of offender remorse (Federal Court of Australia, 2024). In the case of *KS v The State of Western Australia* (2011), evidence of remorse was presented in a pre-sentence report, but the judge gave it less weight due to their interpretation of the offender's (lack of) acceptance of responsibility, which reduced the genuineness of the expressed remorse noted in the report. The offender's diagnosis was not linked to the assessment of remorse. In R v JP(2019), the judge appeared to link the offender's diagnosis and insight into the offence with their lack of acceptance of responsibility, potentially affecting the evaluation of remorse. Although the judge noted little to no evidence of remorse, except for the guilty plea, it is unclear how the diagnosis factored into the assessment. In this case, it appears that the discount for remorse was not applied based on the offender's (lack of) ability to empathise with others as determined by the judge.

In R v Holder (2018), an expert witness presented evidence of the offender's remorse with

reference to their diagnosis. However, the judge did not consider the diagnosis in her evaluation. The judge explicitly stated that she did not accept the expert witness' evidence of the offender's remorse nor rehabilitation prospects. On appeal, the judge analysed the sentencing judge's decision on remorse (R v Holder, 2019). The appeal judge placed emphasis on the lack of 'showing' remorse in the expert witness's evidence and concluded that the sentencing judge based her opinion on the offender's conduct at trial. It appears that neither judge considered the possibility of differences in emotional expression and the impact of interpersonal settings which was addressed in the expert witness' report. The appeal judge in this case agreed with the sentencing judge's decision, and the appeal was denied.

In *Gilshennan v The Queen* (2019), the judge considered the offender's diagnosis and the expert witness' evidence in their conclusion on the offender's lack of remorse. Akin to the previous case, these factors were evaluated with the offender's unfavourable rehabilitation prospects. However, it appears that specifics of the diagnosis mentioned by the expert (i.e., concrete thinking) were used to justify the judge's conclusions on these sentencing factors. In *DPP v Todd* (2019), the judge also accepted evidence from an expert witness on the offender's expressions of remorse in relation to their diagnosis and acknowledged the potential differences in emotional processing and expression. The judge noted that it is challenging to interpret expressions of remorse as genuinely reflecting contrition or whether the consequences of his offending that were now apparent to the offender and had influenced his feelings of regret for their actions.

In *Vucemillo v The State of Western Australia* (2017) an appeal against the sentence was raised due to new evidence of the offender's autism diagnosis. The judge in the appeal re-evaluated the offender's remorse, considering the impact the diagnosis had on their lack of insight. However, the appeal was denied due to other sentencing factors related to the diagnosis. The offence in this case involved communication between a police officer posing as a young girl and the offender, who insisted he believed he was communicating with an 18- year-old. This account of the offence or the absence of a real victim may have limited the offender's insight into the wrongfulness of the
behavior, potentially due to differences in cognitive processing associated with autism which might include weak central coherence, and an inability to think in the hypothetical (Fletcher-Watson & Happé, 2019). Similar to other cases, the offender's intellectual thought process was linked to the limited ability to experience and express remorse.

In R v Bailey (2018), the expert witness' report on the offender's acceptance of responsibility was considered by the judge in their evaluation of remorse in addition to the offender's conduct from the time of the offence and throughout the criminal justice process. Furthermore, the judge identified the impact of autism on the offender's ability to 'identify and discuss emotions' and explicitly stated that remorse would be used as a mitigating factor in sentencing. Similarly, in R v Van Zoelen (2012), the judge acknowledged the diagnosis with respect to the inability to express 'true' remorse and found the offender to have accepted responsibility for the offence and felt regret for his actions.

While third-party evidence, such as expert testimony, can significantly influence a judge's assessment of an offender's remorse, its effectiveness often hinges on the interplay between the offender's diagnosis and their perceived acceptance of responsibility. Cases like *R v Holder* and *Gilshennan v The Queen* illustrates that without a nuanced understanding of neurodiversity and emotional expression, judicial conclusions may overlook the complexities of remorse, potentially impacting sentencing outcomes.

Conclusion

The factors identified in judicial evaluations of offender remorse in these cases are similar to those found in past cases summarised by the National Judicial Courts Association (2023). Judges often weigh expressions of remorse against 'acts of contrition' to determine the genuineness of offender remorse. When evaluating remorse, judges consider factors such as the acknowledgement of wrongdoing, timing of the guilty plea, and cooperation with law enforcement. However, in some of the present cases, these factors appeared to be used to support the judge's own evaluation of the offender's remorse or disregarded them if the offender did not take the witness stand. Decisionmaking processes are subject to heuristic thinking strategies. Confirmation bias may have influenced the decisions in some of these cases, where the judge's impression of remorse by direct testimony (or lack of) led them to selectively choose information that supported their conclusions or reject information that contradicted them.

The impact of the autism diagnosis on a judge's considerations of offender remorse remains ambiguous, as there is inconsistency in how the judges treated this factor across cases. Some judges explicitly stated that the evidence concerning how the diagnosis influenced the experience and/or expressions of remorse would not be utilised as a mitigating factor in sentencing. In other instances, the judge disregarded expert evidence of the diagnosis' influence on remorse. In one case, the judge accepted evidence concerning the offender's diagnosis and decision not to take the stand but considered other forms of evidence to base their decision on remorse.

Despite the inability to pinpoint a consistent strategy for determining genuine remorse, it is evident that offenders judged to lack remorse are denied the discount of this potential mitigating factor, thereby incurring a more substantial sentence than would otherwise be imposed. Additionally, judgments regarding an absence of remorse can lead to a harsher penalty. Further investigation is imperative to examine the type and extent of information provided by expert witnesses and the judge's willingness to accept their conclusions, given the potential impact on sentence outcomes.

The sentencing calculus is inherently subjective, encompassing factors such as evaluations of offender remorse, underscoring the necessity for judicial education on common characteristics exhibited by autistic offenders. Presently, there exists no standardised protocol for presenting evidence from expert witnesses. Research suggests that autistic individuals are often subject to negative perceptions, a phenomenon observed in various social and professional interactions (Cage & Burton, 2019; de Boer & Pijl, 2016; K. Maras et al., 2019). Within the criminal justice system, where equality for all is mandated by law, negative impressions still have the potential for significant and concerning consequences.

Following on from this chapter, the final part of this three-part study will present further analyses on sentencing factors commonly considered alongside mental impairments in this sample of cases.

CHAPTER 5: Sentencing Considerations in Offender Diagnosis

Sentencing purposes have evolved to reflect changing societal priorities, with increasing emphasis on rehabilitation, mental health support, and community alternatives (Davidson et al., 2016). Key objectives identified in Chapter 1 include retribution, deterrence, rehabilitation, denunciation, and incapacitation (ALRC, 2023). I chose to focus on moral culpability, rehabilitation, and prison adaptability because these factors significantly influence sentencing outcomes, particularly for offenders with autism, emphasising the need for a nuanced understanding of how neurodiversity impacts the judicial process.

Research on how offence type affects judgments and perceptions of remorse is limited. Factors such as diagnostic labels, age, and gender can negatively influence sentencing and rehabilitation prospects (Berryessa & Wohlstetter, 2019; Kruis et al., 2023). Certain offences, including arson and sexual crimes, are often associated with autistic offenders (Ali, 2018; Allen et al., 2008). Implicit assumptions about violence can skew assessments of remorse, making it essential to explore how diagnostic information influences judicial penalties and their application to specific offences.

Aims and Hypotheses

As discussed in Chapter 1, autism can have both mitigating and aggravating effects on sentencing approaches, affecting both past behaviour (e.g., moral culpability) and future rehabilitation and prison experiences. The lack of clear guidelines on incorporating diagnoses like autism into sentencing, along with the discretionary nature of judicial decisions, raises concerns about potential injustices and inconsistencies.

This study builds upon analyses presented in Chapters 3 and 4, focusing on a sample of court cases involving offenders suspected or diagnosed with autism. I examined sentencing transcripts to determine how judges applied factors like moral culpability, rehabilitation potential, and adaptability to prison life in cases involving autism diagnoses. I also aimed to assess whether judges viewed autism as a mitigating or aggravating factor in sentencing outcomes.

Mitigating Outcomes

As illustrated in the Verdins principles (*R v Verdins*, 2007), mitigating factors related to mental impairment are relevant for both moral culpability and the ability to endure the prison environment. Judges may consider these factors in sentencing if they believe the offender has demonstrated remorse and has favourable rehabilitation prospects. Given the subjective nature of these evaluations, it is plausible that judges may employ heuristic thinking, leading to biased judgments. As shown in Figure 5, I hypothesised that the perceived presence of remorse would mediate the relationship between sentencing factors and outcomes. Specifically, I expected remorse to positively influence assessments of moral culpability, prison adaptability, and rehabilitation potential. I predicted these factors would lead to autism being regarded as a mitigating factor in sentencing, though the extent of this influence would vary when controlling for remorse.

Aggravating Outcomes

Sentencing principles prioritise fairness and justice, imposing limitations on factors that could disproportionately increase a sentence beyond the guidelines for the offence committed (Hammond, 2007). While the presence of remorse can lead to a reduction in an offender's sentence, the absence of remorse should not automatically result in increased penalties. However, if an offender is perceived to have unfavourable rehabilitation prospects - potentially influenced by their perceived remorse - judges may prioritise other sentencing purposes, such as community protection, resulting in longer sentences (Findlay et al., 2014).

The anticipated absence of remorse could result in aggravating applications of sentencing factors, such as a disregard for moral culpability, prison adaptability, and perceived rehabilitation potential. Consequently, these factors may contribute to viewing autism as an aggravating factor in sentencing, with influence levels varying after controlling for remorse.



Figure 5. Mediation Model for Perceived Offender Remorse and the Application of Sentencing Factors and Offender Diagnosis Impact on Sentencing Outcome

Method

Sentencing factors were chosen based on those which are commonly used when evaluating an offender's diagnosis in sentencing identified in Chapter 1. The same coding protocol and interrater analysis procedure for the previous study (Part A) (Chapter 4) was used and performed at the same time for the present study (Part B). See Table 11 for category descriptions. The interrater agreement results regarding autism-related sentencing considerations were highly conclusive (n =19). There were significant moderate to almost perfect agreement among raters for all factors (Landis & Koch, 1977). This included the sentence outcome of the diagnosis as a mitigating/aggravating factor where a substantial agreement was reached, ($\kappa = .70$, p = .000, 95% *CI* [.47, .94]). The indicators that identified the judge's decision (applications of moral culpability, prison adaptability, and rehabilitation) also showed significant agreement among raters ($\kappa = .60$, p <.001, 95% *CI* [.35, .85]; $\kappa = .82$, p < .001, 95% *CI* [.58, 1.06]; $\kappa = .47$, p = .003, 95% *CI* [.14, .79]). As the indicators for sentencing outcomes were directly linked to the offender's autism diagnosis, data from four cases were removed before any analyses in Part B due to the diagnosis being unknown at the time of sentencing.

Table 11. Part B coding descriptions to identify judicial evaluations of the autism diagnosis in sentencing by the presence and association of indicating variables with the diagnosis and the overall conclusion of whether the diagnosis was mitigating or aggravating

Indicators for diagnosis impact on sentencing	Description	Code
Moral culpability	The factors of intent, motive and circumstances that determine how much the offender should be held accountable for the criminal act.	 0 = Did not consider the diagnosis in the assessment of moral culpability 1 = Diagnosis was considered to impact moral culpability 2 = Diagnosis was considered to not impact moral culpability
Ability to withstand prison environment	The offender's ability to withstand their sentence in a prison environment.	 0 = Did not consider the diagnosis in the assessment of ability 1 = Diagnosis was considered to impact ability 2 = Diagnosis was considered to not impact ability
Rehabilitation potential	The offender's potential for rehabilitation during and after correctional institutionalism.	 0 = Did not consider the diagnosis in assessment of potential 1 = Diagnosis was considered to not impact potential i.e., good prospects for rehabilitation due to diagnosis 2 = Diagnosis was considered to impact rehabilitation i.e., minimal potential due to diagnosis 3 = Diagnosis was considered but was unable to determine the impact on potential
Overall conclusion of how the judge's evaluation of the diagnosis impacted the sentencing decision	 Overall, the judge did not take the diagnosis into consideration in sentencing decision. Overall, the judge considered the diagnosis to be a mitigating factor in sentencing decision. Overall, the judge considered the diagnosis to be an aggravating/non-mitigating factor in sentencing decision. It is not clear whether the judge judged the diagnosis to be a mitigating or aggravating/non-mitigating factor in sentencing decision. 	0 = Not considered in sentencing 1 = Mitigating 2 = Aggravating/non-mitigating 3 = Inconclusive

Data Analysis Plan

For all analyses in this study, I used the Intellectus Statistics (2019) online computer software. A chi-square test of independence will be conducted between Moral Culpability, Rehabilitation, Prison Adaptability, and Sentence Outcome. The chi-square test of independence is appropriate when the goal of the research question is to determine whether two categorical variables are independent.

The chi-square test requires the expected frequencies to be sufficiently large. At least 80% of expected frequencies should be greater than or equal to five, with none less than one (McHugh, 2013). Due to the limited sample size, Fisher's exact test will be conducted in cases where the assumptions for chi-square are not met. The Fisher's exact test does not make any assumptions contrary to the cell size requirements for the Chi-square test. For this reason, the Fisher's exact test is a common alternative to the Chi-square test, when there are small values in some of the cells of the contingency table (Mehta & Patel, 1983). The Fisher's exact test calculates the exact *p*-value using a contingency table. This *p* is used to evaluate the results of the test. For the Chi-square test, significance will be evaluated by calculating a chi- square statistic (χ^2) and obtaining a *p*-value from a χ^2 distribution with (r - 1) × (c - 1) degrees of freedom, where r and c are the number of rows and columns in the contingency table. An alpha of 0.05 will be used when accessing statistical significance.

To further examine relationships between sentencing factors (moral culpability, prison adaptability, rehabilitation) and the mitigating and aggravating factor outcomes of the diagnosis on sentencing, binary dummy variables were created to represent each level of these factors and decisions. These variables allowed me to determine the presence or absence of the application of these factors and the direction and extent of the effects. As the judge's conclusions of offender remorse were reliably identified by the raters in Part A, the categories for the judge's conclusions of offender remorse (present or absent) were also converted into dummy variables to explore relationships with the sentencing factors and sentence outcomes. Cases where factors were determined to be inconclusive, or when autism was not considered with sentencing factors (Part B), were excluded from further analyses due to low frequencies within these categories and the ambiguity of inconclusive decisions. As the focus of this research was to determine the impact of remorse considerations and associations with offender's diagnosed with autism, the judge's considerations of offender remorse were not limited to associations with the offender's diagnosis, unlike the sentencing factors that were directly associated with diagnosis-related considerations. Therefore, remorse (absent) was included as a predictor for diagnosis-aggravating sentence outcomes to assess whether this influenced other sentencing factors due to the judges' unfavourable conclusions on offender remorse.

Ordinal regressions will be conducted to investigate whether the application of sentencing factors (moral culpability, prison adaptability, rehabilitation) predict sentence outcomes (diagnosis resulting in a mitigating/aggravating factor) and whether remorse (absent, present) mediates this relationship. Ordinal regression is a statistical technique that is used to predict behavior of an ordinal level dependent variable with a set of nominal, ordinal, or interval/ratio predictor variables.

The assumptions of ordinal regression are the absence of multicollinearity and the assumption of proportional odds. Multicollinearity will be assessed by calculating variance inflation factors (VIF). VIF values over 10 will suggest the presence of multicollinearity (Menard, 2002). The proportional odds assumptions, also known as the assumption of parallel lines, assesses if the slope of the log-odds is equal for all categories of the dependent variable. If proportional odds cannot be assumed, then each predictor will have as many coefficients as thresholds in the ordinal regression. If the assumption of parallel lines is met, then only one coefficient needs to be calculated for each predictor.

The overall model significance for ordinal logistic regressions will be examined using the χ^2 omnibus test of model coefficients. McFadden's R^2 will be examined to assess the percent of variance accounted for by the independent variables. Predicted probabilities of an event occurring will be determined by Exp(B), also known as the odds ratio.

Pearson correlation will be conducted to explore relationships between offender age and sentence length. Cohen's standard will be used to evaluate the correlation coefficient, where 0.10 to .29 represents a weak association between the two variables, 0.30 to 0.49 represents a moderate association, and 0.50 or larger represents a strong association (Cohen, 2013).

Results

Descriptive Statistics

Summary statistics were calculated for offender age and sentence length. Data were missing for age in five cases, and four life sentences were not recorded. As shown in Table 12, the average age of offenders was 33.5 years, while the average sentence was 126.02 months.

Frequencies and percentages were calculated for offence types related to sentencing factors and outcomes. According to Table 13, murder was the most frequently observed offence. However, combined, the sexual assault categories (ANZSOC division [03] and subdivision levels [031]) accounted for most observed offences (n = 21, 39.62%). Assault and manslaughter (including driving causing death) occurred equally across cases, while other offences were rare, each appearing only once.

For cases where the offender's diagnosis was considered a mitigating factor, assault was the most frequently observed offence, followed by sexual assault and murder/manslaughter offences. In contrast, for aggravating outcomes, the frequency distribution across offences was less clear, with murder being the most common offence type.

In cases where offenders were considered to lack remorse, 34.62% involved murder. For cases where the diagnosis was deemed neither mitigating nor aggravating, or when raters could not determine the judge's conclusion, the sexual assault categories were most frequently observed. Sexual assault cases also showed the highest frequency of offenders being considered remorseful, followed by manslaughter.

In Table 14, there were slightly more cases where the diagnosis did not impact the offender's moral culpability for murder offences. Conversely, for manslaughter, the diagnosis more

often influenced moral culpability. Assault cases frequently resulted in the diagnosis affecting the offender's moral culpability, whereas sexual assault offences were more likely to result in the diagnosis not affecting moral culpability.

The ability of offenders to withstand prison was more often considered in cases of murder and manslaughter. For sexual assault offences, the diagnosis was more likely to be disregarded. Unfavorable rehabilitation prospects were most associated with murder offences, with slightly fewer cases where the judge could not determine between favorable and unfavorable prospects when the diagnosis was considered.

Variable	М	SD	n	SEM	Min	Max	Skewness	Kurtosis
Offender Age	33.50	13.67	48	2.01	19.00	73.00	1.24	0.10
Sentence Length	126.02	123.72	49	17.86	9.00	552.00	1.67	2.44

Table 12. Summary Statistics for Offender Age and Sentence Length

 Table 13. Frequencies for Diagnosis Impact on Sentence Outcomes by Offence Type

	Dx Impact on Sentence				
Offence	Mitigating	Aggravating	Neither	Inconclusive	Total
Murder (011)	4	5	2	1	12
Manslaughter (013)	4	1	1	1	7
Assault (021)	6	-	1	-	7
Sexual Assault (031)	3	1	5	1	10
Sexual Assault &	2	1	-	5	9
Related (03)					
Homicide & related	-	1	-	-	1
(01)					
Robbery (061)	-	-	1	-	1
Deal or Traffic Illegal	-	-	-	1	1
Drugs (102)					
Property Damage	-	1	-	-	1
(121)					

Note. n = 5 removed as Dx was unknown at sentencing. Dx (diagnosis).

]	Remore	se	Ν	Ioral Culpability	7	Pris	on Adaptabili	ty	Re	habilitati	ion Potenti	al
Offerrag	N.	Var	I	Dx not	Dx	Dx no	Dx not	Dx	Dx no-	Dx not	Fav.	Unfav.	Considered
Ollence	INO	res	inc.	considered	impacted	impact	considered	impacted	impact	considered			inc.
Murder (011)	9	3	1	2	4	6	4	6	2	3	-	5	4
Manslaughter	2	-	-	1	4	2		4	2		1		1
(013)	2	5	1	1	4	2	I	4	2	4	I	I	1
Assault (021)	5	2	7	1	5	1	4	1	2	4	3	-	-
Sexual Assault		-		2	2	-	-	2		-			
(031)	3	5	4	2	3	5		3	I		-	4	-
Sexual Assault	_						_		0	_			
& Related (03)	5	4	1	3	l	4	5	3	0	7	-	1	-
Homicide &				_									
related (01)	1	-	-	1	-	-	1	-	-	-	-	1	-
Robbery	-	-	1	1	-	-	1	-	-	1	-	-	-
Deal or Traffic													
Illegal Drugs	-	-	I	-	-	I	1	-	-	1	-	-	-
Property													
Damage	1	-	-	-	-	1	1	-	-	-	-	1	-
Total	26	19	22	11	17	21	25	17	8	27	4	14	5

 Table 14. Frequencies for Sentencing Factors (Remorse, Moral Culpability, Prison Adaptability, Rehabilitation) by Offence Type

Note. n = 5 removed as Dx unknown at sentencing. Dx (Diagnosis).

Frequencies and percentages were calculated for each sentencing factor and sentence outcome. As shown in Table 15, the most frequently observed category of sentence outcome was when the diagnosis was considered a mitigating factor in sentencing (n = 19, 35.85%), which was eight more cases than when the diagnosis was considered an aggravating factor. However, there were many cases where the diagnosis was not considered to be an overly mitigating nor aggravating factor (n = 10, 18.87%), and in some instances, the raters were unable to determine how the judge considered the diagnosis (n = 9, 16.98%).

For remorse, offenders were almost equally likely to be considered remorseful as they were to be considered lacking remorse. The offender's diagnosis was considered alongside remorse evaluations in only nine cases (16.98%). This indicator for remorse conclusions did not appear to significantly influence whether the diagnosis was considered more of a mitigating or aggravating factor, with only a slight increase of cases (n = 2) for mitigating.

For moral culpability, there were few differences in frequencies between cases where this sentencing factor was considered to be impacted by the diagnosis and cases where it was considered not to be impacted by the diagnosis. When moral culpability was impacted by the diagnosis, this constituted the majority of diagnosis-mitigating sentence outcomes.

Conversely, when the diagnosis was considered not to affect the offender's moral culpability, this comprised the majority of diagnosis-aggravating sentence outcomes.

For prison adaptability, the most frequently observed category was when the judge did not consider the diagnosis alongside this factor, followed by cases where the judge considered the diagnosis to affect the offender's ability to withstand prison. However, when the diagnosis was not considered alongside this factor, over half of these cases resulted in neither mitigating nor aggravating outcomes and inconclusive judgment ratings (n = 15, 28.3%), which suggests a lack of a direct relationship with diagnosis mitigating/. aggravating sentence outcomes.

A similar pattern was observed for rehabilitation, where the diagnosis was not considered alongside this factor resulting in the most frequent category. Most of these cases fell into the 'Neither' and 'Inconclusive' sentence outcomes (n = 16, 30.19%). The second most frequent category was when the diagnosis was found to be unfavourable towards the offender's rehabilitation prospects. Most of these cases resulted in the diagnosis being considered an aggravating factor in the sentence outcome.

			Sentence Outcome	•		
Variable	Mitigating $(n = 19)$	Aggravating $(n = 11)$	Neither $(n = 10)$	Inconclusive $(n = 9)$	Diagnosis n/a (n = 5)	Total $(n = 53)$
Remorse						
Absent	2 (10.53%)	7 (63.64%)	4 (40.00%)	5 (55.56%)	3 (60.00%)	21 (39.62%)
Present	15 (78.95%)	2 (18.18%)	3 (30.00%)	2 (22.22%)	0 (0.00%)	22 (41.51%)
Inconclusive	2 (10.53%)	1 (9.09%)	3 (30.00%)	2 (22.22%)	2 (40.00%)	10 (18.87%)
Remorse (indicated by diagnosis)						
No	14 (73.68%)	8 (72.73%)	10 (100.00%)	8 (88.89%)	5 (100.00%)	44 (83.02%)
Yes	5 (26.32%)	3 (27.27%)	0 (0.00%)	1 (11.11%)	0 (0.00%)	9 (16.98%)
Moral Culpability						
Diagnosis not considered	1 (5.26%)	1 (9.09%)	7 (70.00%)	2 (22.22%)	0 (0.00%)	11 (20.75%)
Impacted	17 (89.47%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	17 (32.08%)
Unimpacted	1 (5.26%)	9 (81.82%)	3 (30.00%)	7 (77.78%)	0 (0.00%)	20 (37.74%)
Diagnosis unknown	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	5 (100.00%)	4 (7.55%)
Prison Environment						
Diagnosis not considered	6 (31.58%)	3 (27.27%)	10 (100.00%)	5 (55.56%)	0 (0.00%)	24 (45.28%)
Impacted	11 (57.89%)	4 (36.36%)	0 (0.00%)	3 (33.33%)	0 (0.00%)	18 (33.96%)
Unimpacted	2 (10.53%)	3 (27.27%)	0 (0.00%)	1 (11.11%)	0 (0.00%)	6 (11.32%)
Diagnosis unknown	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	5 (100.00%)	4 (7.55%)
Rehabilitation						
Diagnosis not considered	10 (52.63%)	1 (9.09%)	9 (90.00%)	7 (77.78%)	0 (0.00%)	27 (50.94%)
Favourable	4 (21.05%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	4 (7.55%)
Unfavourable	2 (10.53%)	9 (81.82%)	0 (0.00%)	1 (11.11%)	0 (0.00%)	12 (22.64%)
Considered – unable to determine	3 (15.79%)	0 (0.00%)	1 (10.00%)	1 (11.11%)	0 (0.00%)	5 (9.43%)
Diagnosis unknown	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	5 (100.00%)	4 (7.55%)

Table 15. Frequency Table for Sentence Outcome (Mitigating, Aggravating, Neither, Inconclusive, Diagnosis not applicable) by SentencingFactors (Remorse, Moral Culpability, Prison Environment, Rehabilitation)

Correlation Analysis

To explore the relationship between offender age and sentence length for this sample, a Pearson Correlation test was performed. The results showed only a slight negative correlation between the offender's age at sentencing and sentence length. However, this was not significant (r =-.03, p = .422).

Chi-square and Fisher Exact Tests

The assumption of adequate cell size to perform Chi-square tests were assessed, which requires all cells to have expected values greater than zero and 80% of cells to have expected values of at least five (McHugh, 2013). As shown in Table 16, sentencing outcome, moral culpability, prison adaptability, rehabilitation, remorse, and remorse (indicator) had expected values in all cells, indicating the first condition was met. However, expected frequencies of at least five were not met, indicating the second condition was violated. Moral culpability in combination with either rehabilitation or prison did not meet the required assumptions of having expected cell frequencies of at least five. Similarly, the pairing of rehabilitation with prison also violated these assumptions. Moral culpability met all assumptions when paired with remorse as all cells contained expected values greater than zero and expected frequencies of at least five. However, remorse (indicator), prison adaptability, and rehabilitation failed to meet assumptions when paired with remorse. When the assumptions of the Chi-square test were violated, Fisher's exact test was used to produce more reliable results due to limited cell frequencies.

Sentencing Factors and Sentence Outcome

To further examine relationships between sentencing factors (moral culpability, prison adaptability, rehabilitation, remorse) and the mitigating and aggravating factor outcomes of the diagnosis on sentencing, a Chi-square Test of Independence was performed on each of the sentencing factors for sentence outcome. The results of the Chi-square test were significant

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based on an alpha value of .05. Moral culpability ($\chi^2(1) = 24.04, p < .001$), rehabilitation ($\chi^2(1) = 8.89, p = .003$), and remorse ($\chi^2(1) = 12.57, p < .001$) appeared to be related to sentence outcome. Prison adaptability was not significant ($\chi^2(1) = 0.15, p = .694$), suggesting that the observed frequencies were not significantly different than the expected frequencies. Fisher's exact tests were performed on moral culpability, rehabilitation, and remorse for sentence outcome due to assumption violations.

The results of the Fisher exact test were significant based on an alpha value of .05, suggesting that moral culpability (p < .001, Cramér's V = .67) rehabilitation (p = 008, Cramér's V =.41), and remorse (p < .001, Cramer's V = .49), were related to sentence outcome. For moral culpability and sentence outcome, the following level combinations had observed values that were greater than their expected values as shown in Table 16: sentence outcome (diagnosis-aggravating) with moral culpability (diagnosis-unimpacted) and sentence outcome (diagnosis-mitigating) with moral culpability (diagnosis-impacted). Sentence outcome (diagnosis-aggravating) with moral culpability (diagnosis-impacted) and sentence outcome (diagnosis-aggravating) with moral culpability (diagnosis-impacted) and sentence outcome (diagnosis-aggravating) with moral culpability (diagnosis-impacted) had observed values that were less than their expected values.

For rehabilitation and sentence outcome, Table 17 shows the following level combinations had observed values that were greater than their expected values: sentence outcome (diagnosisaggravating) with rehabilitation (unfavourable); sentence outcome (diagnosis-mitigating) with rehabilitation (unfavourable) and sentence outcome (diagnosis- mitigating) and rehabilitation (favourable). Sentence outcome (diagnosis-aggravating) and rehabilitation (favourable) had observed values that were less than their expected values.

For remorse and sentence outcome, the Fisher's exact test was conducted for a $2x^2$ contingency table, and the odds ratio was calculated, OR = 24.45. This indicates that the odds of observing remorse (absent) and sentence outcome (diagnosis-aggravating) is 24.45 times as likely as observing remorse (present) and sentence outcome (diagnosis-aggravating). Table 18 shows the following level combinations had observed values that were greater than their expected values:

sentence outcome (diagnosis-aggravating) with remorse (absent) and sentence outcome (diagnosismitigating) with remorse (present). Sentence outcome (diagnosis- mitigating) with remorse (absent) and sentence outcome (diagnosis-aggravating) with remorse (present) combinations had observed values that were less than their expected values.

Chi-square tests were performed on each combination of sentencing factors. As moral culpability and rehabilitation ($\chi^2(1) = 4.75$, p = .029) did not meet assumptions, further tests were performed using the Fisher exact test. Moral culpability and rehabilitation were not related to one another (p = .063, Cramér's V = .30). Since the Fisher's exact test was conducted for a 2x2 contingency table, the odds ratio was calculated, OR = 11.81. This indicates that the odds of observing moral culpability (unimpacted) and rehabilitation (unfavourable) is 11.81 times as likely as observing moral culpability (impacted) and rehabilitation (unfavourable). As shown in Table 19, the following level combinations had observed values that were greater than their expected values: rehabilitation (unfavourable) with moral culpability (impacted), and rehabilitation (favourable) with moral culpability (impacted). The following level combinations had observed values that were less than their expected values: rehabilitation (favourable) with moral culpability (unimpacted). moral culpability (impacted). The following level combinations had observed values that were less than their expected values: rehabilitation (favourable) with moral culpability (unimpacted). moral culpability and prison also failed to meet the minimum assumptions.

	Moral Culpability			
Sentence Outcome	Unimpacted	Impacted		
Diagnosis-aggravating	10 (2.08)	0 (3.21)		
Diagnosis-mitigating	1 (3.74)	17 (5.77)		

Table 16. Observed (Expected Frequencies) for Moral Culpability and Sentence Outcome

Note. Fisher's Exact Test (n = 53)

Table 17. Observed (Expected Frequencies) for Rehabilitation and Sentence Outcome

	Rehabil	itation
Sentence Outcome	Unfavourable	Favourable
Diagnosis-aggravating	10 (2.26)	0 (0.75)
Diagnosis-mitigating	2 (1.36)	4 (0.45)

Note. Fisher's Exact Test (n = 53)

 Table 18. Observed (Expected Frequencies) for Remorse and Sentence Outcome

	Rem	orse
Sentence Outcome	Absent	Present
Diagnosis-aggravating	8 (1.89)	2 (3.21)
Diagnosis-mitigating	2 (3.21)	15 (5.45)

Note. Fisher's Exact Test (n = 53)

Table 19. Observed and Expected Frequencies for Moral Culpability and Rehabilitation

	Moral Culpability			
Rehabilitation	Unimpacted	Impacted		
Unfavourable	10 (2.49)	2 (1.13)		
Favourable	1 (0.83)	3 (0.38)		

Note. Fisher's Exact Test (n = 53)

A Chi-square test was performed on each sentencing factor for remorse. Remorse appeared to be related to moral culpability $\chi^2(1) = 8.59$, p = .003, Cramér's V = .40. As shown in Table 20, the following level combinations had observed values that were greater than their expected values: remorse (absent) with moral culpability (unimpacted) and remorse (present) with moral culpability (impacted). The following level combinations had observed values that were less than their expected values: remorse (present) with moral culpability (unimpacted) and remorse (absent) with moral culpability (unimpacted).

Rehabilitation ($\chi^2(1) = 5.62$, p = .018) and prison adaptability ($\chi^2(1) = 0.68$), p = .409) failed to meet assumptions when paired with remorse therefore additional tests were performed on rehabilitation. For prison adaptability, the results were not significant (p =.409), suggesting that remorse and prison adaptability could be independent of one another (Table 22). For rehabilitation, the Fisher exact test was significant (p = .044, Cramér's V =.33), suggesting that remorse and rehabilitation are related to one another. As shown in Table 21, the following level combinations had observed values that were greater than their expected values: rehabilitation (unfavourable) with remorse (absent), rehabilitation (unfavourable) with remorse (present), and rehabilitation (favourable) with remorse (present). rehabilitation (favourable) combined with remorse (absent) had observed values that were less than their expected values.

	Remo	orse
Moral Culpability	Absent	Present
Unimpacted	12 (7.82)	7 (11.18)
Impacted	2 (6.18)	13 (8.82)
Impacted	2 (6.18)	13 (8.8

Table 20. Observed (Expected Frequencies) for Moral Culpability and Remorse

 Table 21. Observed (Expected Frequencies) for Rehabilitation and Remorse

	Remorse			
Rehabilitation	Absent	Present		
Unfavourable	9 (2.04)	3 (1.36)		
Favourable	0 (0.51)	3 (0.34)		

Note. Fisher's Exact Test (n = 53)

Table 22. Observed (Expected Frequencies) for Prison Adaptability and Remorse

	Remorse		
Prison Adaptability	Absent	Present	
Unimpacted	4 (3.08)	3 (3.92)	
Impacted	7 (7.92)	11 (10.08)	

Note. Fisher's Exact Test (n = 53)

Ordinal Logistic Regression

Significant relationships between sentencing factors (moral culpability, rehabilitation, remorse) and sentence outcomes (diagnosis as mitigating or aggravating) were identified in previous analyses. Specifically, higher than expected values for the aggravating outcome were observed for cases where moral culpability was deemed unimpacted, rehabilitation was unfavorable, and remorse was absent. Conversely, higher than expected values for the mitigating outcome were observed when moral culpability was impacted, rehabilitation was favorable, and remorse was present. These findings informed the subsequent analyses using Ordinal Logistic Regression, as described later.

Binary dummy variables, as outlined in the data analysis plan, were used for the analyses. Each variable had two levels: Moral Culpability-Impacted (0 = no; 1 = yes), Moral Culpability-Unimpacted (0 = no; 1 = yes), Rehabilitation-Unfavorable (0 = no; 1 = yes), Rehabilitation-Favorable (0 = no; 1 = yes), Remorse-Absent (0 = no; 1 = yes), Remorse-Present (0 = no; 1 = yes), Sentence Outcome: Diagnosis-Aggravating (0 = no; 1 = yes), and Diagnosis-Mitigating (0 = no; 1 = yes). Frequency distributions are presented in Table 23 and Table 24.

	Diagnosis Aggravating					
Moral Culpability-unimpacted	0 = No	1 = Yes				
0 = No	29 (70.73%)	1 (8.33%)				
1 = Yes	12 (29.27%)	11 (91.67%)				
Total	41	12				
Rehabilitation-unfavourable						
0 = No	37 (90.24%)	1 (8.33%)				
1 = Yes	4 (9.76%)	11 (91.67%)				
Total	41	12				
Remorse-absent						
0 = No	29 (70.73%)	4 (33.33%)				
1 = Yes	12 (29.27%)	8 (66.67%)				
Total	41	12				

 Table 23. Frequencies (percentages) for Model 1: Diagnosis Aggravating Sentence Outcomes by

 Moral Culpability (unimpacted), Rehabilitation (unfavourable), and Remorse (absent)

Table 24. Frequencies (percentages) for Model 2: Diagnosis Mitigating Sentence Outcomes byMoral Culpability (impacted), Rehabilitation (favourable), and Remorse (present)

	Diagnosis Mitigating					
Moral Culpability-impacted	0 = No	1 = Yes				
0 = No	34 (100%)	2 (10.53%)				
1 = Yes	-	17 (89.47%)				
Total	34	19				
Rehabilitation-favourable						
0 = No	34 (69.39%)	-				
1 = Yes	15 (30.61%)	4 (8.16%)				
Total	49	4				
Remorse-present						
0 = No	27 (79.41%)	4 (21.05%)				
1 = Yes	7 (20.59%)	15 (78.95%)				
Total	34	19				

As shown in Table 24, converting the variables for diagnosis-mitigating resulted in cells with zero frequencies, preventing further analysis of that model. Therefore, simple mediation models, illustrated in Figure 7 were tested to assess whether remorse mediated the relationship between sentencing factors and diagnosis-aggravating outcomes.



Figure 6. Mediation Models for Sentencing Factors (Moral Culpability-unimpacted, Rehabilitation-unfavourable, Remorse-absent)

Ordinal Logistic Regressions were conducted to determine if the odds of observing sentence outcome (diagnosis-aggravating) could be explained by the variation in moral culpability (unimpacted) and remorse (absent) (Model 1). Similarly, whether the odds of observing sentence outcome (diagnosis-aggravating) could be explained by the variation in rehabilitation (unfavourable) and remorse (absent) (Model 2).

Variance Inflation Factors (VIFs) were calculated to detect the presence of multicollinearity between predictors. High VIFs indicate increased effects of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10 should be considered the maximum upper limit (Menard, 2002). All predictors in the regression model have VIFs less than 10. Table 25 and Table 26 presents the VIF for each predictor in the models.

Variable	VIF
Moral Culpability (unimpacted)	1.50
Remorse (absent)	1.50

 Table 25. Variance Inflation Factors for Moral Culpability (unimpacted) and Remorse (absent)

Table 26. Variance Inflation Factors for Rehabilitation (unfavourable) and Remorse(absent)able 26. Variance Inflation Factors for Rehabilitation (unfavourable) and Remorse(absent)

Variable	VIF
Rehabilitation (Unfavourable)	1.09
Remrose (absent)	1.09

In order to test the assumption of proportional odds, a likelihood ratio test was conducted between a model with the proportional odds assumption and a model without the proportional odds assumption. When proportional odds are not assumed, separate parameters are estimated for each pair of levels in the outcome variable. If proportional odds can be assumed, these additional parameters are not necessary, and a single parameter can be estimated for each predictor. The likelihood ratio test was not significant for both regression models, $\chi^2(0) = 0.00$, p = 1.000, indicating that proportional odds can be assumed, as the data did not have significantly different fit between models.

The models were evaluated based on an alpha of .05. Both models were significant, suggesting the observed effects of moral culpability (unimpacted) and remorse (absent) on sentence outcome (diagnosis-aggravating) ($\chi^2(2) = 18.06$, p < .001) and rehabilitation (unfavourable) and remorse (absent) on sentence outcome (diagnosis-aggravating) ($\chi^2(2) = 30.88$, p < .001) were unlikely to occur under the null hypothesis. Therefore, the null hypotheses can be rejected. McFadden's R-squared was calculated to examine the model fit, where values greater than .2 are indicative of models with excellent fit (Louviere et al., 2000). The McFadden R-squared value was calculated for Model 1 (.88) and Model 2 (.55).

The regression coefficient for the 1 category of moral culpability (unimpacted) was significant, B = 3.09, $\chi^2 = 7.69$, p = .006. However, the mediation hypothesis was rejected as the regression coefficient for cases where remorse was considered to be absent was not significant, B = 1.23, $\chi^2 = 2.33$, p = .127, suggesting that observing cases with remorse-absent considerations did not have a significant effect on the odds of observing a diagnosis- aggravating outcomes relative to cases where remorse was not evaluated in this way. Table 27 summarises the results of the ordinal regression model.

The regression coefficient for the cases where rehabilitation was considered with the diagnosis and seen as unfavourable was significant, B = 4.47, $\chi^2 = 14.13$, p < .001. However, the regression coefficient for cases of remorse (absent) was not significant, B = 1.17, $\chi^2 = 1.26$, p = .261, also rejecting the mediation hypothesis. These results suggest that observing cases where offenders were considered to lack remorse did not have a significant effect on the odds of observing diagnosis-aggravating outcomes relative to alternative remorse conclusions. Table 28 summarises the results of the ordinal regression model.

Predictor	В	SE	χ^2	р	OR	95.00% CI
(Intercept)	3.83	1.11	11.82	< .001	-	-
Moral Culpability (unimpacted)	3.09	1.11	7.69	.006	21.99	[2.48, 195.22]
Remorse (absent)	1.23	0.81	2.33	.127	3.43	[0.70, 16.66]

Table 27. Ordinal Logistic Regression Results for Moral Culpability (unimpacted) and Remorse(absent) predicting Sentence Outcome (diagnosis-aggravating)

Table 28. Ordinal Logistic Regression Results for Rehabilitation (unfavourable) and Remorse(absent) predicting Sentence Outcome (diagnosis-aggravating)

Predictor	В	SE	χ^2	р	OR	95.00% CI
(Intercept)	4.08	1.17	12.09	< .001	-	-
Rehabilitation	4.47	1.19	14.13	< .001	86.95	[8.48, 891.98]
(unfavourable)						
Remorse (absent)	1.17	1.04	1.26	.261	3.23	[0.42, 24.90]

Discussion

The aim of this study was to examine the relationships between sentencing factors (moral culpability, prison adaptability, and rehabilitation potential) and how a diagnosis was considered as either a mitigating or aggravating factor in sentencing. Additionally, I aimed to determine how evaluations of remorse interacted with these considerations.

The results revealed that when the judge considered the offender's diagnosis to be a mitigating factor, it was more likely that the offender's moral culpability was considered to be impacted by the diagnosis. However, both favourable and unfavourable evaluations of the offender's rehabilitation potential were likely to arise in diagnosis-mitigating outcomes. In cases where the judge considered the offender's diagnosis to be an aggravating factor (or non-mitigating), it was more likely that the offender's diagnosis did not impact their moral culpability, and their rehabilitation prospects were judged unfavourably.

Offenders were more likely to be considered unremorseful in diagnosis-aggravating cases compared to other remorse evaluations and offenders considered to be remorseful were more likely to arise in cases where the diagnosis was viewed as a mitigating factor.

Remorseful offenders were also more likely to have the judge consider their diagnosis as affecting their moral culpability and to have favourable prospects for rehabilitation.

Conversely, offenders who were considered to lack remorse were more likely to have their moral culpability judged as unaffected by their diagnosis. Despite these existing relationships, remorse was not found to mediate the relationship between sentencing factors and sentence outcomes.

These findings align with recommendations that highlight the importance of assessing moral culpability for offenders with a mental impairment at the time of the offence to result in a just sentence. Other considerations such as details surrounding the offence and expert witness evidence appear to influence moral culpability applications over and above perceptions of remorse. Nevertheless, relationships of remorseful offenders and favorable applications of moral culpability remained. Interestingly, these results appear to reject any link between remorseful offenders and

favourable rehabilitation considerations. The diagnosis appears to be more telling of the offender's potential to be rehabilitated rather than their remorse for their behaviour. Considerations of the offender's autism diagnosis with their ability to adapt in prison did not appear to relate to any of the diagnosis related sentence outcomes. As in the previous chapter's discussion, I present a narrative synthesis of the sentencing transcripts (Appendix G) on the outcome variables identified in the search protocol.

Moral Culpability, Rehabilitation and Diagnosis-Aggravating Outcomes

Judgments on rehabilitation were potentially influenced by perceived unmalleable features of autism. However, contrary to predictions, the diagnosis' influence on judges' conclusions on rehabilitation was not necessarily related to how the diagnosis was considered to influence offence commission by reducing the offender's moral culpability. To discuss this further, the following cases present examples of the application of unfavourable and favourable rehabilitation prospects in sentencing.

In the case of R v Kelsall (2015), differing opinions from expert witnesses were accompanied by uncertain conclusions regarding the benefits of psychological intervention. It appears that the judge was unable to base his decision on the experts' evidence for the rehabilitation potential of the offender and instead relied on details of the offence that favoured community protection. Similarly, in R v Hemming (2014), the expert witness was unable to provide a firm conclusion on rehabilitation prospects. However, they did suggest long-term one-on-one psychological intervention would be a viable plan, while medication was deemed unlikely to help the offender's condition. The judge appears to have also prioritised community protection after concluding the offender had poor prospects for rehabilitation, as indicated by the expert's opinion that the offender lacked traits of empathy and emotional connectedness.

In *R v Stanford* (2016), expert opinions also lacked definitive conclusions on their assessments on the offender's potential rehabilitation. However, it was noted that the current risk assessment could change depending on the offender's response to treatment. It appears the judge

placed emphasis on protecting the community and details of the offence, concluding that the offender's present condition poses a risk for the foreseeable future.

Furthermore, the judge specifies how diagnosis considerations can not only decrease a sentence but also increase a sentence to provide community protection. The judge also addresses the offender's moral culpability for the offence deciding that it was unimpacted by the diagnosis.

The expert witness in R v *Giles* (2014) appeared to be more positive with respect to the offender's rehabilitation suggesting interventions that would improve his condition and reduce recidivism. These suggestions appeared to be based on social improvements recorded in the assessment interviews with the offender during his time on remand. However, the judge once again placed more emphasis on protecting the community and details of the offence. The judge appeared to reject the expert's opinion and instead believed the offender's rehabilitation prospects to be unfavourable.

The judge in *DPP vs Todd* (2019) directly used the evidence from the expert witnesses in his assessment of rehabilitation. However, emphasis was placed on the proposed sexual disorder rather than autism regarding treatment efficacy. There were differing conclusions from the experts' reports that the judge had to weigh and base his conclusion.

The expert who interviewed the offender reported favourable rehabilitation potential. That expert considered that the offender was willing to explore the reasons behind his offending, was remorseful, and understood the impact that the offence had on the victim and her family. Conversely, the second expert based their evidence on recidivism studies relating to the offence, the lack of evidence supporting successful treatment options, and the risk of relying on individuals to take medication due to the unwanted side-effects. The judge favored the second expert's opinion over the conclusions drawn from the clinician's interview assessment. It appears the statistical evidence on recidivism for the offence type weighed more than the clinician's interpersonal evaluations in the judge's decision. The judge was specific regarding the weight applied to competing sentencing factors that mitigated or aggravated the overall sentence. While the judge recognised several factors which were in favour of the offender, overall, the aggravating factors were found to be greater determinants of the sentence imposed.

Characteristics of the offender's diagnosis were referenced by the judge in *R v Brown* (2016) in his conclusion that the diagnosis did not reduce moral culpability, which then led to his assessment of the offender's rehabilitation potential. The judge considered community protection to be a priority based on his previous offending and his opinion that there were unfavourable prospects for rehabilitation. Similarly, the appeal judges in *Vucemillo v WA* (2017) argued how mental impairments can be used both positively and negatively against the offender in sentencing. The judges used an example of the nexus between mental impairments and offence commission which might reduce the need for general deterrence but increase the need to protect the community.

In *Gilshenan v R* (2019), protecting the community outweighed any mitigating effects of rehabilitation. The judge considered the 'concrete thinking' of the offender as a characteristic of autism in the assessment of rehabilitation although did not find evidence that reduced the offender's moral culpability. The judge considered the details of the offence (and past offences) emphasising the need to place more weight on community protection.

In *Davies v R* (2019), the evidence provided by expert witnesses was revisited by the appeal judges to assess how the offender's autism diagnosis was used in sentencing. Both reports advised autism to be a life-long condition. The appeal judges noted the sentencing judge's conclusion of unfavorable rehabilitation prospects was determined by the offender's trial behavior and psychological reports. Additionally, the sentencing judge used the expert witness' evidence in his application of Verdins principles deciding that the reduced ability to cope in prison was the only applicable mitigating factor.

Moral Culpability, Rehabilitation and Diagnosis-Mitigating Outcomes

In two cases, autism was associated with unfavourable rehabilitation prospects where the diagnosis was considered mitigating in sentencing. In R v Van Zoelen (2012), while the judge recognised positive aspects of the offender's potential, the offender's rehabilitation was thought to

be limited by the life-long restrictions of the diagnosis and how this posed a risk to the community. However, unlike the autism-aggravating sentences where rehabilitation was considered unfavourable, moral culpability in this case was impacted by the offender's diagnosis and applicable to mitigate the sentence by the judge according to Verdins principles. Similarly, in *Hladik v R* (2015), the judge found moral culpability to be reduced due to the diagnosis while rehabilitation was negatively affected by the diagnosis. In both cases, the judges determined the diagnosis impacted the offender's ability to adapt in prison contributing a mitigating outcome in sentencing.

The examples in these cases suggest the diagnosis' influence on moral culpability outweighs any considerations on rehabilitation. However, this is only the case when the diagnosis is an overall mitigating factor in sentencing. For aggravating outcomes, unfavourable rehabilitation conclusions appeared to weigh heavily on the sentence when moral culpability was unimpacted by the offender's diagnosis. Greater emphasis was placed on protecting the community rather than rehabilitating the offender. In these decisions, prison adaptability appeared to also contribute less weight.

The present study did not address the influence of expert evidence on judges' decisions. However, it appears that judges applied this evidence inconsistently across cases. Expert witnesses' guarded conclusions on rehabilitation prospects were often used to justify judges' reliance on offence details when assessing risk to the community. Additionally, the nature of the offence may have influenced the details related to community protection in aggravating outcomes. In cases with unfavourable rehabilitation conclusions and diagnosis-related aggravating sentences, the type of offence may have been a contributing factor. For example, the cases primarily involved murder and sexual assault offences, both of which rank among the top 10 in severity according to the National Offence Index (ABS, 2019). This may explain why the diagnosis was evaluated more harshly in relation to these sentencing factors.

Sentencing Factors and Offence Classification

In cases where the diagnosis was a mitigating factor, assault was the most common offence, followed by sexual assault and murder/manslaughter. For aggravating outcomes, murder was the most frequent offence. Cases where offenders lacked remorse predominantly involved murder. Sexual assault was the most common offence in cases where the diagnosis had no clear impact on the sentence outcome or where raters could not determine the judge's conclusion. Sexual assault cases also showed the highest frequency of offenders considered remorseful, followed by manslaughter.

For murder, the diagnosis less frequently affected moral culpability, while it more often did for manslaughter, likely due to the lesser charge compared to murder. Assault cases often saw the diagnosis affecting moral culpability, whereas sexual assault cases frequently did not, potentially reflecting the perceived severity of the offences, with assault being seen as less harmful. Remorse was most common among sexual assault offenders, indicating no clear link between moral culpability and being judged as remorseful. Similarly, for murder, moral culpability was more frequently applied despite offenders often being found unremorseful.

Unfavourable rehabilitation prospects were more likely for severe offences like murder, and the majority of rehabilitation assessments did not consider the diagnosis, especially in sexual assault cases. This may reflect the judge's tendency to disregard the diagnosis in sentencing to avoid highlighting the rejection of mitigation. Consequently, there were no cases with favorable rehabilitation prospects, with the majority resulting in unfavourable outcomes. Consideration of an offender's ability to withstand prison was more frequent in murder and manslaughter cases, likely due to the severity of the sentences for these offences. Consistent with previous patterns, the diagnosis was more often disregarded in sexual assault cases.

As assault offences were the most common for mitigating outcomes, I was interested in discovering how the diagnosis was used in these cases. The following case transcripts explore these relationships. The sentencing judge in *Leung v R* (2014) accepted the expert opinion that the

offender was unlikely to reoffend, suggesting good prospects for rehabilitation. However, although the appeal judges agreed with the sentencing judge's decision, they believed there was an error in the extent of mitigation applied to the sentence such as the reduction in the offender's moral culpability and ability to withstand the prison environment. The decision for the offender to be resentenced with a reduced term was based upon the original expert evidence that specified causal connections between the offender's diagnosis and offending behavior. Similarly, the judge in R v*Sharp* (2019) link both moral culpability and rehabilitation with the diagnosis using the expert's evidence resulting in the diagnosis to mitigate the sentence.

The appeal judges in R v Sieden (2009) concurred with the sentencing judge that the impact of the offender's autism diagnosis (including co- occurring diagnoses) on moral culpability and prison environment were to be mitigating in sentencing the offender.

However, the rehabilitation prospects of the offender in this case were not addressed. Moral culpability was also favored in R v Vittori (2019). Further, rehabilitation was judged to be impacted by the diagnosis as identified in the expert evidence. Although the judge submitted the opinion that rehabilitation prospects were not strong due to previous offenses, he noted that the specific interventions would improve the offender's rehabilitation and concluded with a favorable decision on the sentence.

In the appeal of *Jeffree v R* (2017), it was argued that while the judge did consider the offender's mental condition for moral culpability, the specific details of the offence required more weight to be placed on protecting the community. Additionally, favorable assessments of rehabilitation and prison adaptability led to the diagnosis to be considered as a mitigating factor. However, despite the application of these sentencing factors, it appears they were outweighed by the importance of general deterrence and community protection, particularly in light of the offense details. The resulting sentence of 117 months significantly exceeded the average for assault (M *months* = 33; ABS, 2020), and hence, formed the primary basis for the appeal.

The expert witness evidence in R v Stacker (2017) was considered by the judge for moral
culpability alongside the offender's diagnosis. The judge also considered other 'disorders', such as drug addiction, in relation to the offender's criminal behavior. It was noted that despite a series of attempts in treatment facilities, these efforts failed to prevent the offender from continuing to use illegal drugs.

Overall, the mitigating outcomes for assault offences were mainly influenced by the application of moral culpability. The one outlier identified by the sentence length imposed was reflected in the use of general deterrence and community protection overpowering diagnosismitigating factors. Details of the offence deemed to be of greater severity were used to justify the application of these sentencing purposes. Similar patterns were identified in diagnosis-aggravating outcomes where community protection outweighed the need to rehabilitate the offender. When moral culpability was addressed, evidence presented by expert witnesses appeared to influence the judge's conclusions. Similarly, positive assessments on rehabilitation would include treatment recommendations even when aspects of the diagnosis were viewed unfavorably. Although statistical analyses were limited by small frequencies within offence type, favourable moral culpability applications appear more likely to arise in cases of assault compared to other offences. One explanation could be how offence severity is perceived as highlighted in cases where community protection outweighed any mitigating considerations of the diagnosis. Assault is ranked 31 on the National Offence Index (ABS, 2018) compared to the other offences ranking within the 1-10 range. Justifying the moral culpability for the offence by way of mental impairment may occur more frequently when outcomes of the offence are less severe, such as the immediate and long-term effects on the victim and how the offence is considered by the community.

Moreover, the severity of recidivism repercussions may reflect on the judge's responsibility to protect the community.

Summary

The primary objective of this study was to investigate how remorse and sentencing factors influenced sentence outcomes in a sample of cases involving autistic offenders.

Unfavourable rehabilitation judgments were found to be the most significant predictor for the offender's diagnosis to be considered an aggravating factor in sentencing. Sentencing transcripts revealed moral culpability was often overlooked or downplayed in relation to the diagnosis in these cases. Unfavourable rehabilitation prospects emerged when expert evidence lacked certainty and aspects of the diagnosis were perceived as fixed, leading to greater emphasis on offence details and community protection. Contrary to predictions, lacking remorse did not mediate the relationship between the application of sentencing factors and aggravating outcomes on sentencing. However, remorse was still associated with sentence length, reflecting its influence on the severity of the sentence imposed. Moral culpability emerged as the most critical predictor of mitigating outcomes. Being considered remorseful had a minor influence on the application of sentencing factors and mitigating outcomes.

Offence type appeared to influence specific sentencing factors, with murder and sexual assault cases more likely to result in the judge to conclude unfavourable prospects for rehabilitation and consider the diagnosis as an aggravating factor in sentencing. In contrast, assault cases tended to receive more favourable judgments regarding moral culpability and rehabilitation. Mitigating outcomes were more likely to arise for assault offences, which rank much lower on the severity index compared to offences such as sexual assault and murder.

However, one outlier case showed that the increased severity of an assault offence led to prioritising general deterrence and community protection overshadowing the mitigating effects of the diagnosis.

The presence of expert witness evidence appeared to play a crucial role in shaping judgments on rehabilitation prospects. Positive expert opinions relating to the diagnosis appeared to influence mitigating outcomes, while inconclusive or unfavourable evidence often resulted in a focus on community protection in sentencing.

Limitations

Despite the valuable insights gained, this research faces certain limitations that restrict the generalisability of the findings. Small frequencies within offence categories and inability to reliably

identify the indicators to explain judges' considerations for offender remorse challenge broad conclusions. Additionally, it is essential to consider that most cases involved offenders with other co-occurring diagnoses, such as depression, drug addiction, and a history of trauma. These conditions commonly co-occur with autism and may have influenced the observed associations in sentencing decisions.

It is noteworthy that individuals diagnosed with autism often present with various conditions, including ADHD, anxiety disorders, psychotic disorders, and intellectual disabilities (Khachadourian et al., 2023; Rødgaard et al., 2021). Autistic individuals are also found to be four times more likely to have a PTSD diagnosis compared to non-autistic individuals (Lobregt-van Buuren et al., 2021), and there is an association with addictive disorders, including substance abuse (Lalanne et al., 2017; Wijngaarden-Cremers et al., 2014). Therefore, the presence of co-occurring conditions in these cases is not surprising, highlighting the complexity of considering various conditions in the context of sentencing decisions.

Conducting research with a larger and more diverse sample of cases involving autistic offenders would increase the generalisability of findings. This would allow for a more comprehensive understanding of how various offence types, severity levels, and demographic characteristics interact with the presence of autism and other conditions in sentencing. Furthermore, comparing sentencing outcome and use of sentencing factors in cases of offenders diagnosed with autism with those of offenders without an autism diagnosis could provide a better understanding of the unique considerations and challenges in sentencing individuals with autism. Further investigation into offence severity and the application of sentencing factors should also be investigated to determine whether this influences the rehabilitation pathways for the offender.

Longitudinal studies could be undertaken to examine the long-term effects of autism and cooccurring conditions on offender rehabilitation and recidivism rates. Such studies would help identify whether autistic individuals have unique trajectories and responses to different types of interventions. Investigating the effectiveness of specific interventions and treatment programs for autistic offenders, considering their co-occurring conditions, could be helpful. Research could assess the impact of tailored rehabilitation programs that address the specific needs and challenges of this population. The impact of early interventions and support services for individuals with autism in preventing or reducing criminal behavior, potentially influencing future sentencing outcomes, is also a viable area for future research.

Investigating the role of expert witnesses in influencing sentencing decisions would be beneficial. Research could explore how different expert opinions, certainty levels, and recommendations for rehabilitation impact judges' decisions and sentencing outcomes. The development of specific sentencing guidelines or protocols for cases involving autistic offenders may be worth exploring to promote consistency and fairness in sentencing.

Research could delve deeper into the role of remorse in sentencing decisions involving offenders in general. Understanding how judges assess and weigh expressions of remorse, especially in cases with autism-related challenges in communication and emotional expression, would shed light on its influence on sentencing. Further, conducting research on judges' decision-making processes in autism-related cases would offer valuable insights into the factors that weigh most heavily in sentencing decisions.

Finally, it is imperative to investigate judgments, rehabilitation recommendations, and outcomes concerning different offences in light of these findings. If increased severity of the offence is linked to the offender's potential for reform, there might be a diminished emphasis on rehabilitation efforts (e.g., treatment programs).

In summary, understanding the complex interplay between autism, offence type, cooccurring conditions and witness evidence is important to ensure the appropriateness of sentencing for autistic people, highlighting the need for effective intervention and more comprehensive research. These findings offer valuable insights into how factors such as moral culpability, rehabilitation potential, and remorse influence sentencing outcomes. However, to deepen our understanding of these dynamics, it is essential to examine perceptions of remorse in an empirical setting, specifically within a mock sentencing hearing that involves both autistic and non-autistic offenders. The next chapter will focus on this exploration, investigating how sentencing factors are applied and perceived in these contexts. Additionally, we will examine the mechanisms behind remorse evaluations and how they may differ between the two groups, illuminating the implications for both legal practice and psychological assessment.

CHAPTER 6: Constructing Offender Remorse

Building on previous studies, this chapter addresses the gap in understanding how judges evaluate remorse and its impact on sentencing. Prior findings indicated that remorse is related to sentence length (Chapter 4), with remorseful offenders more likely to receive mitigating outcomes and unremorseful offenders more likely to face aggravating outcomes (Chapter 5) with regards to diagnosis-sentencing factor assessments. However, the results regarding the use of sentencing factors and offence type have been mixed, underscoring the need for a clearer framework for evaluating remorse. To address this, I introduce the Offender Remorse Evaluation (ORE) measure, grounded in Affect Control Theory (ACT).

This framework offers a statistical model for interpreting how offenders' communication and presentation of remorse influence judicial perceptions, providing a structured approach to assess remorse through interactions between identity and emotional expression.

The final study of this thesis, detailed in this chapter, presents the development and piloting of the ORE measure in a mock court sentencing hearing. Participants, including individuals with and without an autism diagnosis, portrayed offenders in various offence scenarios. The analysis will investigate the outcomes of the ORE measure along with an existing trait impression measure developed by Sasson et al., (2017), presented in Chapter 2, and single item sentencing factors (remorse, moral culpability, rehabilitation, offence severity) and sentence length. The chapter will conclude with a discussion and recommendations on future validation studies of the ORE.

Theory

As discussed in previous chapters, the concept of remorse within the legal system can be interpreted from multiple perspectives. However, the precise mechanism through which the judiciary forms judgments concerning an offender's display of remorse remains unclear. Weisman's (2014; p. 8) interpretation distinctly portrays remorse as a form of "communication to an audience", rather than a "feeling" experienced by an individual. Moreover, he adopts Goffman's (1971) formulation for the offering of apologies and the act of exhibiting remorse to be recognised as remedial exchanges. In this context, apologies and expressions of remorse are envisaged as "rituals in which the wrongdoer seeks to establish that their essence - their true identity - is distinct from their actions - the transgression they committed, which caused harm to a victim" (Weisman, 2014; p. 9). Essentially, the offender separates themself from the offensive act and agrees that their actions were morally unacceptable. The offender's apology and expressions of remorse aim to represent his true self as different from the self who committed the offence. The judge evaluates the offender's presentation and if successful, decides that the offender's true identity is the one that opposes the offence rather than the offence reflecting the offender's true character.

To further investigate the concept of remorse, Weisman (2014) conducted a comprehensive analysis of 178 Canadian court cases highlighting the elements that are likely to influence a judge's perception of offender remorse. Remorseful offenders were identified through the admission of responsibility, showing one's true feelings, and evidence of self- transformation. Admission of responsibility required the offender to acknowledge that the offence was committed willfully without attempting to justify the act. True feelings of remorse involved projecting visible suffering through emotional expression. However, a process of validation was required to ensure the suffering was oriented towards the other person and not the offender's circumstances. Selftransformation involved the offender to make changes in his life to prevent the occurrence of similar behaviour showing that they are no longer the person who committed the offence.

Proeve and Tudor (2016) synthesised psycho-sociological theories to investigate offender remorse in the legal realm. Their conclusions, paralleling those of Weisman (2014), that a remorseful offender should encompass the following characteristics:

- Recognition that he has wronged and harmed another person.
- Recognition that he was responsible for his action, which was voluntary.

- A sense that his life has changed in some way as a consequence of his actions.
- A desire to atone or make reparation by expressing remorse, making restitution, to the person harmed, undergoing penance, behaving differently in the future.
- Evidence of having enacted the desire to atone or make reparation.
- Desire to be forgiven.

Proeve and Tudor (2016) also outlined the specific attributes that an offender's presentation should embody to attract positive perceptions of their remorse. Physical attributes were described as the individual's demeanour such as their physical posture, facial expressions, tone of voice and gestures. Verbal expressions of remorse included apologies or self-report of their feelings which might include their concern for the victim. The authors note that verbal expressions are a more deliberate form of behaviour compared to the involuntary nature of demeanour which has the potential to mask one's true feelings. Finally, a remorseful offender might take several actions, including surrendering to the police, pleading guilty, compensating the victim materially or symbolically, seeking self- rehabilitation through treatment or employment, or engaging in self-punitive measures like self-loathing and denying themselves certain activities. Offender actions of remorse were suggested to be the highest form of evidence in the context of the legal system (Proeve & Tudor, 2016).

The present study builds upon the foundation laid by these prior constructions of offender remorse by examining the interrelated variables involved. To summarise, a remorseful offender exhibits accountability for the committed offence acknowledging the consequences of their actions upon others. Further, the offender's aspiration to effect behavioural change, thus undergoing a process of internal transformation. Should an offender express these pivotal attributes, the judge will corroborate this with the offender's communicative conduct (verbal and non-verbal) by interpreting the genuineness of the offender's inner emotional state, thereby confirming the presence of remorse. Ultimately, drawing upon this evaluation, the judge will make a conclusive determination regarding the offender's true character as one that either aligns with the offending behaviour (unremorseful) or one as being separate from the offending behaviour (remorseful). For the purposes of this study, I developed four categories to evaluate offender remorse: Admission of responsibility, Self-transformation, Implicit expressions, and Explicit expressions. As shown in Table 29, each category reflects the attributes identified by Weisman (2014) and Proeve and Tudor (2016). I developed these categories by identifying similarities among the remorse attributes described by the authors, resulting in four distinct groups. Additionally, references of Australian Sentencing Acts provide further detail and validation for these categories, which are relevant to sentencing decisions.

Table 29. Construction of Judicial Remorse Across Four Categories with Definition, Framework Component, and Reference of AustralianSentencing Acts

Category	Definition	Theoretical Framework	Australian Sentencing Acts
Admission of Responsibility	The offender provided evidence that he accepted responsibility for his actions and acknowledged the impact his actions had on others.	 Weisman (2014) Characterise the transgressive act as one he has chosen to do. Identify himself with his wrongful act (acknowledge he chose to commit the act). Someone who makes use of none of the deflecting blame devices for diminishing responsibility. Proeve & Tudor (2014) Recognition that he has wronged and harmed another person. Recognition that he was responsible for his action which was voluntary. 	 Part 3, s21, <i>NSW Sentencing Act, 1999</i> The remorse shown by the offender for the offence, but only if: (1) The offender has provided evidence that he or she has accepted responsibility for his or her actions. (2) The offender has acknowledged any injury, loss or damage caused by his or her actions or made reparation for such injury, loss or damage (or both). Part 1, s.4, SA Sentencing Act, 2017 To publicly recognise the harm done to the community and to any victim of the offending behaviour. Part 2, s 11, SA Sentencing Act, 2017 The extent of the defendant's remorse for the offence, having regard in particular as to whether: (1) The defendant has acknowledged any injury, loss or damage caused by the defendant's actions, or voluntary made reparation for any such injury, loss or damage (or both).
Self- transformation	The offender expressed a desire for self- transformation and behavioural change.	 Weisman (2014) Promises to undergo, or has already undergone, a process of self-transformation in which those parts of the former self that contributed to the misconduct or betrayed the moral community, are replaced by a new self that is committed to the moral community. Willingness of offender to make fundamental changes in one's character so that the wrongdoing will not reoccur. Proeve and Tudor (2014) Apologise for offending, repent and/or promise to mend their ways. A desire to atone or make reparation by, for example, expressing remorse, making restitution to the person harmed, undergoing penance, or behaving differently in the future. 	Part 4.1 s 33, ACT Crimes (Sentencing) Act 2005 (f) whether the offender is voluntary seeking treatment for any physical or mental condition that may have contributed to the commission of the offence.

Table 29. Continued

Implicit expressions	Range of behaviours that indicate feelings of remorse/psychological discomfort (e.g., demeanour, facial expressions, body posture/movements, voice prosody)	 Weisman (2014) Expressions of remorse shows or demonstrates the pain by making the suffering visible. Feelings of remorse are expected to be painful, unwanted, and spontaneous rather than deliberate or planned (breaking down/losing control; perceived as involuntary) Absence of any visible or psychological discomfort read as absence of remorse. Feelings of remorse or their absence are perceived as reflecting core attributes of the person who has offended how a person feels is perceived as revealing a truth that words alone cannot achieve. Proeve and Tudor (2014) Range of behaviours that indicate an offender's remorse other than outward acts such as speech and practical, results orientated conduct. Manner of the offender's physical posture and bodily movements; Facial expressions, gestures, proneness to weeping, tone of voice. 	 Part 2, s 5, VIC Sentencing Act, 1991 In sentencing an offender, a court may have regard to the conduct of the offender on or in connection with the trial or hearing as an indication of remorse or lack of remorse on his or her part". Part 4.1 s 33, ACT Crimes (Sentencing) Act 2005 In deciding how an offender should be sentenced (if at all) for an offence, a court must consider whichever of the following matters are relevant and known to the court: (w) whether the offender has demonstrated remorse. Part 2 s9, QLD Penalties and Sentences Act, 1992 In sentencing an offenderthe court must have regard primarily to the following – (x) any remorse or lack of remorse of the offender. Part 2 s 5, NT Sentencing Act, 1995 In sentencing an offender, a court must have regard to: (a) the conduct of the offender during the proceedings. Part 3 s 53, NT Sentencing Act, 1995 In considering whether the offender is unlikely to reoffend, the matters the sentencing court may have regard to include the following: (b) any expressions of remorse by the offender.
Explicit expressions	Verbal expressions of an apology, feelings of remorse, and concern for the victim.	 Proeve and Tudor (2014) Explicit form of behaviour which can often give more detailed insight into the inner emotional life of the offender. Self-report of feelings telling audience how they feel (e.g., I'm feeling very remorseful, I feel rotten about how I behaved). Solicitous enquiry about the well-being of victim of offending. Apologise for offending, repent and/or promise to mend their ways. 	• As above

Affect Control Theory and Remorse

To understand how these four categories for evaluating offender remorse interact, I adopted the Affect Control Theory (ACT) framework. ACT explores the relationships among identity, behaviour, and emotion in social interactions, providing insights into how individuals perceive and form impressions of others (Smith-Lovin & Heise, 1988). According to ACT, people manage their emotions and interpret others' emotions through three dimensions: evaluation, potency, and activity. Evaluation concerns the intensity and valence (positive or negative) of the expressed emotion; potency refers to the perceived dominance associated with the emotion; and activity pertains to the social context (Heise, 2016).

For example, during the sentencing phase of a court hearing, if an offender is perceived as remorseful, the judge is likely to view the valence and dominance of this emotion as positive. In this context, identity' refers to the preconceived notion of the offender's character, largely based on their criminal behavior. According to Smith-Lovin (1990), assessments of the offender's character and criminal conduct involve dimensions of evaluation, potency, and activity, and these dimensions typically carry negative connotations. Individuals with immoral character are often associated with immoral behaviours and vice versa. Thus, these evaluations provide a basis for interpreting emotional expressions, such as remorse, which can either confirm or challenge existing perceptions of character (Smith- Lovin, 1990). Consequently, impressions of an offender's true character depend on whether their emotional response to their criminal behaviour is perceived as positive (remorseful) or negative (unremorseful). For instance, consider a scenario where an offender displays a smirk during court proceedings. If the judge has a preexisting view of the offender as immoral due to their criminal behaviour, they might interpret the smirk as consistent with this negative characterisation, thus reinforcing the belief that the offender is aligned with criminality. Conversely, if the offender's facial expression appears emotionally downcast, it would contrast with the expected traits and challenge the judge's preformed impression. As shown in Figure 7, this illustrates how impression formation is influenced by situational factors and the subjective

interpretation of emotions (MacKinnon & Heise, 1993), making it possible to infer aspects of the individual's character from their emotional expressions.

Researchers investigating legal variables in sentencing have used the ACT framework to analyse how specific legal factors affect sentencing outcomes. Tsoudis (2000) explored the impact of emotional distress and character validation on sentencing judgments, focusing on the victim's character as a key legal variable influencing the process. The study also examined how the offender's character and past criminal record shaped perceptions of their intrinsic nature. The findings revealed that the offender's emotional expression significantly influenced observers' assessments of their inherent character. Additionally, the confirmation or disconfirmation of this character assessment played a crucial role in shaping the final sentencing decisions (Tsoudis, 2000).

Robinson et al. (1994) provided strong support for ACT by linking offender emotions to character assessments. Participants read transcripts of a confession from a male student convicted of vehicular manslaughter, with the transcripts modified to depict either emotional distress (sadness and remorse) or emotional neutrality (calmness and relaxation). Participants then evaluated the offender's character, predicted future behaviour, and recommended sentencing. Those displaying emotional distress were perceived as having a less negative character and were considered less likely to reoffend, leading to more lenient sentencing.

Conversely, offenders who appeared emotionally neutral were judged more harshly, with their character viewed more negatively, resulting in harsher sentencing.

Based on the four identified categories of offender remorse, the offender's character was proposed to be assessed through the content of their evidence regarding 'admission of responsibility' and 'self-transformation'. The evaluation of the offender's emotional expressions, both 'implicit' and 'explicit' expressions of remorse, was proposed to either confirm or disconfirm the validity of their evidence. This, in turn, would impact the judge's sentencing decision.



Figure 7. Process of Impression Formation

Offence Type and Remorse

As highlighted in Chapters 1 offence type can influence perceptions of an offender's character, mental health, and sentence outcomes (Barnett & Feild, 1978; Berryessa & Wohlstetter, 2019; Kleinke et al., 1992). Proeve and Tudor (2016) acknowledged that not all types of offences are suitable subjects for remorse, particularly those that lack a clear victim. Conversely, there is also the question of whether an adequate expression of remorse can exist for offences deemed extreme in severity (Proeve & Tudor, 2016). The author's proposed that remorse is generally agreed to be an appropriate emotional response, and therefore expected, for offences such as murders, assaults, and thefts.

Empirical evidence is currently limited in this area; therefore, it was of interest to examine the effects of offence type on remorse in the present study. Furthermore, associations of offence type and autism have been identified in Chapter 1 (Ali, 2018; Allen et al., 2008; Mogavero, 2016). I aimed to investigate a variety of offence types that have been found to be committed by the autistic population to discover whether specific offences attract higher critical evaluations of offender remorse and whether these evaluations varied for the autistic offender. Furthermore, it was of interest to discover how perceptions of offence severity factored into evaluations of remorse and sentence outcomes.

Sentencing Factors

Regarding the cases involving autistic offenders discussed in Chapter 5, it was found that unfavourable rehabilitation considerations had the most substantial relationship with sentence outcomes where autism was considered an aggravating factor. Additionally, moral culpability emerged most frequently for sentences that were mitigated with regards to the offender's autism. Remorse failed to explain any mediating relationship between the use of sentencing factors and how the diagnosis was considered in sentencing. However, it's noteworthy that while remorse did not directly impact sentencing considerations, it was still notably associated with the length of the imposed sentence, indicating its role in influencing the severity of the sentencing outcome.

The nature of the committed offence emerged as a discernible influence in the sentencing process. Notably, cases involving murder and sexual assault exhibited a higher likelihood where the judge considered the offender to have unfavourable rehabilitation potential. In contrast, assault cases seemed to elicit more favourable assessments of these sentencing factors. Furthermore, autism-mitigating sentence outcomes were notably more prevalent in cases of assault, likely due to their comparatively lower severity ranking on the offence index in comparison to more severe offences like sexual assault and murder.

In the current study, the presence of the diagnosis will be withheld to discover the presence of intergroup differences. However, the investigation into sentencing factors will be expanded upon to explore their interactions with remorse evaluations, offender traits, the type of offence committed, and sentence length to offer a more comprehensive understanding of how these factors intertwine within the context of the study's objectives.

Impressions

Chapter 2 presented a meta-analysis comparing impressions of autistic and non- autistic individuals, revealing that autistic individuals generally receive less favourable ratings. Trait and behavioral intent outcomes showed moderate effects on the variations between target groups. Many of the studies reviewed used the First Impression measure developed by Sasson et al. (2017).

Although individual items within these categories were not subjected to regression analysis due to their large number and inherent variability, consistent patterns in perceptions emerged.

Autistic individuals were consistently rated as less physically attractive compared to nonautistic individuals, a finding observed across multiple studies. Additionally, autistic individuals were frequently perceived as more socially awkward, a characteristic that prominently differentiated the two groups and demonstrated a significant effect size in most studies. Sasson et al. (2017) found that reduced ratings of awkwardness were associated with higher perceived likelihoods of engaging in conversations, forming friendships, establishing good interpersonal relationships, and conversely, spending less time alone.

As previously discussed, misinterpretations of behaviours that deviate from expectations can lead to unfavorable personality judgments. In a sentencing scenario, such misinterpretations may affect how a judge perceives an offender's remorse and rehabilitation prospects, potentially influencing the sentence imposed. Thus, it is valuable to include Sasson et al.'s (2017) impression measure to explore relationships between perceived traits and sentence-related outcomes, such as remorse, rehabilitation, and sentence length. The impression construct includes two variables: traits and behavioral intent. However, since behavioural intent items relate to social interactions like the intention to spend time with the target, these were excluded from the study. This is because such items are likely influenced by the target's status as a convicted criminal rather than a general social context. Nonetheless, trait items, such as perceived awkwardness and attractiveness, remain relevant. For example, an offender's attractiveness has been shown to affect sentence outcome (Swanner, 2022). These traits were shown to differ between the two groups in the studies discussed in Chapter 2 and provide valuable insights into how these perceptions may influence other sentence related outcomes.

Method

Design

A 2 (offender: autistic, non-autistic) x 8 (offence type: manslaughter, assault, carriageoffensive, procure-minor, sexual-assault, arson, child-material, drug-manufacture) randomised mixed design was implemented. Offender was within-groups and offence type were between groups. The dependent variables include the four components of the ORE: admission of responsibility (ADM), self-transformation (TRA), implicit expressions (IMP), explicit expressions (EXP); and sentence (SEN). Additional variables for trait impressions will be examined, along with single measures for remorse, rehabilitation and moral culpability, and offence severity.

Stimulus Development

The stimuli employed in this study were developed based on the 'Virtual You be the Judge' online program created by the Victorian government's Sentencing Advisory Council (2022). This initiative allows users to gain insights into the sentencing process by virtually participating in various aspects of a sentencing hearing, offering an engaging and interactive learning experience. Real criminal cases are depicted, involving offenders, victims, prosecutors, defence lawyers, and judges. Additionally, the program presents the maximum sentence lengths for each offence as stipulated by Victorian sentencing legislation. Participants can assume the role of the judge, assigning sentences to offenders. These sentences are then compared to both the actual sentences imposed by the original judge and the average sentences assigned by other users.

For the purpose of this study, participants were provided with information solely about the offender prior to determining a sentence and completing a series of measures. The criminal offence scenarios were drawn from actual criminal court cases across Australia involving defendants suspected or diagnosed on the autism spectrum (Chapter 3, 4, and 5). From this pool of cases, eight distinct offences were selected to construct scenarios for the stimulus videos. The intention was to offer a diverse array of criminal offences by utilising factual details from actual cases involving autistic offenders. Cases were chosen with attention to the level of sensitive and explicit content to

mitigate potential distress for both actors and participants, while still encompassing various offence categories pertinent to the study's objectives (e.g., sexual assault, child pornography). As depicted in Figure 9 and Figure 10, the videos were designed to feature a brief 'Law & Order' themed introduction before the narrator delves into the case details and the offender presents their testimony. As shown in Figure 11, each video ends with the narrator instructing the viewer to take on the role of the sentencing judge by considering the offender and their testimony when they answer the following questions.



 $\frac{1}{2}$ "In the criminal judicial system, the defendant can enter a plea of guilty or not

guilty. Guilty plea or verdict, the sentencing judge will have the final say. These, are their stories,

and YOU, will BE, THE JUDGE." ^J



The defendant, Mr John Jones, placed an online advertisement on Craigslist – an adult networking site where classified ads can be posted that cover a variety of categories such as housing, job postings, and people seeking relationships.

Figure 9. Example of the Presentation of Case Details Featuring Audio Narrator



Figure 10. Example of the Presentation of Post-testimony Instructions Featuring Audio Narrator

Stimulus Participants

Autistic stimulus actors (n = 8) were recruited from the Flinders University Autism Research database, which includes information about individuals diagnosed with autism residing in the region and interested in participating in research. Non-autistic actors (n = 8) were recruited through word-of-mouth, social media ads, and the university's research participation pool. All participants received compensation as a \$100 gift card or course credit.

To verify autism diagnoses, each autistic participant's diagnosis was confirmed by reviewing formal diagnostic reports from registered diagnosticians, ensuring the authenticity of the diagnoses. All autistic participants had previously completed the Wechsler Abbreviated Scale of Intelligence – Second Edition (WASI-II; Wechsler, 2011) through the university's database. The Verbal Comprehension Index (VCI) data from this assessment was accessed with participants' consent. The WASI-II is a well-established test of cognitive ability with strong reliability and validity, including high internal consistency coefficients (typically above 0.90) (Wechsler, 1999). The VCI measures an individual's ability to understand, use, and think with spoken language, confirming the absence of intellectual disabilities and facilitating meaningful comparisons between the autistic and non-autistic groups.

For non-autistic participants, an online verbal IQ assessment, 'Spot the Word' (Baddeley et al., 1993) was used. This test has demonstrated acceptable reliability and validity, though it is less established compared to the WASI-II. The scores from 'Spot the Word' were transformed into proxy VCI scores for standardised comparison. See Table 30 for participant data.

Both groups completed the Autism Quotient (Baron-Cohen et al., 2001b), a 50-item selfreport measure assessing autism traits in adults and adolescents aged 16 and over. The AQ-50 has shown satisfactory psychometric properties, with good reliability and validity as reported in a systematic review (Baghdadli et al., 2017). For inclusion, autistic participants needed a formal diagnosis from a clinician using the Autism Diagnostic Observation Scale (ADOS) and a VCI score within or above the average range. Non-autistic participants needed to report no autism diagnosis and a VCI score within or above the average range. All participants were aged 18 or older, and nonautistic participants were matched to the autistic group within approximately 3 years of age.

An Independent-Samples Mann-Whitney U Test was used to detect differences between the groups. As shown in Table 30, there were no significant differences in age or verbal comprehension, eliminating these confounds for further analysis. The groups' AQ scores differed significantly, with the autistic group scoring above the threshold of 26, validating their diagnostic status. Both groups were also matched in ethnicity, with 7 Caucasian and 1 Asian participant in each group.

 Table 30. Stimulus participant (target) sex (%), and mean (standard deviation) age, verbal

 comprehension index (VCI), and autism quotient (AQ) by diagnostic group

	Offende	Offender Group				
	Autistic $(n = 8)$	Non-autistic $(n = 8)$	р			
Age M (SD, range)	33.63 (13.24, 23-64)	29.5 (15.18, 20-66)	.161			
VCI M (SD)	112 (13.85)	102.13 (5.77)	.083			
AQ M (SD)	33 (8.91)	16.38 (7.23)	.001*			
Male (<i>n</i>)	8	8	-			
White (<i>n</i>)	7	7	-			
Asian (<i>n</i>)	1	1	-			

* Significant p-value (<.05) for Independent-Samples Mann-Whitney U Test



Figure 11. Example of Simulated Sentencing Hearing (participant face is covered for anonymity purposes)

Video Editing Procedure

The video editing process was carried out using Descript software (Descript, 2023). All videos were in colour, and adjustments were made to ensure uniformity across actor videos. For example, consistent dimensions (640mm x 340mm) ensuring that the actor in the witness stand was depicted from the waist upwards, as depicted in the sample images in Figure 13. Closed captions were included only for the barrister's questions and not the offender's answers so not to divert attention away from the non-verbal emotion expression which was of primary interest of the study. Audio in the videos were enhanced using the video software however, there was one participant's videos where the sound remained poor quality. These videos were still included in the survey as rating participants were informed of some volume discrepancies between offender videos and were instructed to adjust volume accordingly.



Figure 12. Sample Images of Stimulus Videos (Faces Covered for Anonymity Purposes)

Participants (Judges)

Participants (judges; n = 113) were recruited from Prolific, a compensated crowdsourcing platform (Prolific, 2023). See Table 31 for participant data. Although traditional sentencing is performed by judges, this study aimed to use a sample that closely approximates legal decisionmakers, facilitating generalisation to court cases involving a jury. Inclusion criteria were loosely based on Australian legislation for jury eligibility, which required participants to be over 18 years old, have English as their primary language, and not have a criminal conviction. Information on participants' mental health history was not collected, nor were participants excluded based on employment within the legal system or membership in parliament (Courts Administration Authority of South Australia, 2023). Only participants residing in Australia were eligible to access the survey.

To assess the representation of the population, judges completed the Spot the Word and Autism Quotient (AQ-50) tests. Spot the Word scores were converted into Verbal Comprehension Index (VCI) scores, which were within the average range of intelligence. AQ-50 scores were below the threshold of 26, indicating that participants were less likely to exhibit autistic traits. The AQ-50 was included in the study because previous research presented in Chapter 2 showed significant differences in impression ratings of targets based on the perceiver having an autism diagnosis. Consequently, the rating participants in this study are considered more representative of the general population. Two judges timed out where very little data was recorded and therefore were removed from the dataset resulting in 111 judges in the final sample. All judges reported to not have a criminal conviction.

A priori power analysis using G*Power version 3.1.9.7 (Faul et al., 2009), was conducted to guide the determination of the minimum participant count needed for the study (n = 270, with a desired power of 0.80). Due to budget constraints, this number could not be attained, which resulted in restricted analyses for offence type.

N = 111	
Age M (SD, range)	35.32 (10.3, 19-73)
Male (%)	48.6
VCI M (SD)	103.15 (8.45)
AQM(SD)	21.9 (7.23)
Ethnicity	
White (%)	69.4
Asian (%)	18
Other (%)	12.6
Employment	
Employed (%)	70.2
Unemployed (%)	3.6
Student (%)	11.7
Retired (%)	1.8
Other (%)	12.6
Education	
Some Secondary (%)	6.3
Secondary (%)	11.7
Vocational (%)	14.4
Some University - no degree (%)	44.1
University - Bachelor's Degree (%)	22.5
Marital Status	
Married (%)	30.6
Living with partner (%)	19.8
Widowed (%)	.9
Divorced/Separated (%)	3.6
Never been married (%)	45

Table 31. Rating Participants Demographics and Verbal Comprehension and Autism QuotientMean (SD) Scores

Procedure (Judges)

The rating participants (judges) accessed the Qualtrics survey via Prolific. All judges completed demographics and tests (Spot the Word, AQ-50). A commitment to providing 'thoughtful' answers to the survey was included as this has been found to be associated with higher quality responses compared to attention checks (APOR, 2022). Attention checks were also included by asking participants to describe the offender's physical appearance in a free text box after each offender's testimony. After the series of tests, each judge was randomly allocated to only one of the eight offences (manslaughter, assault, carriage-service, intent to procure, sexual assault, arson, child material, drug manufacturing) in which they watched up to 16 videos of each offender providing their testimony for the same offence. Survey blocks for each offender were in fixed order (ORE, Impressions, Sentence). Items within survey blocks were presented randomly. Not all 16 offenders were featured for each offence due to the previously mentioned video recording malfunctions and one offender declining to participate in the manslaughter scenario. Judges were compensated on average AU\$11.64 per hour for their participation within 24 hours of completing the survey through the Prolific platform. The median time taken to complete the survey was 2.27 hours.

Measures

ORE Item Development

Offender Remorse Evaluation (ORE) was categorised into four distinct variables: admission of responsibility, self-transformation, implicit expressions, and explicit expressions. These categories were further substantiated through alignment with Australian sentencing legislation, facilitating validation across multiple jurisdictions as shown in Table

32. The interview questions designed to generate stimuli were formulated to elicit responses that closely corresponded with the rating judge's questionnaire items. See Appendix I. These items were framed as statements concerning the offender's testimony devised to gauge the four dimensions of remorse. Responses were collected on 5-point Likert scales ranging from 0 = 'completely disagree' to 4 = 'completely agree'.

To ascertain the content validity of the items within the four categories, an initial judgment phase was introduced. Six independent judges from the Flinders University Autism Research lab took part in an online Qualtrics survey (see Appendix G). Judges were tasked with associating statements pertaining to an offender's behaviour with one of four categories. The mean agreement percentage, derived from the number of agreements among pairs of raters (Fleiss, 1971), was calculated for each category. For admission of responsibility (n = 5, M = 53.3), explicit expressions (n = 3, M = 59.5), implicit expressions (n = 6, M = 80), and self-transformation for future behaviour (n = 2, M = 66.7). Mean agreement values for individual statements ranged from 25% to 93.25%. Based on these results, it was clear that some statements required refinement to improve clarity. Feedback gathered during a meeting with raters guided these revisions. The final set of statements, presented in Table 32, achieved unanimous agreement (100%) among the raters.

Variable	Items	Abbreviation	Scale
Admission of responsibility	1. The offender's testimony indicated that he agreed with the charges	Agreed	0- Completely disagree.
(ADM)	laid against him.		1- Slightly disagree.
	2. The offender's testimony indicated that he understood the	Wrongfulness	2- Neither agree nor disagree.
	wrongfulness of the criminal act.		3- Slightly agree.
	3. The offender's testimony indicated he acknowledged it was his	Choice	4- Completely agree.
	choice to commit the crime.	-	
	4. The offender's testimony indicated that he recognised how his	Impact	
	behaviour impacted the victim/s.	T	
	5. The offender's testimony attempted to justify the crime they	Justified	
	committed (reverse scored)	Willing	0 Completely discourse
Self-transformation	1. The offender's testimony indicated he is willing to change.	Willing	0- Completely disagree.
(IKA)	2. The offender's testimony indicated that he would behave	Future benaviour	1- Slightly disagree.
	annerentiy in the future.	D	2- Neither agree nor disagree.
	3. The offender's testimony indicated that he had strategies in place	Prevention	3- Slightly agree.
	to prevent similar behaviour in the future.		4- Completely agree.
Implicit expressions	1. The offender appeared to be experiencing distress due to his	Distressed	0- Completely disagree.
(IMP)	actions.		1- Slightly disagree.
	2. The offender appeared emotional.	Emotional	2- Neither agree nor disagree.
	3. The offender's demeanour matched their testimony.	Demeanour match	3- Slightly agree.
	4. The offender's facial expression indicated he was remorseful.	Facial expression	4- Completely agree.
	5. The offender's body posture indicated he was remorseful.	Body posture	
	6. The offender's tone of voice indicated he was remorseful.	Tone of voice	
Explicit expressions	1. The offender's words indicated that he apologised for the crime he	Apologised	0- Completely disagree.
(EXP)	committed.		1- Slightly disagree.
× 2	2. The offender's words expressed his feelings of remorse.	Feelings	2- Neither agree nor disagree.
	3. The offender's words expressed concern for the victim.	Concern	3- Slightly agree.
	*		4- Completely agree.

 Table 32. Four Categories of Offender Remorse Evaluation (ORE) Measure with Items, Abbreviation, and Scale

Sentence Length

For each presented scenario, participants were tasked with determining the appropriate length of the sentence that the offender should serve. To facilitate this assessment, a six-item scale was devised drawing from the sentence length categories used by the Australian Bureau of Statistics (ABS, 2022). This scale includes the following time brackets:

Under 1 year 1 to under 3 years 3 to under 5 years 5 to under 7 years 7 to under 10 years 10 years and over

The instructions included the minimum, maximum, and average sentence length recorded in the most recent national ABS report (ABS, 2022). This information was designed to aid participants in making informed judgments in a similar way that a judge would be privy to guidelines prior to sentencing offenders.

Example for manslaughter:

The average sentence an offender received for related offences in Australia last year was 8.7 years. The minimum sentences received were within 6 to under 12 months and maximum sentences were 10 years and over.

In this scenario, you are stepping into the role of a sentencing judge. Your task is to determine the appropriate sentence length you believe the offender should serve for this offence.

Please provide your judgment on the suitable duration of the sentence.

Offence Severity

A one-item measure of crime severity adapted from Bergeron and McKelvie (2004) was employed. Perceptions of offence severity were of interest to discover relationships with offence type, sentence length, and offender remorse.

Item example:

Please indicate how much you agree that the nature of this offence was more

severe in comparison to most offences of manslaughter? (0 = Strongly disagree to)

4 =Strongly agree)

Sentencing Factors

Single-item assessments were designed to gauge evaluations of moral culpability (the offender's explanation for the offence excuses their immoral behaviour) and potential for rehabilitation (reverse-scored) (the offender is likely to reoffend) on a 5-point Likert scales (0 = Completely disagree to 4 = Completely agree). A single item for remorse was also included with the same scale (the offender's testimony indicated he was remorseful). Higher scores indicated more favourable ratings for moral culpability (reduced moral culpability), rehabilitation (favourable prospects) and remorse (remorse for the offence).

Impressions

A modified version of the impression measurement utilised in Sasson et al.'s (2017) work was incorporated into the current study. This adaptation aimed to extend the insights garnered from the systematic review and meta-analysis (Chapter 2), which revealed that autistic individuals tend to elicit more negative impressions compared to non-autistic individuals. Additionally, it was of interest to explore potential connections between trait impressions and perceptions of remorse. Given the potential influence of the criminal context on behavioural intent (e.g., willingness to live near or socialise with the person), this element was excluded. Furthermore, the assessment of behavioural intent toward the targets (offenders) in the present study would manifest through the judges' sentencing decisions within the criminal court context. Responses were collected on a 5point Likert scale with higher scores indicating more favourable impressions.

Example:

Please indicate how much you agree with the following characteristic traits of the offender. (5-point Likert scale - Strongly Disagree to Strongly Agree).

This person is attractive. This person is likely as intelligent as I am. This person is honest. This person is aggressive. This person is likable. This person is socially awkward (reverse-scored).

Qualitative Responses

After the sentence length question, judges were requested to provide a short summary of their opinion of the offender's testimony and explain the reason for their judgement. These responses were completed in a free text field on the survey with no maximum limit.

Data Preparation

Data preparation involved extracting survey data from Qualtrics into SPSS format. The data then had to be restructured into a long format due to the repeated measures design. Most missing data were treated as random due to video-recording malfunctions and one offender declined to portray one of the offences. Therefore, the mode for each offender was used to replace missing values. Further, eight judges' surveys were timed out, but most of their data were recorded. Two judges' data were removed due to minimum data recorded.

Data Analysis Plan

The dataset was prepared by checking for missing values and appropriately handling them by imputation or exclusion. Frequencies and percentages of the categories of the Likert Scale Items are reported. The Medians, Modes and Range were calculated to measure the central tendency and the most frequent occurring responses.

An Exploratory Factor Analysis (EFA) using MPlus (version 8.8) was conducted on the survey data collected from judges evaluating each offender. The goal was to determine the factor structure of the items developed to represent the four components of offender remorse evaluations: Admission of Responsibility (ADM), Self-transformation (TRA), Implicit Expressions (IMP), and Explicit Expressions (EXP).

Sample size is critical for conducting a reliable and repeatable EFA. There are two main approaches to evaluating sample size: one based on the minimum number of samples required irrespective of the number of variables, and another based on the ratio of observations to variables. Comrey and Lee (2013) implement the following criterion to assess the sample size: 50 - very poor, 100 - poor, 200 - fair, 300 - good, 500 - very good, and 1000 - excellent. Tabachnick et al. (2013) suggest that a smaller sample size of about 150 observations could be sufficient for factor structures with high loadings (> 80).

Due to budget constraints, the current study includes 111 observations per offender, which falls within the poor to fair range according to Comery and Lee's (2013) criteria. This smaller sample size may limit the validity of the preliminary EFA for the Offender Remorse Evaluation (ORE) measure, potentially affecting the robustness and generalisability of the results.

The EFA employed standard statistical techniques, including factor extraction based on review of scree plots, Kaiser criterion (eigenvalues > 1.00), and Oblimin rotation methods, to identify and clarify the factor structure. This approach will help determine the best-fitting model for the ORE measure based on the available data.

The assumptions of multivariate normality, factorability, and absence of multicollinearity was assessed. The assumption of multivariate normality is required if maximum likelihood estimation is used in the fitting process. The absence of multicollinearity assumption requires that the variables not be too highly correlated with one another. Multicollinearity was examined by calculating the determinant of the correlation matrix for the variables (Field & Wilcox, 2017).

In determining the number of factors, the observed eigenvalues were calculated from the correlation matrix, replacing the diagonal elements with the squared multiple correlations (Ledesma & Valero-Mora, 2007) to estimate the communalities (DiStefano et al., 2019). The number of factors was determined by the Kaiser criterion whereby the number of factors in the model are equal to the number of observed eigenvalues that have a value greater than one. The number of factors

with an observed eigenvalue larger than 1 will be used for extraction (Ledesma & Valero-Mora, 2007).

The factor structure was assessed by maximum likelihood estimation. A chi-squared goodness-of-fit test was conducted to assess model fit. The factor loadings implemented the criterion used by Comrey and Lee (2013) for factor interpretation. The factor structure was examined by the precedents and rules described by Costello and Osborne (2019).

To mediate the impact of ordinal measures, I used the Mplus WLSMV estimator (weighted least squares with mean and variance adjusted chi-square test) for all factor-analytic models Muthén and Muthén (2009). Here, Brown (2015) noted that "WLSMV procedures produce accurate test statistics, parameter estimates, and standard errors of CFA models under a variety of conditions," including conditions of "nonnormality and model complexity" (p. 355).

The models assessed against the baseline model using the Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI). The Standardised Root Mean Square Residual (SRMR) measures the discrepancy between the observed and predicted covariance matrices with lower values indicating a better fit (cutoff <.08).

Missing data items (n = 84) were considered and treated as random due to the video recording malfunctions and one actor declining to portray the offender in the manslaughter scenario. MPlus handles missing data under the missing at random assumption (MAR) using the WLSMV estimator, which allows missingness to be a function of the observed covariates, but not observed outcomes (Dunn et al., 2015).

Finally, the qualitative sentencing response data are presented in the Discussion to aid in explaining the results.

Results

To analyse the relationships among the measures, a Spearman Rank correlation test was conducted to assess associations between items on the impression measure (awkward, like, aggressive, honest, intelligent, attractive) and single measures including remorse, moral culpability, rehabilitation, sentence severity, and sentence length (n = 1,776). Given the repeated measures design and the non-independent nature of the variables, the data were aggregated using percentiles which maintained the ordinal nature of the responses. This method ranked judges based on their ordinal ratings and aggregated these rankings across repeated measures, preserving the ordinal structure by expressing each judge's evaluations relative to the distribution of responses. The mean percentile rank was then computed for each judge across the repeated measures and used for the correlation analysis.

The results indicate several key findings. As shown in Table 33, awkward was negatively correlated with offence severity and rehabilitation potential, while positively correlated with likability and intelligence. This suggests that offenders perceived as less awkward were viewed as more likable and intelligent and were also believed to commit less severe offences with better rehabilitation prospects.

Likability exhibited strong positive correlations with honesty, intelligence, attractiveness, and remorse, while showing negative correlations with offence severity, sentence length, rehabilitation, and moral culpability. This indicates that offenders perceived as more likable were also viewed as more honest, intelligent, and attractive. Additionally, more likable offenders were perceived as more remorseful, had lower offence severity, were seen as less morally culpable, had more favorable rehabilitation prospects, and received lighter sentences.

Interestingly, aggressive displayed negative correlations with offence severity, meaning offenders perceived as more aggressive were viewed as committing less severe offences. Aggressiveness was also positively associated with honesty and moral culpability.

Honesty had a strong positive relationship with remorse, suggesting that offenders perceived as more honest were also seen as more remorseful. Intelligence was positively related to attractiveness, indicating that offenders perceived as intelligent were likely to be seen as more attractive. Finally, remorse had a negative correlation with sentence length, suggesting that offenders viewed as more remorseful received shorter sentences.

	1	2	3	4	5	6	7	8	9	10	11
1. Awkward	1.000										
2. Like	.260**	1.00									
3. Aggressive	.179**	008	1.00								
4. Honest	.169**	.462**	.142**	1.00							
5. Intelligent	.199**	.453**	077**	.249**	1.00						
6. Attractive	.150**	.601**	067**	.263**	.487**	1.00					
7. Remorse	.056**	.344**	.001	.493**	.134**	.138**	1.00				
8. Severity	214**	109**	392**	.045	059*	$.060^{*}$.031	1.00			
9. Sentence	.013	202**	064**	220**	044	075**	370**	.064**	1.00		
10. Rehabilitation	161**	117**	.044	058*	172**	175**	.040	038	057*	1.00	
11. Moral Culp	016	293**	.163**	146**	111**	170**	080**	084**	.114**	055*	1.00

 Table 33. Spearman Correlations for Impression Items

Note. ** p < .001. * p < .05
Offender Group Differences

Sentencing Factors, Offence Severity, and Sentence Length

Frequencies and percentages and distribution statistics (median, mode and range) were calculated for sentencing factors (remorse, moral culpability, rehabilitation) and offence severity and sentence length (See Appendix L). For the single item measure of remorse, the most common response was '3 = slightly agree'. Among autistic offenders, response distribution varied: three offenders were most frequently rated '0 = completely disagree', four '1 = slightly agree', and one '4 = completely agree'. In contrast, non-autistic offenders received more consistent ratings, with six frequently selecting '4 = completely agree' and two selecting '1 = slightly agree.'

A Wilcoxon Signed Rank test compared remorse scores between the groups. As shown in Figure 14, non-autistic offenders (M = 3.02, SD = 1.17) rated higher in remorse than autistic offenders (M = 1.93, SD = 1.46), Z = -14.491, p < .001, r = .49. The rank summary showed 155 cases where non-autistic ratings were lower than autistic (mean rank = 323.20) and 567 cases where they were higher (mean rank = 371.97), with 166 ties. See Figure 13 for a comparison of quartile distributions.

For moral culpability, the most frequent rating was '0 = completely disagree.' Despite both groups having generally low ratings, a significant difference emerged. Non-autistic offenders (M = .75, SD = .97) had more favourable ratings than autistic offenders (M = .65, SD = .95), Z = -3.01, p = .003, r = .10. The rank summary indicated 130 cases where non- autistic ratings were lower than autistic (mean rank = 179.26) and 207 cases where they were higher (mean rank = 162.56), with 551 ties. See Figure 14 for a comparison of quartile distributions.

For rehabilitation, the most common response was '3 = slightly disagree.' Non- autistic offenders (M = 2.48, SD = 1.24) received significantly more favourable ratings compared to autistic offenders (M = 1.69, SD = 1.27), Z = -12.15, p < .001, r = .41. The rank summary showed 181 cases where non-autistic ratings were lower than autistic (mean rank = 290.53) and 490 cases where they were higher (mean rank = 352.79), with 214 ties. See Figure 15 for a comparison of quartile

distributions.

The average offence severity was considered neither more nor less severe than typical offences (*Mode* = 2). However, non-autistic offenders (M = 1.83, SD = 1.07) were rated as having less severe offences compared to autistic offenders (M = 1.96, SD = 1.09), Z = -4.21, p < .001, r = .14. The rank summary indicated 231 cases where non-autistic offences were rated lower in severity than autistic offences (mean rank = 191.92) and 147 cases where they were rated higher (mean rank = 185.69), with 508 ties. See Figure 16 for a comparison of quartile distributions.

The mode sentence length for all offenders was category 2 (1 to under 3 years), slightly less than the previous year's average sentence length of 2.49 years across all offences (Table 35.) Autistic offenders received moderately longer sentences (M = 2.66, SD = 1.32) compared to non-autistic offenders (M = 2.30, SD = 1.26), Z = -8.36, p < .001, r = .28. The rank summary showed 383 cases where non-autistic offenders received shorter sentences than autistic offenders (mean rank = 276.96) and 168 cases where non-autistic offenders received longer sentences (mean rank = 273.81), with 337 ties. See Figure 17 for a comparison of quartile distributions.



Figure 13. Box Plot Featuring Quartile Rating Distributions for Remorse by Offender Group



Figure 14. Box Plot Featuring Quartile Rating Distributions for Moral Culpability by Offender Group



Figure 15. Box Plot Featuring Quartile Rating Distributions for Rehabilitation by Offender Group



Figure 16. Box Plot Featuring Quartile Rating Distributions for Offence Severity by Offender Group



Figure 17. Box Plot Featuring Quartile Rating Distributions for Sentence Length by Offender Group

Impressions

Frequencies and percentages were calculated for the response options on the trait items of the impression scale (See Appendix M). For the autistic group, the '3 = slightly agree' option was the most frequently selected for the trait *awkward*, whereas the non-autistic group more often received the '1 = slightly disagree' rating. Autistic offenders were most frequently rated as '2 = neither agree nor disagree' for *likable*, while judges tended to view non-autistic offenders more favourably, selecting '3 = slightly agree'. Offenders in both groups were most frequently rated at the highest point (4) for *aggressive*, suggesting that the criminal identity of the target influenced this item.

For *honest*, autistic offenders were most frequently rated as '3 = slightly agree', indicating a generally favourable view. Non-autistic offenders had similar responses, but one offender received harsher ratings with '0 = completely disagree' as the most frequent response and another as '2 = neither agree nor disagree'. The *intelligent* trait showed frequent indifferent responses in the autistic group, with two offenders rated at the lowest point, '0 = completely disagree'. In contrast, the non-autistic group had two offenders rated more favourably as '3 = slightly agree'. Autistic offenders

were often rated at the lowest points for *attractiveness* (0 = completely disagree and 1 = slightly disagree), whereas the non-autistic group received mostly indifferent ratings (2 = neither agree nor disagree).

Wilcoxon Signed Rank tests were conducted to determine if group differences were significant. As shown in Figures 18-23, significant differences were found with autistic offenders being rated less favourably than non-autistic offenders for the following traits: *awkward* (autistic: M= 1.27, SD = 1.18; non-autistic: M = 2.45, SD = 1.15), r = .62, Z = - 18.37, p < .001; *likable* (autistic: M = 1.46, SD = 1.01; non-autistic: M = 2.08, SD = 1.06), r = .42, Z = -12.46, p < .001; *intelligent* (autistic: M = 1.65, SD = 1.16; non-autistic: M = 2.25, SD = 1.10) r = .44, Z = -13.07, p < .001: and *attractive* (autistic: M = 1.22, SD = .95; non- autistic: M = 1.47, SD = .99), r = .21, Z = -6.36, p < .001. Non-autistic offenders were rated slightly higher on the *aggressive* trait (autistic: M= 2.94, SD = 1.12; non-autistic: M = 3.11, SD = .98) r = .14, Z = -4.24, p < .001. There were no significant group differences for *honest* (p = .069).



Figure 18. Box plot for Awkward Rating Distributions for Autistic and Non-autistic offenders



Figure 19. Box plot for Like Rating Distributions for Autistic and Non-autistic offenders



Figure 20. Box plot for Aggressive Rating Distributions for Autistic and Non-autistic Offenders



Figure 21. Box plot for Honest Rating Distributions for Autistic and Non-autistic offenders



Figure 22. Box plot for Intelligent Rating Distributions for Autistic and Non-autistic offenders



Figure 23. Box plot for Attractive Rating Distributions for Autistic and Non-autistic offenders

Offender Remorse Evaluation (ORE) Items

Spearman correlations were computed for the items on the ORE. The data were prepared using mean rank percentiles as described earlier. As presented in Table 34, most correlations were statistically significant, indicating relationships among the items. The correlations are generally moderate to high, reflecting a cohesive set of interrelated ORE items.

There were strong correlations between the core items assessing Admission of Responsibility, such as agreed with the charges and understood the *wrongfulness* (adm1, adm2), acknowledged their *choice* to commit the offence(adm3), and recognised the *impact* on the victim (adm4). These correlations range from moderate to strong. The item about *justifying* the offence (adm5) is weakly correlated with the other items, with only a modest positive correlation (e.g., adm5 and adm1 = .056). This suggests that justifying actions may not align strongly with other forms of Admission of Responsibility.

The items related to self-transformation (*willingness* to change, *future behaviour*, prevention of reoffending) are highly interrelated. For example, tra1 (*willingness*) and tra2 (*future behaviour*) have a strong correlation of .870, indicating these two aspects of self- transformation are closely linked. These items are also moderately to strongly correlated with admission of responsibility items, particularly with acknowledging the *impact* of the offence (adm4). For instance, tra1 and adm4 = .745.

Implicit expressions like *distress*, *emotion*, *demeanour*, *facial expressions*, and *body language* are moderately correlated with each other. The strongest relationships are seen between *facial expressions* (imp4) and *body language* (imp5) (r = .867), as well as *tone of voice* (imp6) and *body language* (r = .774), indicating a close alignment between physical cues of remorse. *Distress* (imp1) and *emotion* (imp2) show weaker correlations with other Implicit Expressions, such as *demeanour* and *tone of voice*, suggesting these emotional experiences are less tied to observable behavioural cues.

Explicit expressions like apologising, discussing feelings, and expressing concern for the

victim are highly correlated, especially between *apologising* (exp1) and discussing *feelings* (exp2), with a correlation of .863. This reflects that verbal remorse typically includes both apology and expressions of emotional regret. These Explicit Expressions are also strongly correlated with items in the Admission of Responsibility section. For example, the correlation between *apology* (exp1) and acknowledging *impact* (adm4) is very high (r =

.838), suggesting that offenders who explicitly apologise are also more likely to acknowledge the consequences of their actions.

The data suggests that the Admission of Responsibility, Self-transformation, and Explicit Expressions of remorse are tightly interrelated. Offenders who admit wrongdoing, understand the impact, and take responsibility are also more likely to express explicit remorse (*apologies*, discussing *feelings*), and show a willingness to change. However, the Implicit Expressions (such as *distress* and *demeanour*) seem to have weaker relationships with explicit forms of remorse, highlighting a potential disconnect between emotional expressions and verbal acknowledgments of responsibility. This could suggest that offenders may outwardly express remorse in non-verbal ways without necessarily offering explicit apologies, or vice versa. Additionally, *justifying* the offence (adm5) appears somewhat isolated from the other items, reflecting that when offenders justify their actions, they may not express remorse in other ways (e.g., through apology or self-transformation). This may help explain instances where an offender appears less remorseful in the eyes of evaluators.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Admission of Responsibility 1. Agreed (adm1)	1.000																
2. Wrong (adm2)	.754**	1.000															
3. Choice (adm3)	.511**	.565**	1.000														
4. Impact (adm4)	.664**	.732**	.475**	1.000													
5. Justify (adm5)	.056*	.243**	.191**	.139**	1.000												
Self-transformation																	
6. Willing (tra1)	.596**	.714**	.451**	.745**	.199**	1.000											
7. Future (tra2)	.554**	.678**	.385**	.709**	.185**	.870**	1.000										
8. Prevent (tra3)	.440**	.612**	.403**	.645**	.134**	.769**	.803**	1.000									
Implicit Expressions																	
9. Distress (imp1)	.313**	.271**	.063**	.439**	173**	.368**	.298**	.358**	1.000								
10. Emotion (imp2)	.155**	.229**	-0.030	.330**	047*	.313**	.234**	.317**	.736**	1.000							
11. Demean. (imp3)	.334**	.411**	.449**	.355**	.264**	.412**	.376**	.311**	.132**	.183**	1.000						
12. Facial (imp4)	.467**	.527**	.233**	.567**	0.011	.554**	.532**	.535**	.647**	.661**	.389**	1.000					
13. Body (imp5)	.488**	.602**	.287**	.585**	.102**	.624**	.621**	.632**	.532**	.549**	.479**	.867**	1.000				
14. Tone (imp6)	.595**	.578**	.320**	.560**	.146**	.560**	.554**	.543**	.576**	.539**	.433**	.816**	.774**	1.000			
Explicit Expressions																	
15. Apology (exp1)	.639**	.752**	.497**	.838**	.179**	.751**	.732**	.657**	.424**	.323**	.396**	.593**	.622**	.555**	1.000		
16. Feelings (exp2)	.537**	.704**	.381**	.759**	.122**	.783**	.769**	.690**	.486**	.380**	.342**	.614**	.681**	.596**	.863**	1.000	
17. Concern (exp3)	.487**	.590**	.314**	.732**	.050*	.704**	.687**	.576**	.544**	.426**	.255**	.613**	.614**	.480**	.747**	.800**	1.000

Table 34. Spearman Correlations for Items on the ORE

Note. ** p < .001. * p < .0

As shown in Table 35, strong positive correlations for remorse with items like admitting *wrongdoing* (adm2) and acknowledging the *impact* (adm4) suggest that these are key factors in how remorse is perceived. Offenders who admit responsibility and recognise the consequences of their actions are more likely to be judged as remorseful. A small positive correlation (r = .113) was revealed for *remorse* and *justified* suggesting that offenders who justify their offence tend to be perceived as less remorseful. Justifying the offence may hinder the perception of genuine remorse.

Weak and mostly negative correlations between Admission of Responsibility items and rehabilitation potential suggest that the perception of rehabilitation is not strongly influenced by whether the offender admits responsibility.

There were generally weak correlations between admission items and moral culpability, except for the justification item (adm5R), which had a small positive correlation. This suggests that offenders who justify their actions are seen as more morally blameworthy, while admitting wrongdoing or taking responsibility doesn't significantly affect moral culpability.

There was little relationship between admission items and offence severity, indicating that judges' views of how severe the offence was are not strongly influenced by whether the offender admits responsibility.

Stronger negative correlations (e.g., with "admitting *wrongdoing*" and "acknowledging *impact*") suggest that offenders who admit responsibility, especially by acknowledging the impact of their offence, tend to receive shorter sentences. Conversely, those who *justify* their actions may receive slightly longer sentences.

Self-transformation

Table 36 shows that all self-transformation items (*willingness* to change, *future* strategies, and *prevention* of reoffending) show strong positive correlations with remorse. This suggests that expressions of self-transformation are key indicators of perceived remorse. Offenders who show a commitment to change are more likely to be seen as remorseful, which can have a significant impact

on sentencing outcomes.

Surprisingly, all self-transformation items have weak negative correlations with rehabilitation potential, suggesting that expressions of change are not strongly linked to perceptions of rehabilitation. This might reflect scepticism about whether expressed intentions for change are genuine or sufficient to indicate rehabilitative potential.

The correlations between self-transformation items and moral culpability are weak and negative, indicating that self-transformation is not a strong factor in reducing perceptions of moral blameworthiness. This suggests that moral culpability is likely judged based on factors other than the offender's expressed intentions to change.

The correlations between self-transformation items and offence severity are weak, showing little to no relationship. This indicates that expressions of self-transformation do not strongly influence how serious the offence is perceived to be.

All self-transformation items are moderately to strongly negatively correlated with sentence length, suggesting that offenders who express *willingness* to change, demonstrated that they would behave differently in the *future*, or had strategies in place to prevent reoffending are likely to receive shorter sentences. This reflects the importance judges place on an offender's commitment to self-improvement when determining sentence length.

Implicit Expressions

All implicit expression items are positively correlated with remorse, with *body posture*, *facial expressions*, and *tone of voice* showing the strongest associations as shown in Table 37. This suggests that how offenders express themselves physically and vocally plays a significant role in how remorseful they are perceived to be.

All implicit expression items showed negative correlations with rehabilitation potential, though the relationships are generally weak. This might reflect a disconnect between physical/vocal expressions and the more cognitive assessment of an offender's capacity for rehabilitation.

The correlations between implicit expression items and moral culpability are mostly weak or

near zero, indicating that these expressions do not strongly influence perceptions of moral blameworthiness. It suggests that judges may base culpability more on the facts of the case rather than the offender's emotional display.

Implicit expressions have very little influence on perceptions of offence severity, with most correlations being close to zero. This indicates that how remorseful or emotional an offender appears has a minimal impact on how severe the crime is perceived to be.

The strongest predictor of shorter sentences was *body posture* (r = -.306) followed by *facial expressions* (r = -.246) and *tone of voice* (r = -.213). This suggests that offenders who display remorseful body language, facial expressions, or vocal cues are more likely to receive leniency in sentencing, possibly due to being perceived as less likely to reoffend or more genuinely remorseful. *Explicit Expressions*

All explicit expression items (*apologising*, expressing *feelings*, and demonstrating *concern* for the victim) show very strong positive correlations with remorse, with correlations ranging from .794 to .877. See Table 38. This indicates that explicit verbal expressions of remorse are significant in shaping perceptions of genuine remorse. Offenders who make these explicit gestures are overwhelmingly viewed as more remorseful.

There are negative correlations between explicit expressions and rehabilitation potential (ranging from -.059 to -.142), but these relationships are weak. Explicit expressions of remorse, such as *apologising* or showing *concern*, appear to have a limited influence on perceptions of an offender's ability to rehabilitate. This could suggest that while these expressions indicate remorse, they may not necessarily be seen as predictors of future change or improvement.

The relationships between explicit expressions and moral culpability are weak and mixed. Both *apologising* (r = .080) and expressing *feelings* (r = .123) are slightly associated with higher perceptions of culpability, while demonstrating *concern* is slightly associated with lower culpability (r = ..094). This suggests that different explicit expressions may be interpreted in different ways; apologies and emotional admissions may affirm guilt, while showing concern for others may slightly reduce perceived blame.

None of the explicit expression items significantly influence offence severity, with all correlations hovering near zero. This indicates that explicit expressions of remorse do not affect how severe the offence is perceived to be.

All explicit expression items show moderate negative correlations with sentence length (ranging from -.322 to -.370), indicating that offenders who engage in explicit expressions of remorse such as *apologising*, expressing *feelings*, or showing *concern* are more likely to receive shorter sentences. This highlights the important role that explicit displays of remorse play in sentencing decisions.

1	2	3	4	5	6	7	8	9	10
1.000									
.754**	1.000								
.511**	.565**	1.000							
.664**	.732**	.475**	1.000						
.056*	.243**	.191**	.139**	1.000					
.598**	.716**	.384**	.796**	.113**	1.000				
073**	077**	049*	064**	028	080**	1.000			
041	036	.023	.002	.206**	.040	055*	1.000		
.074**	019	058*	.035	.026	.031	084**	038	1.00	
060*	236**	127**	328**	099**	370**	.114**	057*	.064**	1.00
	1 1.000 .754** .511** .664** .056* .598** 073** 041 .074** 060*	12 1.000 .754** 1.000 .511**.565**.664**.732**.056*.243**.056*.243**.98**.716**.073**077**041036.074**019060*236**	123 1.000 .754** 1.000 .511**.565** 1.000 .664**.732**.475**.056*.243**.191**.598**.716**.384**073**077**049*041036.023.074**019058*060*236**127**	1234 1.000 .754** 1.000 .511**.565** 1.000 .664**.732**.475** 1.000 .664**.732**.475** 1.000 .056*.243**.191**.139**.598**.716**.384**.796**.073**077**049*064**041036.023.002.074**019058*.035060*236**127**328**	12345 1.000 .754** 1.000 .511**.565** 1.000 .664**.732**.475** 1.000 .664**.732**.475** 1.000 .056*.243**.191**.139** 1.000 .056*.243**.191**.139** 1.000 .598**.716**.384**.796**.113**073**077**049*064**028041036.023.002.206**.074**019058*.035.026060*236**127**328**099**	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Table 35. Spearman Rank Correlations for Admission of Responsibility Items and Sentencing Factors (Remorse, Rehabilitation, MoralCulpability), Offence Severity and Sentence Length

Note. ** p < .001. * p < .0

Table 36. Spearman Rank Correlations for Self-transformation Items and Sentencing Factors (Remorse, Rehabilitation, Moral Culpability),Offence Severity and Sentence Length

	1	2	3	4	5	6	7	
1. Willingness (tra1)	1.000							
2. Future (tra2)	.870**	1.000						
3. Prevention (tra3)	.769**	.803**	1.000					
4. Remorse	.775**	.736**	.687**	1.000				
5. Rehabilitation	160**	047*	051*	080**	1.000			
6. Moral Culpability	043	056*	105**	.040	055*	1.000		
7. Offence Severity	077**	034	054*	.031	084**	038	1.000	
8. Sentence Length	443**	431**	423**	370**	.114**	057*	.064**	1.000

Note. ** p < .001. * p < .0

Table 37. Spearman Rank Correlations for Implicit Expression Items and Sentencing Factors (Remorse, Rehabilitation, Moral Culpability),Offence Severity and Sentence Length

	1	2	3	4	5	6	7	8	9	10	11
1. Distressed (imp1)	1.000										
2. Emotional (imp2)	.736**	1.000									
3. Demeanour (imp3)	.132**	.183**	1.000								
4. Facial Express. (imp4)	.647**	.661**	.389**	1.000							
5. Body Posture (imp5)	.532**	.549**	.479**	.867**	1.000						
6. Tone of Voice (imp6)	.576**	.539**	.433**	.816**	.774**	1.000					
7. Remorse	.501**	.399**	.318**	.652**	.699**	.603**	1.000				
8. Rehabilitation	222**	114**	081**	122**	140**	114**	080**	1.000			
9. Moral Culpability	164**	147**	029	104**	081**	028	.040	055*	1.000		
10. Offence Severity	018	.081**	024	.081**	.001	.044	.031	084**	038	1.000	
11. Sentence	.004	091**	266**	246**	306**	213**	370**	.114**	057*	.064**	1.000

Table 38. Spearman Rank Correlations for Explicit Expression Items and Sentencing Factors (Remorse, Rehabilitation, Moral Culpability),Offence Severity and Sentence Length

	1	2	3	4	5	6	7	8
1. Apologised (exp1)	1.000							
2. Feelings (exp2)	.863**	1.000						
3. Concern (exp3)	.747**	.800**	1.000					
4. Remorse	.824**	.877**	.794**	1.000				
5. Rehabilitation	059*	116**	142**	080**	1.000			
6. Moral Culpability	.080**	.123**	094**	.040	055*	1.000		
7. Offence Severity	005	002	.006	.031	084**	038	1.000	
8. Sentence Length	323**	361**	322**	370**	.114**	057*	.064**	1.000

Offender Group Differences (ORE)

The mean, median, mode and range were calculated across the 17 ORE items by offender group. As shown in Table 39, overall, the non-autistic offenders generally received more favourable ratings on the ORE items than autistic offenders, who tended to receive lower ratings across most items. Autistic offenders had lower mean scores compared to non- autistic offenders across most items, indicating they were rated less favourably. Autistic offenders had a median score of 2 for many items, suggesting that their ratings are often concentrated around lower values. In contrast, non-autistic offenders had medians around 3, indicating a tendency to be rated on the items more positively. Similarly, the mode often reflected lower values (e.g., 1 or 2) for autistic offenders, while for non-autistic offenders, the mode is frequently 3 or 4, indicating a shift towards higher ratings. Noticeable differences in the most frequent ratings between groups were for items *justified*, *distressed*, *emotional*, *facial expression*, *body posture*, *tone of voice*, and *concern*. These generally ranged between 3 and 4 points difference on the scale where the autistic offenders were rated less favourably. The range was consistent across both groups, with a maximum of 4 for all items. This consistency suggests similar variability in responses within both groups, although the average ratings differ.

A Wilcoxon Signed Ranks Test was performed on each of the ORE items to determine whether ratings between groups were significantly different. As shown in Table 40, all items except for imp3 (*demeanour match*) were significantly different with the autistic offenders receiving less favourable ratings compared to the non-autistic offenders.

		А	utistic			Nor	n-autistic				
Items	М	Mdn	Mode	Range	М	Mdn	Mode	Range	Ζ	р	r
Admission of Responsibility											
Agreed (adm1)	2.09	3	3	4	3.13	3	4	4	-15.19	<.001	1.44
Wrongfulness (adm2)	2.05	2	3	4	3.16	3	4	4	-16.19	<.001	1.54
Choice (adm3)	2.65	3	3	4	3.21	3	4	4	-10.91	<.001	1.04
Impact (adm4)	1.89	2	3	4	3.03	3	4	4	-16.33	<.001	1.55
Justified (adm5R)	1.63	1	1	4	2.41	3	4	4	-11.77	<.001	1.12
Self-transformation											
Willing (tra1)	2.11	2	3	4	3.05	3	4	4	-14.75	<.001	1.40
Future (tra2)	2.16	2	3	4	3.04	3	4	4	-13.94	<.001	1.25
Prevention (tra3)	1.83	2	3	4	2.81	3	3	4	-14.92	<.001	1.42
Implicit Expressions											
Distressed (imp1)	1.54	1	0	4	1.99	2	3	4	-6.89	<.001	0.66
Emotional (imp2)	1.34	1	0	4	1.88	2	3	4	-8.44	<.001	0.80
Demeanour (imp3)	2.70	3	3	4	2.76	3	3	4	-0.95	.341	0.09
Facial (imp4)	1.62	1	0	4	2.43	3	3	4	-11.64	<.001	1.11
Body posture (imp5)	1.71	1	0	4	2.60	3	4	4	-12.83	<.001	1.22
Tone of voice (imp6)	1.72	2	0	4	2.52	3	3	4	-11.30	<.001	1.07
Explicit Expressions											
Apologised (exp1)	2.04	2	3	4	3.11	3	4	4	-15.62	<.001	1.49
Feelings (exp2)	1.94	2	3	4	3.03	3	4	4	-15.45	<.001	1.47
Concern (exp3)	1.83	2	0	4	2.94	3	4	4	-15.81	<.001	1.49

 Table 39. Descriptive (Mean, Median, Mode, Range) and inferential (Z, p, r) statistics for ORE Items by Offender Group

Exploratory Factor Analysis

An Exploratory Factor Analysis (EFA) was conducted using MPlus (version 8.10) across the sixteen offenders (n = 111) to examine whether the relationships between items aligned with the theoretical framework for judicial evaluations of offender remorse. Given the absence of a comparative measure in the literature, EFA was preferred over Confirmatory Factor Analysis (CFA) for the initial analysis. The analysis was aimed at assessing four proposed latent variables: Admission of Responsibility (ADM), Self-Transformation (TRA), Implicit Expressions (IMP), and Explicit Expressions (EXP).

The analysis included 17 dependent variables, comprising ordered categorical items.

The estimation method used was Weighted Least Squares Mean and Variance adjusted (WLSMV), appropriate for ordinal data. An oblique rotation method, specifically Geomin, was applied to allow for correlated factors, with row standardisation based on correlation. A probit link function was utilised, with up to 30 random starts and a maximum of 10,000 iterations to ensure robust factor extraction. Convergence criteria included a derivative convergence criterion of 0.0001 and an H1 convergence criterion of 0.001, with a maximum of 2,000 iterations. Factors were retained based on eigenvalues greater than 1 and further validated through the scree plot, which helped identify the inflection point where eigenvalues began to level off (See Appendix N).

Table 40 and Table 41 provide the Exploratory Factor Analysis (EFA) results for autistic and non-autistic offenders, respectively. A qualitative review across all offenders indicates that the Implicit Expressions (IMP) and Self-transformation (TRA) components generally functioned as stable factors. However, the Explicit Expressions (EXP) and Admission of Responsibility (ADM) components sometimes overlapped. Specifically, items related to ADM particularly items 2 (*wrongfulness*) and 4 (*impact*) frequently aligned with EXP items.

For autistic offenders, there was considerable variability in factor loadings across the 17 items. Items like *agreed*, *wrongfulness*, and *willingness* often loaded highly on both factors. In contrast, items such as *distressed* and *emotional* displayed mixed or lower loadings. Notably, items

related to Implicit and Explicit expressions (e.g., *facial expression, body posture*) showed higher variability in their loadings, which may reflect differing interpretations or emphasis within this group. *willingness* and *future behaviour* frequently had strong loadings on the first factor, suggesting a strong association with the self- transformation component of remorse evaluations. Conversely, items like *demeanour match* and *emotional* within IMP displayed more varied loadings.

Factor 1 (F1) for autistic offenders combined elements of both ADM (e.g., *agreed*, *wrongfulness*) and IMP aspects of remorse (e.g., *facial expression, body posture*), suggesting a general remorse dimension that integrates explicit acknowledgments with non-verbal indicators. Factor 2 (F2) primarily captured *impact* (an ADM item) and TRA (e.g., *willingness, future*), reflecting attitudes and commitments towards change and understanding the impact of one's actions.

Fit indices for autistic offenders varied but were generally acceptable. RMSEA values ranged from 0.048 to 0.091, indicating an acceptable fit. CFI and TLI values were mostly above 0.95, suggesting good fit for most offenders, though variability was higher than in the non-autistic group. This variability indicates that while the two-factor model generally represents remorse structure, it may not apply uniformly across all autistic offenders.

In contrast, non-autistic offenders exhibited more consistent factor loadings with fewer extreme values. Items such as *agreed* and *wrongfulness* showed strong and stable loadings, and the factors related to IMP and EXP expressions displayed more uniform loadings, indicating a more consistent response pattern. F1 often captured items related to TRA (e.g., *willingness, future*), focusing on personal change and future intentions. F2 generally reflected ADM and EXP (e.g., *agreed, apologised*), emphasising direct expressions of remorse and acknowledgment of wrongdoing. The factor loadings for non-autistic offenders were more consistent, with less variability in Implicit Expressions (IMP).

Fit indices for non-autistic offenders showed slightly better or comparable fit to the autistic group. RMSEA ranged from 0.044 to 0.096, with some offenders showing particularly strong fit

indices (e.g., Offender 11 with RMSEA = 0.045). CFI and TLI values were consistently high, indicating good model fit across most offenders.

Both groups exhibit a similar factor structure with prominent roles for explicit acknowledgment and implicit expressions of remorse. However, non-autistic offenders show clearer separation between these factors and slightly better model fit, suggesting differences in how remorse and related behaviors are expressed and assessed between the groups. Further analysis was not conducted due to the preliminary nature of the work and limited sample size.

	(Offender l	l		Offender	2	(Offender 3	3	(Offender 4	1		Offender	5	(Offender	6	(Offender '	7	(Offender 8	;
Items	F_1	F ₂	F3	F1	F_2	F3	F1	F ₂	F3	F1	F ₂	F ₃	F1	F_2	F3	F1	F ₂	F3	F1	F ₂	F ₃	F1	F_2	F3
Admission																								
Agreed	0.61	0.31	-0.09	0.61	-0.08	0.38	0.01	0.94	-0.34	-0.01	0.22	0.63	0.93	-0.10	0.13	0.14	0.02	0.62	-0.12	0.42	0.48	0.80	-0.10	0.04
Wrongfulness	0.71	0.25	-0.07	0.39	0.01	0.57	0.01	0.93	-0.25	0.52	0.01	0.42	0.88	0.00	0.10	0.02	0.14	0.79	0.06	0.05	0.83	0.97	-0.32	-0.01
Choice	0.43	0.32	-0.15	0.13	0.01	0.67	0.27	0.33	0.01	0.04	-0.22	0.68	0.14	-0.12	0.46	0.01	0.14	0.42	-0.06	-0.12	0.49	0.92	-0.12	-0.08
Impact	-0.07	0.99	0.01	-0.01	0.50	0.60	-0.35	1.21	0.02	0.42	-0.07	0.64	0.85	0.01	0.27	-0.07	0.02	0.99	0.03	-0.04	0.98	0.73	-0.12	0.25
Justified	0.54	-0.09	0.07	0.09	-0.06	0.45	-0.25	0.86	-0.24	-0.35	0.01	0.52	0.62	0.16	-0.02	0.01	0.40	0.25	-0.13	-0.02	0.51	0.51	-0.24	-0.01
Transformation																								
Willingness	0.86	0.03	0.07	0.88	0.00	0.02	0.70	0.30	-0.03	0.81	0.02	0.14	0.78	0.22	-0.20	1.03	0.03	-0.18	0.57	0.30	0.15	0.81	0.22	0.01
Future	1.16	-0.28	0.01	0.85	0.14	-0.03	0.82	0.12	0.06	1.15	-0.25	-0.02	0.94	-0.03	-0.38	1.18	-0.30	0.01	0.96	0.01	-0.01	0.77	0.37	0.02
Prevention	0.86	-0.02	0.04	0.75	0.16	0.01	0.88	0.00	0.22	0.87	-0.14	0.04	0.87	0.03	-0.22	0.70	0.01	0.18	0.68	0.00	0.15	0.77	0.43	-0.03
Implicit																								
Distressed	-0.02	0.31	0.60	-0.01	0.88	0.06	0.12	0.52	0.52	0.00	0.84	0.08	0.09	0.88	-0.02	-0.02	0.72	0.16	0.01	0.87	-0.13	0.00	0.22	0.84
Emotional	0.07	0.15	0.71	-0.03	0.94	-0.01	-0.01	0.56	0.58	0.05	0.80	0.06	0.00	0.88	0.20	0.06	0.78	-0.02	-0.03	0.97	-0.06	-0.01	-0.06	0.92
Match	0.01	-0.04	0.46	0.24	0.71	-0.01	-0.01	0.14	0.28	-0.09	0.28	0.31	-0.01	-0.08	0.42	0.11	0.44	-0.10	0.24	-0.16	-0.20	0.42	0.12	0.48
Facial exp.	0.46	0.02	0.59	0.29	0.82	-0.08	0.38	0.66	0.01	0.16	0.84	0.00	0.57	0.50	0.00	0.18	0.57	0.23	0.15	0.84	0.01	0.42	-0.01	0.60
Body posture	0.49	0.04	0.54	0.32	0.72	0.03	0.26	0.73	0.04	0.32	0.68	0.03	0.66	0.39	-0.02	-0.01	0.72	0.32	0.00	0.63	0.38	0.47	-0.07	0.65
Tone of voice	0.50	-0.03	0.59	0.45	0.44	0.15	0.34	0.63	0.00	0.14	0.90	-0.05	0.52	0.53	0.05	0.13	0.80	0.01	0.09	0.67	0.20	0.34	0.13	0.59
Explicit																								
Apologised	0.29	0.64	0.04	0.23	0.33	0.57	-0.01	0.95	-0.01	0.81	0.02	0.14	0.86	0.10	0.02	0.41	-0.02	0.54	-0.03	0.30	0.74	0.79	0.02	0.17
Feelings	0.37	0.53	0.10	0.45	0.39	0.23	0.22	0.79	-0.02	1.15	-0.25	-0.02	0.80	0.24	-0.02	0.33	0.32	0.37	0.05	0.31	0.65	0.68	0.03	0.33
Concern	0.03	0.80	0.19	0.00	0.54	0.51	-0.16	1.07	0.00	0.87	-0.14	0.04	0.63	0.33	0.05	0.48	-0.01	0.46	0.07	0.20	0.67	0.70	0.01	0.26

 Table 40. Exploratory Factor Analysis (two factors) of 17 Items of the Offender Remorse Evaluation Scale (ORE; 111) for Offenders 1-8 (Autistic)

*Factor loadings ≥ 0.7 are in bold set.

	$X^2 : df \le 2 \text{ or } 3$	р	<i>RMSEA</i> <.06 to .08 with CI 90%	$\frac{SRMR}{\leq .08}$	$CFI \le .95$	$TLI \le .95$
Offender	v					
1	143.254 (88)	<.001	.076 [.053, .098]	.039	.994	.991
2	134.304 (88)	.001	.074 [.048, .099]	.039	.990	.984
3	156.247 (88)	<.001	.091 [.067, .114]	.040	.993	.990
4	167.281 (88)	<.001	.091 [.070, .112]	.039	.990	.985
5	144.657 (88)	<.001	.077 [.054, .099]	.045	.994	.991
6	135.008 (88)	.001	.075 [.048, .099]	.045	.989	.982
7	109.607 (88)	.059	.048 [.000, .075]	.047	.995	.992
8	140.290 (88)	<.001	.074 [.050, .096]	.041	.991	.986

Table 41. Exploratory Factor Analysis (two factors) of 17 Items of the Offender Remorse Evaluation Scale (ORE; 111) for Offenders 9-16 (Non
autistic)

																					-			
		Offender 9	9	C	Offender I()	C	ffender l	1	C	Offender I	2	C	Offender l	3	C	offender l	4	0	ffender l	5	(Offender .	16
Items	F_1	F ₂	F3	F1	F ₂	F3																		
Admission of																								
Responsibility																								
Agreed	0.62	-0.01	-0.47	0.48	-0.11	0.70	0.69	0.30	0.02	0.84	-0.15	-0.03	-0.23	0.57	0.19	0.78	-0.02	0.10	0.01	0.28	0.64	0.18	0.02	0.71
Wrongfulness	0.71	0.17	-0.25	0.77	0.01	0.40	0.78	0.19	-0.02	0.89	-0.05	0.04	-0.10	0.72	0.25	0.93	0.07	0.01	0.17	0.49	0.37	0.64	0.04	0.38
Choice	0.82	-0.18	-0.03	0.47	0.02	0.57	0.86	0.03	-0.07	0.64	-0.18	0.01	-0.28	0.77	-0.02	0.82	0.08	-0.10	-0.11	0.11	0.80	-0.01	0.11	0.50
Impact	0.67	0.19	0.12	0.75	0.01	0.18	0.78	0.14	0.14	0.87	-0.05	0.25	-0.01	0.47	0.51	0.91	-0.11	-0.01	0.06	0.92	0.04	0.74	-0.09	0.39
Justified	0.14	0.16	-0.34	0.17	-0.01	0.49	0.19	0.32	-0.10	0.47	-0.24	0.05	-0.43	0.39	0.03	0.33	-0.12	-0.13	-0.31	-0.06	0.55	0.31	-0.04	0.53
Self-transformation																								
Willingness	1.00	0.01	0.23	0.97	-0.03	-0.01	1.01	-0.15	-0.04	0.90	0.10	-0.17	0.38	0.81	-0.01	0.95	0.39	-0.01	0.45	-0.01	0.70	0.88	0.11	0.01
Future	0.94	-0.10	0.01	0.95	-0.07	0.03	0.94	-0.02	-0.30	0.85	-0.01	-0.20	0.67	0.68	0.03	0.79	0.46	-0.01	0.34	0.20	0.51	1.06	-0.08	-0.05
Prevention	0.94	-0.11	0.29	0.99	-0.15	-0.07	0.66	0.20	-0.22	0.79	0.15	-0.21	0.45	0.66	-0.01	0.83	0.45	0.02	0.33	0.12	0.49	0.84	0.14	-0.05
Implicit																								
Distressed	0.20	0.69	0.38	0.15	0.67	-0.45	0.05	0.74	0.30	0.14	0.64	0.32	0.06	-0.20	0.91	0.15	0.02	0.76	0.91	-0.09	-0.07	0.02	0.83	0.05
Emotional	-0.01	0.96	0.55	-0.01	0.86	-0.37	-0.02	0.86	0.30	-0.01	0.71	0.42	0.00	-0.72	1.30	-0.04	0.21	0.93	1.01	-0.34	0.03	0.00	0.94	-0.14
Match	0.25	0.72	-0.11	0.11	0.77	0.09	-0.02	0.91	-0.16	-0.01	0.78	-0.37	0.06	0.23	0.54	0.00	-0.18	0.89	0.71	0.01	0.11	0.01	0.33	0.36
Facial	0.19	0.78	0.00	0.12	0.86	-0.01	0.05	0.89	-0.03	0.26	0.82	0.01	-0.08	0.01	0.91	0.10	-0.13	0.85	0.67	0.27	-0.09	0.30	0.71	-0.02
Body posture	0.00	0.96	-0.19	0.13	0.85	-0.01	0.06	0.90	0.01	0.46	0.65	0.07	0.00	0.26	0.65	0.40	-0.03	0.57	0.74	0.29	-0.02	0.49	0.46	0.08
Tone of voice	0.27	0.70	0.18	-0.02	0.81	0.11	0.09	0.85	-0.08	0.40	0.76	-0.11	-0.02	0.11	0.76	0.31	0.16	0.67	0.77	0.12	0.01	0.26	0.70	0.09
Explicit																								
Apologised	0.38	0.59	-0.07	0.64	0.21	0.34	0.74	0.23	0.08	0.70	-0.02	0.40	0.10	0.53	0.40	0.90	-0.06	0.06	-0.14	0.70	0.35	0.56	0.07	0.46
Feelings	0.77	0.09	-0.24	0.64	0.22	0.27	0.68	0.29	0.10	0.68	0.02	0.50	0.11	0.41	0.57	0.76	0.02	0.13	0.26	0.52	0.24	0.68	0.18	0.21
Concern	0.70	0.15	0.00	0.77	0.17	-0.01	0.72	-0.01	0.50	0.72	0.05	0.42	-0.04	0.14	0.76	0.75	-0.09	0.17	0.01	0.83	0.07	0.87	-0.01	0.11

*Factor loadings ≥ 0.7 are in bold set

	X^2 $X^2: df \le 2 \text{ or } 3$	р	<i>RMSEA</i> < 06 to_08 [CI 90%]	SRMR < 08	<i>CFI</i> < 95
Offender				_ 100	_00
9	106.723 (88)	.085	.044 [.000, .072]	.051	.995
10	175.610 (88)	.000	.096 [.075, .116]	.046	.985
11	107.271 (88)	.080	.045 [.000, .072]	.032	.997
12	113.114 (88)	.037	.052 [.041, .078]	.043	.994
13	134.871 (88)	.001	.070 [.045, .093]	.041	.991
14	124.522 (88)	.006	.062 [.034, .086]	.043	.993
15	168.843 (88)	<.001	.092 [.071, .113]	.047	.982
16	145.369 (88)	<.001	.077 [.054, .099]	.035	.997

Discussion

The final study of this thesis aimed to address the gap in understanding how judges evaluate offender remorse, specifically comparing perceptions of remorse in autistic and non- autistic offenders. To achieve this, I conducted a mock sentencing hearing, assessing factors such as remorse, rehabilitation potential, moral culpability, perceived offence severity, and sentence length. Additionally, I examined impressions of characteristic traits, as prior research has primarily focused on unfavourable social impressions, with limited attention to the forensic context. This study also piloted the novel Offender Remorse Evaluation (ORE) measure, as there are currently no other validated tools designed to assess the components involved in evaluating remorse in criminal offenders. The findings revealed significant differences in how remorse was perceived and evaluated between autistic and non-autistic offenders.

Sentencing Factors

Autistic offenders were rated significantly lower on the single measure for remorse compared to non-autistic offenders, reflecting previous research that highlights the challenges autistic individuals face in expressing emotions in ways that align with neurotypical expectations (Alkhaldi et al., 2019). This finding is concerning, as it suggests that autistic offenders may be disadvantaged in judicial settings where remorse is a crucial factor influencing sentencing outcomes.

Moral culpability ratings were generally unfavourable for both groups but were slightly more negative for autistic offenders. The measure of moral culpability was framed as "the offender's explanation for the offence excuses their immoral behaviour." This suggests that judges did not find the offenders' explanations sufficient to lessen their moral culpability, with this judgment being particularly pronounced for autistic offenders. This is concerning because understanding the reasoning behind the offence is essential for reducing moral culpability, especially for offenders with mental impairments. Awareness of the offender's diagnosis appears to be especially important in applying this mitigating sentencing factor as demonstrated in the qualitative case analysis presented in Chapter 5; judges were more likely to consider the offender's diagnosis as impacting moral culpability when they believed the offender was remorseful, while moral culpability remained unaltered if the offender was seen as unremorseful.

Rehabilitation potential was rated much lower for autistic offenders and showed strong associations with remorse ratings, suggesting that not only do autistic offenders appear less remorseful, but they are perceived as more likely to reoffend. These results also support the findings in Chapter 4 where autistic offenders considered to lack remorse were more likely to be considered to have unfavourable rehabilitation prospects. Moreover, rehabilitation was related to moral culpability where favourable considerations for rehabilitation were likely to occur if the offender was perceived to be less morally culpable. No relationship existed for the non-autistic group.

On average, offence severity was viewed as neither more nor less severe than typical offences of that nature. However, autistic offenders were perceived as committing slightly more severe offences compared to non-autistic offenders. This suggests a potential spillover effect from the more negative evaluations of the autistic group, influencing perceptions of factors that were otherwise fixed across both groups, such as the details of the offence. Offence severity had weak relationships with moral culpability indicating offences were perceived as less severe when offenders received favourable ratings for moral culpability.

Autistic offenders, on average, received longer sentences compared to the non-autistic group, supporting the findings from the pilot study presented in Chapter 3. Sentence length was negatively correlated with remorse supporting the notion that offenders are more likely to receive less severe sentences when they were perceived as remorseful. Sentence length was also negatively associated with rehabilitation potential, with shorter sentences given to offenders who were perceived to have stronger prospects for rehabilitation. No relationship was found between sentence length and moral culpability, likely due to overall unfavourable moral culpability ratings, where offender explanations were not seen as excusing immoral behaviour. Lastly, sentence length was positively correlated with offence severity, with longer sentences given for offences considered

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more severe.

Trait Impressions

Consistent with previous studies (Alkhaldi et al., 2021; Alkhaldi et al., 2019; Cage & Burton, 2019; DeBrabander et al., 2019; Grossman et al., 2019; Morrison et al., 2020; Sasson & Morrison, 2019; Scheerer et al., 2022b), autistic offenders were rated less favourably for traits such as awkwardness, likability, and attractiveness compared to non-autistic offenders. Additionally, autistic offenders were rated as less aggressive than non-autistic offenders, though both groups were generally rated high on aggression, suggesting that the criminal context influenced this trait. There were no significant group differences in ratings for honesty, which aligns with one previous study (Scheerer et al., 2022a), while most studies using this measure had found autistic targets to be rated more favourably in this regard.

Overall, favourable remorse judgments were associated with offenders perceived as less awkward, more honest, more likable, more intelligent, and more attractive. Interestingly, aggression was not associated with perceptions of remorse. Offenders perceived as less awkward were more likely to have their offences judged as less severe. Most favourable trait ratings yielded similar results, except for honesty, which was not associated with offence severity. Similarly, favourable trait ratings for like and honest were associated with lesser sentences.

Due to the complexity of the study design and the limited sample size, the planned analysis of character trait assessments in relation to other constructs, such as the ORE, was not conducted. Future research should involve a larger sample size to determine whether character trait assessments influence remorse evaluations and other sentencing factors. Additionally, character trait assessments should ideally be conducted before the offender's testimony, or the forensic context is revealed to minimise the impact of context-related variables on the evaluations.

Offender Remorse Evaluation (ORE) Items

The affect control theory model could not be tested in this pilot study due to the design complexity and limited sample size. Future research with larger samples could use Structural Equation Modelling (SEM) analysis of the refined factors will determine whether there are indirect effects of emotion expression (implicit expressions) and character assessments (admission of responsibility, explicit expressions, and self-transformation items) on judgments, such as sentence length and other sentencing outcomes.

Interesting insights were gained through the relationships between items on the ORE. Overall, the results suggest that offenders who show clear acknowledgment of their offence, its wrongfulness, and its impact on others tend to be perceived more favourably in terms of remorse and receive shorter sentences. Justifying the offence, on the other hand, tends to increase perceptions of moral culpability and may lead to longer sentences. Rehabilitation potential appears to be only weakly influenced by admissions of responsibility, indicating that other factors likely play a more significant role in these judgments.

Judges appeared to consider expressions of self-transformation, especially in relation to remorse and sentence length. Offenders who demonstrated a willingness to change or prevent future offences were seen as more remorseful and received shorter sentences, likely due to the perception that they are less likely to reoffend. The weak negative correlations with rehabilitation suggest that judges might be sceptical of the sincerity or effectiveness of expressed self-transformation when evaluating an offender's capacity for rehabilitation.

Since the correlations between self-transformation and moral culpability or offence severity were weak, it seems that expressions of change do not strongly affect judgments of blameworthiness or the seriousness of the crime. These factors might be more influenced by the nature of the offence and the offender's past behaviour rather than their stated intentions for the future. In sum, expressions of self-transformation, especially related to remorse and the desire to avoid future offences, can significantly influence sentence length but do not appear to strongly affect perceptions of rehabilitation, moral culpability, or offence severity.

Implicit expressions (body language, facial expressions, and tone of voice) played a significant role in how remorseful offenders were perceived and appeared to influence sentencing

decisions. These results suggest that offenders who appear more emotionally engaged and remorseful are more likely to receive shorter sentences.

Despite their influence on remorse and sentence length, implicit expressions have little impact on rehabilitation potential and moral culpability, suggesting that judges may rely on other factors (such as the nature of the crime or past behaviour) when evaluating these aspects. In sum, implicit expressions, particularly body posture, facial expressions, and tone of voice are key factors in shaping perceptions of remorse and influencing sentence length, even though they have limited effects on perceptions of rehabilitation and moral culpability.

Explicit expressions (apologies, feelings, concern) were strongly associated with remorse. Judges appeared to interpret these explicit verbal or emotional displays as indicators of genuine remorse. Explicit expressions were weakly related to rehabilitation potential, suggesting that while offenders may be seen as remorseful, these verbal displays do not strongly influence perceptions of their ability to change or rehabilitate. The relationship between explicit expressions and moral culpability were mixed. Apologies and emotional admissions slightly increased perceptions of culpability, while showing concern slightly decreased it.

Explicit expressions were moderately correlated with shorter sentences. Offenders who apologised, expressed their feelings, or demonstrated concern for the victim received more lenient sentences, likely due to the strong association between these behaviours and perceptions of remorse. Overall, explicit expressions of remorse (apologising, expressing feelings, and showing concern) appear to have a significant impact on perceptions of remorse and sentence length but only a limited effect on rehabilitation potential and moral culpability. These findings suggest that judges place great weight on explicit verbal expressions when evaluating remorse and determining sentencing outcomes.

A qualitative review of the factor analyses revealed that items within the Implicit Expressions and Self-transformation components were consistent across most offenders. However, Explicit Expressions (EXP) and Admission of Responsibility (ADM) often overlapped. Specifically, items 2 and 4 of ADM frequently aligned with EXP items, suggesting that statements about the victim's impact and the 'wrongfulness' of the offence might better align with explicit expressions of remorse. This supports Weisman's (2014) view that remorseful 'suffering' should be oriented toward the victim rather than the offender's own circumstances, emphasising the importance of verbal expressions of remorse. To further validate the ORE measure, the next step should involve revisiting the Admission of Responsibility component, with consideration for removing or restructuring items that were less consistent and showed lower factor loadings.

Overall, the results from the Offender Remorse Evaluation (ORE) measure revealed that autistic offenders were rated less favorably than non-autistic offenders on 16 of the 17 items. The sole exception was the item related to *demeanour match* ("The offender's demeanour matched their testimony"), which did not show significant differences between the groups. This item also demonstrated inconsistent factor loadings across offenders.

Significant group differences were observed in items concerning *facial expression*, *body posture*, *tone of voice*, *distress*, and *emotion*. Strong relationships existed between items related to Admission of Responsibility and Implicit Expressions. Notably, when judges considered an offender to agree with the charges, they were more likely to perceive the offender as remorseful based on facial expressions, body posture, and emotions, and vice versa. These results suggest that the processing of interview questions related to the Admission of Responsibility component (e.g., acknowledging the charges) and the formulation of their responses significantly impacted how their non-verbal expressions of remorse were perceived. The specifics of the offence particularly may have influenced whether autistic offenders expressed agreement with the charges and other aspects of admitting responsibility. For instance, some offences did not involve a clear victim, which may have limited the extent of remorse autistic offenders could feel and convey. In contrast, non-autistic offenders might be better at demonstrating non- verbal remorse by adopting a broader perspective on the offence. Even in cases without a clear victim, they may be more likely to recognise the wrongdoing and its potential or indirect impact on others.

Central Coherence Theory explains these differing processing styles (Frith, 2003). Strong central coherence (global processing) involves attending to the overall context or 'big picture' (Ji et al., 2019), while weak central coherence (local processing) focuses on specific details, a style more common in the autistic population (Happé & Booth, 2008). Differences in offence details may have influenced how autistic offenders processed and portrayed themselves in the vignette, affecting how their emotional reactions were expressed and perceived by judges.

Although inferential analysis on offence type was limited due to small sample size in this study, there appeared to be patterns in the autistic group's testimony transcripts for specific offences, such as 'intent to procure minor'. For example, this offence depicted a police officer posing as an underage girl responding to the offender's ad "looking for young girls who want to have some fun" on Craigslist, one autistic offender felt betrayed and set up, suggesting that if the police officer had not posed as an underage individual, they would not have engaged in the conversation. Other autistic offenders questioned the police's motives and felt they did not deserve punishment, using terms like 'tricked' and believing the police were deceptive. Conversely, non-autistic offenders admitted their wrongdoing and expressed self-disgust, indicating regret and poor judgment.

Some of the judges' justifications for sentence length in the 'intent to procure a minor' offence reflected similar patterns. In the case of autistic offenders, several judges highlighted the offenders' lack of responsibility and remorse. One judge noted that the offender partially blamed the victim and believed no crime had been committed. Another expressed concern that the offender did not understand the gravity of the offence and was at high risk of reoffending, needing significant guidance and therapy. Another judge emphasised the offender's lack of remorse, noting that they believed "nothing happened" and thus felt they shouldn't be punished, though the judge acknowledged the offender had taken a small step by recognising the need for self-reflection. Several judges pointed out that the offender failed to take ownership, blamed external circumstances, and offered no strategies to prevent reoffending, which led to concerns about their

likelihood to reoffend. In some cases, offenders were seen as shifting blame to the police and viewing themselves as victims, which further supported harsher sentences.

In contrast, the judges' responses to the non-autistic offenders for the same offence were more favourable. One judge noted that the offender fully understood the wrongdoing, expressed deep remorse, and acknowledged that it would be something they had to live with for the rest of their life, justifying a lighter sentence. Another judge observed that the offender appeared distressed by their actions, took accountability, and seemed unlikely to reoffend. Some judges remarked that these offenders had learned their lesson, apologised, and seemed committed to change. One judge even noted that the offender was relieved to have been caught and was grateful for the police intervention, expressing confidence that they were already on the path to rehabilitation.

In offence scenarios where the offender had clear, direct contact with the victim, such as in the case of 'sexual assault,' autistic offenders appeared to express more responsibility and ownership for their actions. They demonstrated this through statements acknowledging the harm they caused and their personal culpability. For example, one offender expressed remorse by recognising the victim's disinterest: "I feel bad. She clearly was not interested in what I wanted." Another took full accountability, saying, "I'm sorry for what I did to you, and I shouldn't have done that - it was my fault." A third described their behaviour as "reprehensible," admitting their poor judgment: "It was very irresponsible of me to drink like that and then act the way I did." Others reflected on the damage caused to relationships, with one stating, "I feel quite horrible. I quite likely destroyed my relationship with them," and apologising for breaking trust: "I'm sorry for being an absolute asshole and destroying any trust you had in me."

Similarly, some judges' responses to this offence were more favourable for autistic offenders. One judge noted that the offender showed awareness of their wrongdoing, expressed remorse, and was willing to take steps to reduce the risk of reoffending. Another judge highlighted the offender's acknowledgment of their actions and remorse. One judge observed that the offender demonstrated genuine remorse and deep reflection on their behaviour, emphasising that their responses were not calculated but thoughtful, with a focus on preventing future occurrences. Another judge remarked that the offender appeared regretful and emotional when recalling the situation, believing they had done wrong and were prepared to accept the consequences, showing confidence that the offender would not reoffend. Similarly, another judge commented that the offender seemed remorseful, recognised the harm caused, and accepted full responsibility for their actions with strong regret.

However, there remained some uncertainty with some of the judges regarding aspects of the offenders' nonverbal behaviour. One judge mentioned that the offender appeared socially awkward and didn't seem contrite, leading to a harsher sentence. Another judge noted the offender's awkward demeanour but acknowledged their remorse, both verbally and through body language, which led to a more lenient sentence. One judge felt that while the offender showed signs of remorse, they struggled to communicate it fully due to their nature, sometimes appearing vague. Another judge expressed skepticism, feeling that the offender's flat affect and lack of compassion indicated they didn't truly understand the nature of the crime and were sorrier for being caught than for the harm caused. Lastly, a judge noted that the offender seemed aware of their actions but showed little concern, maintaining a downcast gaze and a disengaged tone, though they acknowledged the wrongness of their actions and the consequences.

Implications for the Legal System

The findings have important implications for the legal system, particularly in terms of how autistic individuals are perceived and treated in court. The lower ratings for remorse, moral culpability, and rehabilitation potential among autistic offenders suggest that current judicial practices may not adequately account for the unique ways in which autistic individuals express emotions and understand social interactions.

The ORE measure, designed to provide a more structured and theoretically grounded assessment of remorse, revealed that non-autistic offenders were evaluated more favourably on nearly all items. This indicates a need for the legal system to develop more inclusive tools and
training that can help judges better interpret the emotional expressions of autistic offenders. Expert witnesses such as psychologists and psychologists should emphasise how the offender processes the events that took place using weak coherence theory and connect this to situations where it does appear that the offender lacks remorse. Such tools could help mitigate the potential bias and ensure that sentencing decisions are fair and equitable.

Strengths and Limitations

Despite the valuable insights gained from this study, several limitations should be acknowledged. The use of mock sentencing scenarios, while beneficial for controlled experimentation, may not fully capture the complexities and pressures inherent in real-world judicial decision-making. However, participant feedback from the debrief survey indicated that the moot courtroom setting enhanced the perceived validity of the sentencing experience. Many participants noted that the courtroom environment contributed to a sense of realism, with comments highlighting the professionalism of those involved and the intimidating atmosphere of the space. This setting helped actors immerse themselves in their roles, which may have positively influenced their responses.

Additionally, the majority of the actors reported successfully getting into character, expressing that the clear instructions and prior exposure to the scenarios enabled them to respond appropriately. This suggests that, while the mock setting might not replicate all aspects of actual court proceedings, it effectively facilitated a more genuine engagement with the material.

The limited sample size within the offender groups may impact the generalisability of the findings. However, a notable strength of the study lies in the inclusion of multiple offenders in both the autistic and non-autistic groups, closely matched on age and IQ. This matching helps enhance the validity of comparisons between the groups. Given the experimental design, recruiting participants willing to portray offenders who had committed serious crimes, while being video recorded for others to view and evaluate, presented a significant challenge. Additionally, the focus on specific types of offences could restrict the applicability of the results to wider contexts.

Another challenge lies in measuring abstract constructs like remorse. Although the ORE measure offers a structured approach, it still relies on subjective human interpretation, which can introduce variability. The weaker correlations and inconsistent factor loadings for certain items within the ORE measure, particularly among autistic offenders, suggest that further refinement is needed to ensure it accurately captures the nuances of remorse across different populations.

Theoretical Contributions

Complex statistical analysis such as SEM on the factor structure of the ORE were restricted due to the sample size in this initial pilot. However, there were valuable insights gained though the differing factor loadings on certain items between offender groups. Within the context of Affect Control Theory (ACT), the results still supported the idea that emotional expressions play a crucial role in confirming or disconfirming character assessments, which in turn influence sentencing decisions. Additionally, the finding that autistic offenders' non- verbal expressions of remorse were more closely tied to their internal processing of the offence (e.g., admission of responsibility) suggests that ACT may be particularly useful for understanding how identity and emotion interact in this population. This has important implications for how we conceptualise and assess remorse in individuals who communicate differently from the neurotypical majority.

Future Research Directions

The affect control theory model could not be tested in this pilot study due to the design complexity and limited sample size. In the next stage, Structural Equation Modelling (SEM) analysis of the refined factors will help determine whether there are indirect effects of emotion expression (implicit expressions) and character assessments (admission of responsibility, explicit expressions, and self-transformation items) on judgments, such as sentence length and other sentencing outcomes. Future studies are recommended to refine and validate the ORE measure across various populations and offence types to enhance its accuracy and reliability in assessing remorse. Based on these preliminary results, subsequent studies should include larger sample sizes for further validation. Additionally, future research should explore other factors that might influence judges' perceptions of remorse, such as the nature of the offence. Understanding these factors could lead to the development of more nuanced and effective tools for evaluating remorse. Moreover, there is a need to investigate interventions or training programs for judges to enhance their ability to recognise and interpret remorse in autistic offenders. Such programs could incorporate findings from this study to help judges better understand the unique ways in which autistic individuals process events and subsequently express emotions, potentially leading to more equitable sentencing outcomes. Other research might explore comparative studies between autistic and other neurodiverse populations such as ADHD or PTSD to determine if similar patterns of remorse evaluation exist across different conditions.

Future qualitative analyses should examine offender transcripts and judges' justifications for sentencing to identify common themes within and between offender groups. It would also be useful to analyse testimony length and word count to identify any patterns, as preliminary observations suggested that videos of autistic offenders appeared longer.

Detailed descriptions from an offender during the interview process may be counterproductive if they are perceived as attempts to justify the behaviour rather than straightforwardly admitting wrongdoing and accepting consequences.

Policy and Practice Recommendations

Based on these findings, several recommendations can be made to enhance the fairness and accuracy of judicial evaluations of remorse in autistic offenders. Firstly, it is crucial to develop comprehensive training programs for judges and legal professionals that address implicit biases and deepen their understanding of how autism affects emotional and cognitive processing. Such training could help mitigate the risk of unfair sentencing outcomes that may arise from misunderstandings or stereotypes about autistic individuals.

Additionally, introducing specialised support structures within the criminal justice system is recommended. This could involve the inclusion of mental health professionals, advocates, or autism

specialists who can assist autistic offenders in navigating legal proceedings. These professionals would play a key role in helping autistic offenders express remorse in a manner that aligns with judicial expectations and ensures a fair evaluation.

Rehabilitation programs should also be tailored to accommodate the unique ways in which autistic offenders process and express remorse. Programs designed with a nuanced understanding of autism-specific needs are likely to improve rehabilitation outcomes and support fairer sentencing practices. Moreover, advocating for adjustments in courtroom procedures and guidelines is essential to better accommodate autistic offenders. This may involve implementing alternative methods for presenting and assessing remorse that align with their communication styles and processing preferences.

Conclusion

In conclusion, this study highlights significant differences in how remorse is evaluated in autistic versus non-autistic offenders, with important implications for sentencing outcomes. The findings underscore the need for more inclusive and nuanced approaches to assessing remorse in the legal system, particularly for neurodiverse populations. By refining and validating tools like the ORE measure, the legal system can move towards more equitable and consistent sentencing practices that better reflect the complexities of human behaviour and emotion.

CHAPTER 7: Discussion

A key concern in the legal evaluation of autistic offenders is the unintended consideration of autism-related characteristics during the assessment of remorse. Research shows that differences in social communication, a core aspect of autism, may lead to misconceptions about an accused's emotional expressions (Allely, 2015; Hepworth, 2017). These misconceptions can result in negative evaluations of an individual's mental state and moral character due to a lack of understanding about autism (Berryessa, 2014; Cea, 2014; Freckelton, 2011; Freckelton & List, 2009; Gardner et al., 2019; Maras et al., 2017). This issue is particularly significant when behavioural evidence is used to assess an individual's remorse - a crucial factor in sentencing offenders. In many jurisdictions in Australia and abroad, courts are encouraged to consider an offender's conduct during the trial or hearing as an indication of remorse or lack of remorse (e.g., Sentencing Act 1991, Vic). However, it is important to recognise that behavioural evidence of remorse is not limited to courtroom demeanour or actions. While courtroom conduct may offer some insight, remorse can also be demonstrated through behaviour outside the courtroom, such as taking steps to change one's behaviour, seeking help, or engaging in rehabilitative programs to reduce future offending. These actions can be crucial indicators of genuine remorse but may not always align with conventional expectations of emotional expression. Moreover, such actions may not be fully understood or appreciated by legal decision-makers, particularly if they are based on autistic individuals' distinctive social communication styles. Given that autism can affect how individuals express or perceive remorse, there is a significant risk of misinterpretation. If legal decision-makers are not well-informed about how autism impacts social communication, cognitive processing, and emotional expression, they may incorrectly assess an individual's remorse or moral character, leading to unjust sentence outcomes.

The research reported in this thesis was carried out in three main phases. The first phase sought to provide evidence that individuals on the autism spectrum are more likely to receive negative social impressions, regardless of whether perceivers are aware of the individual's autism status. Additionally, this phase aimed to investigate whether such negative impressions occur across various social contexts, including the legal system. This approach was essential due to the limited research on autism and its impact on social impressions within the legal system, particularly concerning evaluations of remorse. At the beginning of this project, only one systematic review existed, which included a relatively small sample of studies (Allely & Cooper, 2017).

The second phase involved analysing real criminal court cases through sentencing and appeal hearing transcripts. In this analysis, I aimed to determine whether offenders with autism receive disproportionately severe penalties compared to average sentences for similar offences. Additionally, I assessed how remorse and other sentencing factors, particularly those related to mental impairment, were considered in the context of autism. The goal was to understand how autistic offenders were evaluated and how their diagnosis influenced these evaluations and sentencing decisions.

The final phase of this thesis sought to provide empirical evidence on how autistic offenders are evaluated in a forensic context compared to non-autistic offenders. In this phase, I aimed to determine if autistic offenders are indeed perceived unfavourably in terms of remorse and other sentencing considerations, resulting in harsher penalties. Additionally, I aimed to explore the reasons behind any unfavourable perceptions by introducing the Offender Remorse Evaluation (ORE) measure, which builds on previous theories on perceptions of offender remorse (Goffman, 1971; Proeve & Tudor, 2016; Weisman, 2004) and the impression formation process described by Affect Control Theory (Smith-Lovin & Heise, 1988). This theory examines how emotions and behaviours confirm or disconfirm perceptions of another's character.

Impressions of Individuals on the Autism Spectrum

The systematic review and meta-analysis of thirty studies in Chapter 2 confirmed that individuals with autism are perceived significantly less favourably than those without autism, regardless of age or whether diagnostic information is provided. This effect was notably more pronounced for male targets compared to female targets. Young adults (ages 17-25) rated autistic targets less favourably than older adults (>40 years) and teenagers (13-16 years). However, age was

not a factor for targets indicating autistic persons of all ages were perceived equally unfavourably. Factors such as discourse quality, characteristic traits, and behavioural intentions were key factors in determining impression ratings, while target readability did not reach significance as anticipated. Professional and legal environments seemed to reduce the variability in impression ratings between autistic and non-autistic targets compared to general and educational social environments.

The reduced variability in impression ratings for the legal context, compared to general social environments, was contrary to my expectations. However, these findings should not be generalised, as only two studies met the inclusion criteria for this category. These studies indicated that autistic individuals were perceived as less competent, trustworthy, and more deceptive based on behavioural cues (Lim et al., 2022). However, disclosing an autism diagnosis mitigated the perceived negative impact on competence. Furthermore, without knowledge of the diagnosis, credibility ratings for autistic individuals were similar to those of non-autistic individuals (Maras et al., 2019). With diagnostic information, autistic targets were rated as slightly more credible. Previous research supports the idea that impressions can be significantly influenced by forensic contexts, even when more relevant information is available (Jaeger et al., 2020; Wilson & Rule, 2015, 2016).

Throughout the systematic review, I consistently found that individuals with autism are perceived as less attractive and more socially awkward than those without autism, with awkwardness being a key differentiator. I also observed that autistic individuals are often viewed as having lower self-esteem, being less expressive, less dominant, and less likable, while being less likely to initiate conversations or form friendships, instead being seen as more inclined toward solitary activities. Furthermore, autistic individuals tend to score lower on traits such as articulateness, enthusiasm, openness, and extroversion. Traits like detachment, disorganisation, and inexpressiveness contributed to less favourable impressions. Interestingly, I found mixed results regarding trustworthiness and intelligence, with some studies suggesting that autistic individuals may be perceived as less trustworthy or more prone to deception. Given these findings, I believe that a defendant with autism might be viewed unfavourably in a criminal court due to perceived traits such as lack of expressiveness, awkwardness, and detachment, potentially impacting judgments of their remorse, trustworthiness, and overall character.

In my final study presented in Chapter 6, I compared impressions of autistic and nonautistic offenders using a mock sentencing hearing, adapting the measure from Sasson et al (2017) with a focus on six traits: attractive, intelligent, honest, aggressive, likable, and awkward. Consistent with the findings from the systematic review in Chapter 2, autistic offenders were rated less favourably on most traits, except for 'honest,' where no significant difference was found, and 'aggressive,' where both groups were rated unfavourably, likely due to their shared criminal identity. However, non-autistic offenders were rated as slightly more aggressive, further supporting previous findings.

Following the trend in Chapter 2, I found that the largest difference between groups was in ratings of awkwardness in Chapter 6. Further, offenders who were rated as less awkward were also seen as more likable and honest. Remorse had a strong positive relationship with likability, with remorseful offenders being rated more likable. It's possible that some awkwardness is expected in a courtroom setting, reducing its impact on likability, but this relationship may function differently for autistic offenders. The group differences between awkwardness and remorse in non-autistic offenders suggests awkwardness might be interpreted as a sign of remorse for them - a pattern not seen in autistic offenders. Both groups in Chapter 6's study showed strong correlations between likability and traits such as honesty, intelligence, and attractiveness. This suggests that while both groups are judged on similar traits, the strength of these associations might influence how their character is perceived in legal settings.

A review of offender transcripts and judges' comments revealed that when the victim's role was less prominent, autistic offenders were often honest about their lack of responsibility, frequently stating they were "tricked" into committing the offence. This honesty may have been interpreted as a lack of remorse. In contrast, non-autistic offenders in similar cases tended to take more ownership of their wrongdoing and expressed regret, likely leading them to being perceived as more remorseful by judges. The observed differences in awkwardness, intelligence, attractiveness and sentence length suggest autistic offenders may face unique challenges in legal evaluations. If their traits are interpreted more unfavourably, this could influence sentencing, potentially leading to harsher or inappropriate outcomes.

These results support earlier research by others showing that evaluations on individuals' outward appearance can lead to disproportionately harsh sentences, including the death penalty (Wilson & Rule, 2015, 2016). Wilson and Rule's research demonstrated that judgments based on facial trustworthiness affected sentencing outcomes regardless of actual guilt, with untrustworthy-looking individuals more likely to receive the harshest punishments, including wrongful convictions. Wilson and Rule (2016) further showed that participants assigned harsher sentences to untrustworthy-looking individuals based on appearance alone, with these judgments aligning with real-world jury decisions. This bias mirrors similar effects in social perception, such as elections and leadership evaluations (Sussman et al., 2013), underscoring the pervasive influence of appearance in legal contexts.

Jaeger et al. (2020) sought to assess whether interventions could reduce the impact of facial stereotypes on legal decision-making. Participants were more likely to find defendants guilty when they appeared untrustworthy, regardless of actual case details. This effect persisted even when participants were educated about the unreliability of facial stereotypes. These findings echo earlier studies showing that facial features influence legal judgments despite interventions to reduce such biases.

Findings from Chapter 2's meta-analysis found improved impressions of autistic offenders over time became non-significant after accounting for the increased number of female autistic participants, who were generally rated more favourably than males. However, this pattern may not apply in forensic contexts, as Lo et al. (2016) found that gender has no effect on sentence severity when analysing the tone and content of confessions and their influence on remorse evaluations. Despite increased autism awareness over the past 20 years, this increased knowledge may not significantly affect how autistic individuals are perceived in social or legal settings. This raises concerns that judicial education on remorse may not effectively reduce implicit biases. Consequently, I argue that alternative forms of remorse expression, such as written testimonies, should be considered during sentencing submissions to address these biases.

In summary, the systematic review and meta-analysis presented in Chapter 2 and subsequent findings highlight the consistent trend that individuals on the autism spectrum are perceived less favourably than non-autistic individuals across various social and professional contexts, including legal environments. While factors such as awkwardness, likability, and honesty play pivotal roles in shaping these impressions, autistic offenders face unique challenges in how these traits are interpreted, often to their detriment. Notably, legal contexts did not exacerbate the disparities as expected, but autistic individuals were still judged more harshly, particularly when diagnostic information was absent. The complexity of these perceptions, particularly in the correlation between honesty, likability and remorse, suggests that traditional markers of remorse may be misinterpreted for autistic offenders, influencing sentencing outcomes. These findings emphasise the need for further research to explore how perceptions of autistic individuals can be better understood and more fairly evaluated, especially in forensic settings where such biases may result in disproportionately severe

sentences. Moreover, alternative methods for expressing remorse, such as written statements, may offer a more equitable approach to mitigating these biases in court proceedings.

Real-World Sentencing Outcomes for Autistic Offenders

Fifty-three sentencing/appeal hearing transcripts were analysed and reported over Chapter 4, 5 and 6 of this thesis. Variables developed from the Australian sentencing legislation review in Chapter 1 included various indicators of remorse such as the offender's presentation in court, expert testimony, and cooperation with authorities including guilty pleas. Furthermore, sentencing factors commonly considered alongside offenders presenting with mental impairment were used including moral culpability, rehabilitation, and prison adaptability assessments. These were used to determine whether the offender's diagnosis was considered a mitigating or aggravating factor in sentencing.

Sentence Length

When comparing the sentences of autistic offenders from the study to national data, the results suggest that autistic offenders may receive harsher sentences. This was particularly evident in cases involving sexual assault, where 73% of the cases involved victims under the legal age of consent, likely leading to more severe penalties. The gravity of these offences could have influenced the judiciary's decision to impose harsher sentences. However, variations in sentencing across jurisdictions, along with differences in maximum penalties, complicate direct comparisons. Research on sentencing disparities based on diagnoses, such as autism or mental health conditions, remains limited.

Previous studies provide some context for these findings. Davidson and Rosky (2015) observed that the presence of a mental illness increased sentence length for violent convictions in male offenders, while it decreased sentence length for female offenders. This suggests that mental illness may be viewed as evidence of diminished capacity in females but as an indication of future dangerousness in males. While this pattern was not specifically examined in the present study, the harsher sentencing of a majority male sample of autistic offenders may reflect a similar perception of future risk rather than diminished responsibility, particularly for serious offences like sexual assault.

Nance (2023) found that defendants with intellectual disabilities were perceived as less responsible for their actions and were more likely to face less serious charges. In contrast, planning and premeditation did not predict outcomes highlighting that perceptions of responsibility, rather than the defendant's cognitive capabilities, played a key role in sentencing decisions. This finding resonates with the current study, where autistic offenders, despite their potential cognitive and social differences, may not have been perceived as less culpable by the judiciary. Instead, their traits may have been misunderstood or overshadowed by the severity of the offences, leading to harsher

penalties.

Thomaidou and Berryessa (2024) noted that defendants with no mental health evidence received the harshest sentences, while those with organic brain disorders were given less severe sentences and more likely offered treatment options. Judges were more lenient when biological evidence was presented, potentially reducing the perceived need for retribution or community deterrence. However, trauma-related evidence had little impact on sentencing outcomes, reflecting a broader trend where neurobiological explanations of behaviour are more influential than trauma in mitigating punishment. In an earlier study, Thomaidou and Berryessa (2023) found that individuals with mental disorders had a high likelihood (75%) of imprisonment, with less severe mental disorders often resulting in harsher sentences. Factors such as the type of disorder and offence severity played crucial roles in predicting sentencing outcomes. Trauma-related disorders were linked to higher imprisonment rates, while addiction and mood disorders led to lower rates of incarceration.

While mental disorders were often introduced as mitigating factors, incarceration remained more common than treatment or diversion. This pattern aligns with the present findings, where autistic offenders, despite their neurodevelopmental differences, may have been perceived similarly to individuals with less severe or misunderstood mental health conditions, resulting in more punitive outcomes.

Overall, the present findings suggest that autistic offenders, particularly in cases involving serious offences such as sexual assault, may receive harsher sentences, potentially due to misperceptions of their traits and behaviours. These results align with broader trends in sentencing, where neurodevelopmental or mental health conditions are not consistently recognised as mitigating factors, leading to more punitive outcomes despite the complexities of the defendants' cognitive and social challenges.

Remorse Judgements and Sentencing

In Chapter 4, various indicators of remorse including testimony, guilty pleas, cooperation with authorities, and expert witness reports were analysed to assess how remorse influenced sentencing outcomes. Autistic offenders were equally likely to be judged as remorseful or unremorseful, but there was a notable lack of agreement among raters on specific indicators of remorse, underscoring the complexity of identifying genuine remorse in court proceedings. Only the judges' own perceptions of remorse were consistently influenced by the offender's diagnosis, highlighting the subjective nature of these assessments.

Importantly, offenders deemed unremorseful received significantly longer sentences than those considered remorseful, aligning with broader judicial trends.

This subjectivity in remorse assessments is particularly relevant in light of offence type. In assault cases, for example, where mitigation was more common, autism frequently influenced moral culpability and, in some cases, rehabilitation potential. Judges in these instances appeared more willing to consider the diagnosis as a mitigating factor, especially in less severe crimes, reflecting the findings of Spiranovic et al. (2012), who reported that the public tends to prioritise rehabilitation over punishment in less serious offences. In contrast,

for more severe offences such as murder and sexual assault, autism's influence on sentencing was limited, and community protection was often prioritised. This mirrors Mueller-Johnson and Dhami (2009) findings that sexual assault typically results in longer sentences, with factors like remorse or a mental health diagnosis playing a minimal role in mitigating outcomes.

The study in Chapter 4 revealed judges frequently referenced autism when evaluating remorse, often considering how the condition might affect emotional expression and responsibility. Some judges acknowledged these challenges and treated atypical displays of remorse as mitigating, while others either misunderstood or disregarded them. This inconsistency is consistent with Berryessa (2023) findings, where probation officers recognised that psychiatric conditions, including autism, could complicate the expression and interpretation of remorse. As seen in both

Berryessa's research and the present study, these challenges in evaluating remorse can lead to inconsistent sentencing outcomes.

Berryessa (2022) reflected on the concept of "remorse bias," which suggests that decisionmakers may rely on biased expectations about the remorsefulness of defendants with specific characteristics, including mental illness. In Chapter 4, this bias may explain the inconsistency among judges when evaluating autistic offenders' remorse, as some appeared to discount the possibility that autistic individuals could express remorse in nontraditional ways. This bias is paralleled in Berryessa's findings, where probation officers used characteristics such as mental illness or criminal history to infer a defendant's remorsefulness and capacity for reform. In both studies, such biases had a significant impact on sentencing decisions, often leading to harsher outcomes for defendants perceived as unremorseful.

Silver and Berryessa (2023) also found that displays of remorse were linked to lower perceptions of offender immorality, though they did not significantly alter views on the immorality of the offence itself. This suggests that while remorse can affect perceptions of the offender, it may not substantially shift a judge's view of the crime's severity. This is particularly relevant to the present study's findings, where remorse was frequently observed in sexual assault cases, but this did not consistently mitigate sentencing outcomes. The inconsistency in applying neurodevelopmental conditions as either mitigating or aggravating factors underscores the challenges faced by judges in integrating complex factors like autism into their assessments of remorse and sentencing.

In summary, these findings underscore the complex and subjective nature of remorse judgments in sentencing, particularly for autistic offenders. While some judges acknowledged the impact of autism on emotional expression and treated atypical displays of remorse as mitigating, others appeared to misunderstand or overlook these differences. This inconsistency highlights the presence of remorse bias, where expectations of traditional emotional displays influence sentencing outcomes. Ultimately, the variability in how autism is interpreted in relation to remorse can lead to disparate sentencing decisions, underscoring the need for clearer judicial guidance and understanding of neurodevelopmental conditions.

Autism and Sentencing Factors

The current study (Chapter 5) explored how an autism diagnosis affects judicial evaluations of sentencing factors such as moral culpability, prison adaptability, and rehabilitation potential. Judges were more likely to view moral culpability as diminished when autism was considered a mitigating factor, aligning with previous research, such as Berryessa (2020), which highlights that traits associated with autism, like rigid thinking or emotional disconnect, often lead judges to perceive offenders as less morally responsible. However, when autism was viewed as an aggravating (or non-mitigating) factor, moral culpability was perceived as unaffected, reflecting previous findings that certain traits might reinforce perceptions of responsibility (Silver & Berryessa, 2023).

In line with prior research, the current findings in Chapter 4 and 5 underscores the pivotal role of remorse in shaping sentencing outcomes. Zhong et al. (2014a) found that judges use remorse as a reliable predictor of future behaviour, often equating expressions of remorse with lower risk of recidivism and better rehabilitation potential. Similarly, in my research, remorseful offenders with an autism diagnosis were more likely to receive favourable assessments, with judges seeing the diagnosis as mitigating and more likely to view rehabilitation prospects positively. In contrast, offenders perceived as unremorseful were more likely to have their autism diagnosis viewed as irrelevant to their moral culpability, suggesting that remorse can overshadow the diagnosis in shaping judicial decisions, much like the findings in Silver and Berryessa (2023), where perceived immorality (often linked to lack of remorse) led to harsher sentencing.

While remorse clearly influences sentencing, the current study highlighted the mixed outcomes in how autism affects evaluations of rehabilitation potential. When the diagnosis was considered mitigating, some judges saw rehabilitation as possible, particularly when expert testimony supported treatment potential. This contrasts with other cases where the diagnosis was perceived as a lifelong challenge, leading to more pessimistic views on rehabilitation prospects. These mixed findings echo previous research, like Berryessa (2020), which found that autistic traits such as difficulty with social interactions or emotional regulation often negatively influence rehabilitation assessments, especially when expert opinions are uncertain or when community safety is prioritised.

Moreover, the current study in Chapter 5 found that when autism was viewed as an aggravating factor, judges were more likely to focus on community protection over rehabilitation, particularly when the offender was deemed unremorseful or when the autism diagnosis was seen as complicating rehabilitation efforts. This aligns with Tangney et al. (2011), who noted that focusing on traits like guilt and empathy in rehabilitative settings

could be more effective in improving offender outcomes. Judges in the current study often cited a lack of remorse or emotional connection as barriers to rehabilitation, which is consistent with the idea that judges are more sceptical of an offender's potential for reform when they exhibit traits that hinder emotional expression. This mirrors findings in Xuereb et al. (2009) and Wright and Gudjonsson (2007), where offenders who displayed shame or rigid emotional responses were judged more harshly, and their rehabilitation potential diminished.

Additionally, the Double Empathy Problem (Milton, 2012) as suggested by Berryessa (2020), could explain why autistic offenders are often perceived as less remorseful or less capable of rehabilitation. This theory posits that misunderstandings between autistic and non- autistic individuals lead to biased interpretations of an autistic offender's emotional state. Judges may not fully appreciate the communicative differences in autistic individuals, which can result in judgments of an offender to lack remorse or emotional disconnect. This is significant because remorse, as highlighted by Hanan (2018), is deeply embedded in cultural narratives about wrongdoing. Judges often view a lack of remorse as a marker of bad character, potentially exacerbating the punitive treatment of autistic offenders.

The current study's finding that remorse did not mediate the relationship between sentencing

factors and sentence outcomes (likely due to limited cell frequencies) contrasts with previous research, which often positions remorse as a key factor in more lenient sentencing. Hanan (2018) suggests that remorse typically serves as a gauge of a defendant's capacity for reform, influencing judges' assessments of recidivism risk and rehabilitation potential. In this study, although remorse impacted evaluations of moral culpability and rehabilitation potential, it did not directly mediate the final sentence outcome. This may be due to the way sentencing factors were analysed in relation to the diagnosis's influence on these factors. It could also indicate that, even when remorse is present, judges may prioritise community protection over rehabilitation particularly in cases involving mental impairments such as autism, as noted by Silver and Berryessa (2023).

Prior research on perceived immorality, such as Silver and Berryessa (2023), found that perceptions of an offender's moral character significantly shape sentencing outcomes. Offenders deemed immoral, especially those perceived as lacking remorse, often face harsher sentences and a greater emphasis on incapacitation. The current study's findings align with this, as unremorseful offenders with an autism diagnosis were judged more harshly, with judges focusing more on community protection and less on rehabilitation. This indicates that, as in prior research, perceptions of the offender's moral character, influenced by the presence or absence of remorse, play a critical role in judicial decisions, sometimes overriding other sentencing factors like moral culpability or rehabilitation potential.

The inconsistent application of expert evidence across cases observed in the current study mirrors findings in research on how jurors process expert testimony. While the influence of expert testimony was not directly assessed, the variability in sentencing outcomes suggests that judges, like jurors, may sometimes rely on heuristics focusing more on the expert's credentials or perceived trustworthiness rather than the content of their testimony, as suggested by the 'Heuristic Model' of persuasion (Brekke & Borgida, 1988; Cooper et al., 1996). This could explain why, in some cases, an autism diagnosis led to more favourable views on rehabilitation, while in others, the diagnosis was seen as complicating rehabilitation efforts.

Moreover, the 'Story Model' (Hastie, 1983) offers further insight, suggesting that expert testimony may be integrated into the broader narrative judges construct about the offender. In severe cases, where community protection was prioritised, expert testimony that didn't align with this focus may have been less persuasive, leading to harsher sentencing outcomes. This aligns with the present findings that in more serious offences, the challenges of rehabilitation and concerns about community safety were emphasised, potentially overshadowing mitigating factors like remorse or the influence of autism on moral culpability.

In conclusion, the findings presented in Chapter 5 emphasise the complex role an autism diagnosis plays in judicial evaluations of key sentencing factors, particularly moral culpability and rehabilitation potential. While some judges viewed autism as a mitigating factor that could reduce moral culpability, others focused more on community protection, especially when remorse was absent. The mixed influence of autism on sentencing outcomes reflects broader issues of misunderstanding and bias, such as the Double Empathy Problem (Milton, 2012), which may lead judges to misinterpret autistic traits. Ultimately, these findings highlight the need for clearer judicial understanding and guidance in handling cases involving neurodevelopmental conditions like autism.

Sentencing Factors and Offence Type

In my research, the type of offence appeared to play a key role in shaping sentencing outcomes, with notable differences observed across various crimes (Chapter 5). In cases where autism was successfully argued as a mitigating factor, assault was the most common offence. Conversely, in cases where the diagnosis was not considered a mitigating factor, the offences were typically more serious, such as murder, often characterised by a perceived lack of remorse. Previous research supports the idea that the severity of the offence significantly influences sentencing priorities. For instance, Spiranovic et al. (2012) found that in cases of serious assault, punishment was considered more important than in less severe crimes like burglary. This aligns with my study's finding that moral culpability was more frequently impacted in assault cases where autism was a mitigating factor, whereas in more serious crimes like murder, the diagnosis had less influence on moral culpability.

For sexual assault, the present study revealed mixed outcomes, with many cases showing no clear impact of the diagnosis on sentencing. This may reflect the seriousness with which sexual offences are regarded, as supported by Mueller-Johnson and Dhami (2009), who found that sentences for child sexual abuse were significantly longer than for violent assault. This emphasis on longer sentencing for sexual crimes may explain why, in the current study, judges were less inclined to consider the diagnosis as mitigating for sexual assault cases. The presence of remorse in these cases was also high, though it did not consistently affect moral culpability, suggesting that even when remorse was expressed, the severity of the offence overshadowed its mitigating potential.

Murder cases in my qualitative research (Chapter 5) showed the diagnosis having little impact on moral culpability, which is consistent with the idea that judges prioritise community protection over rehabilitation in the most serious crimes. Unfavourable rehabilitation prospects were common for murder and manslaughter, with expert evidence frequently disregarded. This reflects Spiranovic et al. (2012) finding that the public and legal system place greater emphasis on punishment in severe offences. In these instances, autism's mitigating influence was often overshadowed by the offence's gravity, reinforcing the priority of community safety over rehabilitative concerns, a pattern similarly observed in research by Silver and Berryessa (2023).

In my research I also observed a lack of favourable rehabilitation assessments in sexual assault cases, despite the diagnosis being acknowledged in some instances. This echoes Mueller-Johnson and Dhami (2009) finding that factors like age and health influenced sentencing for violent crimes but had less of an effect on sexual offences. Judges in these cases may be less willing to consider mitigating factors for sexual offences due to the perceived risk to the community, even when the offender shows remorse, or the diagnosis suggests limited culpability.

Overall, both the current studies and previous research indicate that offence type plays a

critical role in how sentencing factors, such as moral culpability, remorse, and rehabilitation potential, are applied. Assault offences, where mitigation based on the diagnosis was more common, often saw a stronger link between the diagnosis and moral culpability, leading to more lenient outcomes. In contrast, for more serious crimes like murder and sexual assault, concerns about community protection and the offence's severity often overrode any mitigating factors related to the offender's diagnosis or rehabilitation potential.

Empirical Insights: Sentencing Outcomes for Autistic vs. Non-Autistic Offenders

In the final study in this thesis, I examined how judges assess remorse in autistic compared to non-autistic offenders, utilising a mock sentencing hearing to evaluate various factors, including remorse, rehabilitation potential, and moral culpability. This study sheds new light on how these factors interact with neurodevelopmental differences and compares with existing research in the field.

The study found that autistic offenders were rated lower on remorse compared to nonautistic offenders, a finding consistent with Berryessa (2023), which highlighted how traditional signs of remorse are often misunderstood or overlooked in individuals with psychiatric conditions. This study builds on Berryessa's (2022) concept of "remorse bias," showing that judges may discount nontraditional expressions of remorse from autistic individuals. Lo et al. (2016) further supports this by demonstrating that emotional tone can heavily influence perceptions of remorse, which may disadvantage autistic offenders who struggle with expected emotional cues.

Autistic offenders received more negative ratings for moral culpability, indicating that judges found their testimony less justifiable compared to non-autistic offenders. Offence severity was also perceived to be higher for the autistic group. Similar to the findings in Chapter 5, judges often disregarded moral culpability when the offence details were severe.

These results align with Spiranovic et al. (2012) and Mueller-Johnson and Dhami (2009), who found that offence severity typically intensifies negative perceptions of offenders.

The lower rehabilitation potential rated for autistic offenders aligns with findings from

Berryessa (2022) and Silver and Berryessa (2023), which suggest that psychiatric conditions often result in less favourable assessments of rehabilitation prospects. Notably, the judges in the present study were unaware of the offenders' diagnostic status. The current study's observation that rehabilitation potential was also linked to perceived moral culpability and offence severity supports Mueller-Johnson and Dhami's (2009) finding that more severe crimes typically lead to harsher sentences, especially when rehabilitation is considered less viable.

The longer sentences received by autistic offenders compared to their non-autistic counterparts in Chapter 6 align with previous research (Berryessa, 2023), including findings from Chapter 3. The current study's observation that remorse had a considerable influence on sentence length is also supported by Lo et al. (2016), highlighting that while emotional expression plays a crucial role in sentencing, autistic offenders' difficulty in conforming to expected emotional norms can significantly impact sentencing outcomes.

Framework for Remorse and ORE Results

The theoretical framework proposed by Proeve and Tudor (2016) provides a structured approach for understanding evidence of remorse, categorising it into demeanours, verbal expressions, and actions. The results shown in Chapter 6 of the Offender Remorse Evaluation (ORE) measure largely support this framework, demonstrating how various indicators of remorse manifest in offenders.

Proeve and Tudor (2016) emphasise that remorse can be indicated through a combination of non-verbal cues, verbal admissions, and reparative actions. The present findings in Chapter 6 align with this categorisation, as they reveal how these elements interact to influence judicial perceptions of remorse. Specifically, the study showed that autistic offenders often struggled with non-verbal indicators of remorse, such as facial expressions and body posture, which aligns with the theoretical emphasis on the importance of demeanours. Non-autistic offenders, in contrast, received more favourable ratings on verbal admissions and non-verbal cues, reinforcing the theoretical framework's assertion that these indicators collectively contribute to the perception of remorse.

The Central Coherence Theory, which suggests that autistic individuals tend to focus on specific details rather than the broader context, helps explain the observed differences in remorse expression. Chapter 6's study supports this theory, showing that responses to admissions of responsibility were closely tied to their non-verbal expressions. This detail- focused processing may affect how their remorse is perceived, reflecting Proeve and Tudor's notion that genuine remorse involves a complex interplay between verbal and non-verbal cues. For instance, while autistic offenders demonstrated acknowledgment of their wrongdoing in cases involving direct victims, their non-verbal expressions were often inconsistent, which impacted the judges' overall perception of their remorse.

Moreover, the judges' responses underscore the relevance of Proeve and Tudor's (2016) framework. Non-autistic offenders who exhibited consistent verbal admissions and coherent nonverbal expressions of remorse generally received more favourable sentences. This supports the framework's assertion that actions and demeanours are crucial for demonstrating remorse. Conversely, autistic offenders, who were often perceived as lacking in some non-verbal cues or whose verbal admissions were not as impactful, faced harsher sentences. This disparity highlights the framework's applicability in differentiating how remorse is assessed across different populations.

In summary, the results outlined in this thesis support Proeve and Tudor's (2016) theoretical framework by demonstrating how various aspects of remorse such as demeanour, verbal expressions, and actions play out in real-world judicial assessments. The findings also illustrate how characteristics such as autism can affect the interpretation of these remorse indicators, aligning with the framework's emphasis on the nuanced and multidimensional nature of remorse. The anticipated use of Structural Equation Modelling (SEM) in future research will further validate these findings and refine the framework's application, particularly in understanding how different types of remorse indicators influence sentencing outcomes across diverse offender profiles.

Insights from Affect Control Theory

Affect Control Theory (ACT) further illuminates the process by which judges evaluate offender remorse, providing a cognitive framework for understanding how emotional expressions are interpreted in light of an offender's perceived identity. ACT posits that individuals interpret emotions through three dimensions: evaluation, potency, and activity (Smith-Lovin & Heise, 1988). In a sentencing context, judges use these dimensions to assess the valence and dominance of an offender's emotional expressions, as well as their alignment with pre-existing notions of the offender's moral character.

For example, an offender who shows visible emotional distress such as crying or adopting a submissive posture is more likely to be seen as remorseful and sincere. In contrast, an offender who appears stoic or neutral may be judged more harshly, as these cues are interpreted as a lack of remorse or emotional disengagement (Robinson et al., 1994). This dichotomy has relevance for autistic offenders, whose non-verbal expressions of emotion may deviate from neurotypical norms. The findings in Chapter 6 indicate that autistic offenders were more frequently perceived as unremorseful, not because they failed to meet the objective criteria for remorse (admission of responsibility, self-transformation, etc.), but because their affective expressions did not conform to expected patterns of remorse as demonstrated in the idiosyncratic results between offender groups in the factor analysis.

The study in Chapter 6 also indicates that the atypical affective presentations of autistic offenders significantly influence judicial perceptions of remorse. Autistic offenders were rated lower on key remorse-related dimensions, such as admission of responsibility and self-transformation, which likely stems from judges misinterpreting their emotional and behavioural cues. In line with ACT, judges may form negative evaluations based on the offenders' perceived lack of emotional potency or valence, thereby reinforcing the perception that their moral character aligns with their criminal behaviour.

This presents a critical issue within the legal system. Autistic offenders may be unfairly

disadvantaged due to misinterpretations of their emotional expressions even when they exhibit other remorse-related behaviours, such as pleading guilty or making restitution efforts. Proeve and Tudor's (2016) emphasis on the importance of demeanour (e.g., facial expressions, tone of voice, posture) further exacerbates this issue as autistic individuals often struggle with neurotypical social cues. Consequently, their genuine remorse may not be recognised, which leads to harsher sentencing outcomes.

The factor analysis (Chapter 6) demonstrated significant variability in how autistic offenders' remorse was perceived, with mixed loadings for items related to 'Implicit' and 'Explicit' expressions of remorse, such as facial expressions and body posture. This variability, particularly in non-verbal indicators like emotional tone and physical demeanour, reflects previous research (Berryessa, 2022; Lo et al., 2016) on the challenges of interpreting remorse in individuals with neurodevelopmental conditions. Autistic offenders' struggle to express remorse in traditional ways could explain why they were rated lower on remorse than non-autistic offenders.

The high variability in factor loadings for autistic offenders, especially on items like distressed and emotional, underscores how differently judges may interpret these offenders' emotional expressions. This aligns with research by Berryessa (2023), who found that judges often misinterpreted non-traditional expressions of remorse as insincere. The inconsistent assessment of remorse in autistic individuals highlights the need for greater awareness of neurodivergent behaviours in court proceedings.

The Factor analysis in Chapter 6 also showed that for autistic offenders, Factor 1 combined the explicit admission of responsibility (e.g., agreed and wrongfulness) with non- verbal indicators like facial expression and body posture. This suggests that judges relied on a combination of both verbal and non-verbal cues when assessing moral culpability, which might contribute to the more negative ratings for autistic offenders.

For non-autistic offenders, the factor structure was more consistent, with clearer separation between explicit demonstrations and implicit expressions of remorse. This stability in factor loadings may have contributed to the more favourable evaluations of remorse and moral culpability in non-autistic offenders, as they exhibited more recognisable remorse cues.

In both groups, remorse was strongly associated with the self-transformation concept, though autistic offenders exhibited greater variability in this relationship. The second factor for autistic offenders, which emphasised attitudes and commitments toward future behaviour, suggests that judges were influenced by how well autistic offenders demonstrated remorse through their stated intent to change, rather than through emotional expression alone. This echoes Spiranovic et al.'s (2012) findings, where offence severity influenced sentencing decisions and rehabilitation potential more heavily than remorse expressions in certain cases.

However, the inconsistency in remorse assessments among autistic offenders likely contributed to their being rated lower on self-transformation overall. Judges' difficulty in interpreting their remorse as genuine, as seen in the factor analysis, might have influenced the longer sentences autistic offenders received compared to their non-autistic counterparts. This reflects Berryessa's (2022) concept of 'remorse bias,' where atypical expressions of remorse can lead to harsher sentencing outcomes.

The factor analysis revealed that Factor 1 for autistic offenders combined explicit acknowledgment and non-verbal cues, which likely influenced how their remorse was perceived. Judges may have struggled to interpret these cues accurately, contributing to the finding that sentence length for autistic offenders was more strongly impacted by remorse than for non-autistic offenders. Coutts et al. (2024) demonstrated that criminal records can lead to more negative trait evaluations, and this study suggests a similar bias may shape how autistic offenders are perceived from the outset, as suggested by Affect Control Theory (ACT), particularly when their expressions of remorse deviate from traditional expectations.

The clearer factor structure for non-autistic offenders, which captured both direct expressions of remorse (e.g., apologised, agreed) and commitments to future change (e.g., willingness, future behaviour), contributed to a more favourable perception of remorse and shorter sentence lengths. In contrast, autistic offenders' difficulty in presenting these traditional cues likely reinforced negative perceptions and longer sentences.

In summary, the insights gleaned from ACT underscore the significant challenges autistic offenders face in judicial settings, particularly regarding the interpretation of their emotional expressions. The study illustrates that judges' assessments of remorse are heavily influenced by their perceptions of an offender's identity, shaped by neurotypical expectations of emotional behaviour. Autistic offenders, whose non-verbal cues often diverge from these norms, may be unfairly judged as unremorseful, leading to harsher sentencing outcomes. The variability in judges' interpretations highlights the necessity for greater awareness and understanding of neurodivergent behaviours within the legal system. By fostering this understanding, the judiciary could mitigate the negative impact of biases against autistic offenders, ensuring that expressions of remorse are accurately recognised and appropriately weighed in sentencing decisions. Ultimately, enhancing judges' sensitivity to the nuances of emotional expression in neurodivergent individuals may contribute to fairer treatment and improved rehabilitation opportunities for autistic offenders.

Implications for Sentencing Practices

The implications of these findings are significant for judicial practices. Current sentencing guidelines in Australia and other jurisdictions place considerable emphasis on an offender's remorse when determining culpability and sentence length. However, the reliance on normative expressions of emotion may inadvertently penalise autistic offenders, who are less likely to conform to neurotypical standards of affective expression. Oral testimony, although afforded credibility by judges, may carry significant disadvantages for autistic offenders due to the effects of autism on impressions and judgments, as demonstrated in this study. The challenges autistic individuals face in expressing emotions verbally, due to factors like social communication differences and difficulties with emotional recognition, can lead to misinterpretation by judges, potentially affecting their sentencing outcomes. Judges should be made aware of the variability in how remorse can be expressed, particularly among neurodiverse individuals. Training programs that educate legal

professionals on autism could help mitigate the bias that arises from misinterpreting emotional cues. Additionally, the use of expert testimony on autism during sentencing hearings could provide judges with a more accurate understanding of how autistic individuals process information and subsequently express remorse and emotional distress.

In Australia, there are existing programs aimed at training mental health professionals on the relationship between autism and various types of offending, as well as issues of criminal responsibility and diminished capacity in court decisions (see CMHL, 2024). Furthermore, initiatives developed by QCs, such as Dr Felicity Gerry QC's webinar, offer education on risk assessment strategies and highlight autistic traits that may lead to perceptions of evasiveness, remorselessness, lack of empathy, and guilt (Libertas Chambers, 2024). However, there is currently no standardised government policy guiding these approaches within the judicial system. Autism organisations, such as Amaze, have submitted recommendations to the Parliamentary Inquiry into Victoria's Criminal Justice System (2021), advocating for autism- accessible courts and training for all court staff and professionals. Their recommendations include coordinated support, increased autism awareness, a communication intermediaries' program, jury diversity, and higher public sector disability employment targets for judicial and tribunal members. The Council for Intellectual Disability (CID, 2024) successfully advocated for the New South Wales (NSW) Community Justice program, which provides community accommodation to individuals with disabilities and offending histories, along with access to support programs such as the National Disability Insurance Scheme (NDIS). Additionally, the CID campaigned for changes to the Justice Advocacy Service to enhance diversion programs and provide police and court support across NSW. These initiatives in Australia's major states represent a positive step toward raising awareness and promoting education within judiciaries across other states and territories. Standardised policies will help ensure that defendants with autism are treated fairly and receive appropriate penalties and support when needed.

Limitations and Future Directions

While this research provides valuable insights into the role of remorse in sentencing decisions, particularly for autistic offenders, several limitations must be acknowledged. First, the small sample sizes within offence categories across all studies and the challenges in identifying specific indicators for remorse judgements in sentencing cases (Chapter 4) limit the ability to draw broad conclusions. The mock sentencing context in the final study may not fully capture the complexities of real-world judicial proceedings, where multiple factors influence offender behaviour and sentencing decisions. Additionally, there appeared to be variability in judges' qualitative responses based on offence type for the same offender, which warrants further investigation. Future research could explore how different types of offences (e.g., violent vs. non-violent) impact perceptions of remorse and whether autistic offenders are more frequently perceived as unremorseful for specific offences.

Many of the sentencing cases in Chapter 3, 4 and 5 involved offenders with co- occurring conditions such as depression, drug addiction, and trauma, which may have influenced the outcomes. Autistic individuals often present with additional conditions like ADHD, anxiety disorders, psychotic disorders, and intellectual disabilities, and they are notably more likely to experience PTSD and substance abuse disorders compared to non- autistic individuals. The presence of these co-occurring conditions highlights the complexity of assessing autism in sentencing decisions.

The effect of diagnosis was not examined in this study. Although the meta-analysis in Chapter 2 found no significant benefits in reducing negative impressions for the autistic group, this information might have a greater impact in a forensic setting. Insights from the sentencing case sample suggest inconsistencies in how judges applied sentencing factors based on diagnosis, particularly in relation to offence severity. For example, moral culpability was often reduced for offenders involved in assault offences, while judges tended to prioritise community protection over moral culpability assessments in cases of murder and sexual assault. Replicating the final study with a diagnostic label/information condition, in addition to offence type, would provide further insights into these effects. Additionally, research into the content of expert witness testimony and its influence on judges' decisions would be beneficial.

To enhance generalisability, future research should involve larger and more diverse samples of autistic offenders. Comparing cases of autistic offenders with those without an autism diagnosis could illuminate unique sentencing considerations. Further investigation into the interplay between offence severity and sentencing factors is also necessary to understand their impact on rehabilitation pathways.

Lastly, limitations in the meta-analysis and the mock sentencing study should be considered. Autistic participants were all formally diagnosed and mostly recruited from autism specialist schools and the Flinders University Autism Research Database. While this strengthens the study's validity, it may limit the generalisability of the results. These individuals, being more aware of their atypical characteristics, may identify more strongly with their autism diagnosis. Rather than camouflaging their traits, they may have emphasised them, potentially influencing the findings. Additionally, awareness of the study's focus on autism may have shaped how they presented their differences.

Conclusion

This project comprised five studies using both qualitative and quantitative approaches to explore how autistic individuals are perceived in forensic contexts, particularly regarding impressions of remorse. Additionally, pilot testing of a novel tool designed to measure offender remorse evaluations (ORE) provided insights into the mechanisms behind these evaluations and offender presentations, highlighting differences in event processing and emotional expression between autistic and non-autistic individuals.

The results suggest promising potential for future research to refine this measure and identify specific differences in how remorse is expressed by various offender groups and evaluated by judges. Autistic individuals were consistently perceived less favourably on most impression

measures in both social and forensic contexts. Insights were gained into how judges consider the diagnosis alongside sentencing factors, revealing that offence severity and expert testimony significantly influence decisions regarding moral culpability and rehabilitation applications in sentencing.

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Appendices

A: Systematic Review and Meta-analysis Protocol

Title: Impressions on the Presentation of Autism and the Effects of Diagnostic Information Systematic Review Protocol. In accordance with preferred reporting items for systematic review and meta- analysis protocols (PRISMA-P)

Registration: PROSPERO

Registration number: CRD42020207509 Author contributions

Author	Contribution	
Tammie Foster	Scoping search	
	Protocol	
	Registration	
	Search terms	
	Screening	
	Study appraisals	
	Data extraction and analyses	
	Manuscript writer	
Robyn Young	Guarantor	
	Oversee manuscript	
Michelle Short	Dual screener	
	Study appraisals	

Support

Hamish Ramsay Fund for autism research Flinders University

Objectives

Research questions

- 1. Are autistic people perceived negatively by others?
- 2. Do impressions of autistic individuals differ when the perceiver is autistic?
- 3. Can the impressions of autistic individuals change based on the social context or environment they are in?
- 4. Can having knowledge of the diagnosis and the typical traits associated with it lead to more positive perceptions?

Methods

Eligibility criteria

SPICE categories Quantitative studies Peer-reviewed journal articles

SPICE categories	Definition	
Social setting/interaction	Studies that represent any form of social interaction which includes the presentation of autistic person/s (e.g., professional, educational, legal)	
Social partners/perceivers	Social partners/perceivers of autistic presentations in western societies	
Autistic presentation	Autistic presentation (written descriptions/visual representations/interactions with diagnosed autistic individual/s) with/without diagnostic information	

Non-autistic individuals and/or diagnostic information	Non-autistic individuals and/or diagnostic label and/or diagnostic information	
Impressions	Impressions/perceptions and/or any type of social outcomes (influenced by the impression) of the perceiver (e.g., legal, relationships etc.) Quantitative studies Peer-reviewed journal articles English Autism, ASD, Autistic, Asperger's, behavio#r, communication,	
Additional inclusion criteria:		
Keywords:	characteristic, presentation, manifest, attitude, perception, person perception, impression, judgment, views, opinion, diagnostic information, diagnostic disclosure, labels	

Information sources

Primary databases

- MEDLINE
- Informit
- PsycINFO
- PubMed
- CINAHL
- Scopus
- Web of Science
- ProQuest

Secondary databases

- Cochrane Library

Search strategy

The master search will be conducted in MEDLINE using concepts and keywords developed from the SPICE categories. The search will include investigating concepts within the thesaurus hierarchy and discover any associated key terms/words. All subject and keyword definitions will be checked to ensure it matches the author's interpretation. The search terms developed in this process will be used for all other databases. Additionally, a search will be conducted through the reference list of primary studies included in the review.

Study records

Data management

- All database searches will be conducted on the same day and the results will be transferred into reference management software (Endnote).
- Each database will be allocated a folder to keep record of search results.
- All citations will be imported into Covidence for dual screening.
- Search terms, dates, results, databases, and data will be recorded in a excel spreadsheet managed by the primary investigator.

Selection

Two independent reviewers will be involved in screening, eligibility, and quality appraisal processes.

Data collection

The PICOT framework (Population, Intervention, Comparison, Outcome, Type) will be used to choose data elements in the data extraction form. Data extraction forms will be used to produce summary table of study characteristics which will be included in the results section of the manuscript.

Data items

Citation

Journal, author, volume, page numbers etc.

Objective	The study objective as described by the authors	
Population	Demographic detail of the participants in the study	
Intervention	Presentation/characteristics of autism with/without	
	diagnostic information	
Comparison	Non-autistic presentations/characteristics and/or the	
	absence of diagnostic information	
Outcome	Record the results of the intervention and how	
	measured e.g. impressions, decisions, perceptions	
Туре	Study type/design	
Comments	Study quality (Q-SSP checklist)	

Risk of bias in individual studies

All studies included from the full-text screening will go through an appraisal process by two independent reviewers using the 'checklist to assess the quality of survey studies in psychology' (Q-SSP) to address the risk of bias (Protogerou & Hagger, 2020). The Q-SSP consists of 20 questions designed to assess a study's quality across 4 different domains: Introduction (rationale, variables), Participants (sampling), Data (collection, analyses, measures, results, discussion), and Ethics. Any discrepancies in the study appraisal process between the two independent reviewers will be decided by a third reviewer.

Data synthesis

A summary of findings table will be developed to support the narrative synthesis in a clear format. An analysis of the relationship within and between studies and an overall assessment of the robustness of the evidence will be included. Patterns in data will be explored using a Forest plot. Homogeneous data will be identified across studies to be included in the meta-analyses.

B: PRISMA-P (Preferred Reporting Items for Systematic review and Meta-Analysis Protocols) 2015 checklist:

Section and topic	Item No	Checklist item
ADMINISTRATIVE INFORM	ATION	
Title:		
Identification	1a	Identify the report as a protocol of a systematic review
Update	1b	If the protocol is for an update of a previous systematic review, identify as such
Registration	2	If registered, provide the name of the registry (such as PROSPERO) and registration number
Authors:		
Contact	3a	Provide name, institutional affiliation, e-mail address of all protocol authors; provide physical mailing address of corresponding author
Contributions	3b	Describe contributions of protocol authors and identify the guarantor of the review
Amendments	4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments
Support:		
Sources	5a	Indicate sources of financial or other support for the review
Sponsor	5b	Provide name for the review funder and/or sponsor
Role of sponsor or funder	5c	Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol
INTRODUCTION		
Rationale	6	Describe the rationale for the review in the context of what is already known
Objectives	7	Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)
METHODS		
Eligibility criteria	8	Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review
Information sources	9	Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey literature sources) with planned dates of coverage
Search strategy	10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated
Study records:		

Recommended items to address in a systematic review protocol*

Data management	11a	Describe the mechanism(s) that will be used to manage records and data throughout the review	
Selection process	11b	State the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (that is, screening, eligibility and inclusion in meta-analysis)	
Data collection process	11c	Describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators	
Data items	12	List and define all variables for which data will be sought (such as PICO items, funding sources), any pre-planned data assumptions and simplifications	
Outcomes and prioritization	13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale	
Risk of bias in individual studies	14	Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis	
Data synthesis	15a	Describe criteria under which study data will be quantitatively synthesised	
	15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data and methods of combining data from studies, including any planned exploration of consistency (such as I ² , Kendall's τ)	
	15c	Describe any proposed additional analyses (such as sensitivity or subgroup analyses, meta-regression)	
	15d	If quantitative synthesis is not appropriate, describe the type of summary planned	
Meta-bias(es)	16	Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies)	
Confidence in cumulative evidence	17	Describe how the strength of the body of evidence will be assessed (such as GRADE)	

* It is strongly recommended that this checklist be read in conjunction with the PRISMA-P Explanation and Elaboration (cite when available) for important clarification on the items. Amendments to a review protocol should be tracked and dated. The copyright for PRISMA-P (including checklist) is held by the PRISMA-P Group and is distributed under a Creative Commons Attribution Licence 4.0.

From: Shamseer L, Moher D, Clarke M, Ghersi D, Liberati A, Petticrew M, Shekelle P, Stewart L, PRISMA-P Group. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation. BMJ. 2015 Jan 2;349(jan02 1):g7647

C: Quality Assessment Checklist for Survey Studies in Psychology (Q-SSP) and Guide

Study:					
The Q-SSP is meant to be scored with the use of its guide; please, refer to the guide below.					
Research domain	Quality item	Yes	No	Not stated clearly	N/A
Introduction (Rationale)	1. Was the problem or phenomenon under investigation defined, described, and justified?				
Introduction (Rationale)	2. Was the population under investigation defined, described, and justified?				
Introduction (Rationale)	3. Were specific research questions and/or hypotheses stated?				
Introduction (Variables)	4. Were operational definitions of all study variables provided?				
Participants (Sampling)	5. Were participant inclusion criteria stated?				
Participants (Sampling)	6. Was the participant recruitment strategy described?				
Participants (Sampling)	7. Was a justification/ rationale for the sample size provided?				
Data (Collection)	8. Was the attrition rate provided? (applies to cross-sectional and prospective studies)				
Data (Analyses)	9. Was a method of treating attrition provided? (applies to cross-sectional and prospective studies)				
Data (Analyses)	10. Were the data analysis techniques justified (i.e., was the link between hypotheses/ aims / research questions and data analyses explained)?				
Data (Measures)	11. Were the measures provided in the report (or in a supplement) in full?				
Data (Measures)	12. Was evidence provided for the validity of all the measures (or instrument) used?				
Data (Collection)	13. Was information provided about the person(s) who collected the data (e.g., training, expertise, other demographic characteristics)?				
Data (Collection)	14. Was information provided about the context (e.g., place) of data collection?				
Data (Collection)	15. Was information provided about the duration (or start and end date) of data collection?				
Data (Results)	16. Was the study sample described in terms of key demographic characteristics?				
Data (Discussion)	17. Was discussion of findings confined to the population from which the sample was drawn?				
Ethics	18. Were participants asked to provide (informed) consent or assent?				
Ethics	19. Were participants debriefed at the end of data collection?				
Ethics	20. Were funding sources or conflicts of interest disclosed?				

SCORING (optional; see guide below)
Overall Quality Score (%):
Compute an overall study quality score expressed as a percentage by dividing
YES (Y) scores by the Total (T) number of APPLICABLE items and multiplying
by 100. If a report fails to attain a Y score for 5 of the items, then it may be classed as of
questionable quality.
Specifically:
When $(T) = 20$, then a score of $Y/T \ge 75\%$ may be considered acceptable quality.
When $(T) = 19$, then a score of $Y/T \ge 73\%$ may be considered acceptable quality.
When (T) = 18, then a score of $Y/T \ge 72\%$ may be considered acceptable quality.
When (T) = 17, then a score of $Y/T \ge 70\%$ may be considered acceptable quality.
If Y/T <75% or < 73% or < 72%, or < 70% (depending on number of applicable items),
then study is of questionable quality.
Domain Quality Scores
Express domain quality scores as a simple ratio of the (Y) items, divided by the (T) applicable
items.
<mark>(4 items) Introduction (Rationale/Variables)</mark> score: /4
(3 items) Participants (Sampling/Recruitment) score: /3
(10 items) Data (Conection/Analyses/Measures/Results/Discussion) score: /10
(3 itams) Ethias score: /3
(o nems) remes score. /o

IN A DATA FILE, ASSIGN 1 FOR YES SCORES; 0 FOR NO OR NOT STATED CLCLEARLY; 2 = FOR NOT APPLICABLE.

Guide and Definition of Terms used.

General guidance on assessment:

- Shaded areas indicate response options that are not available for Q-SSP items. Studies are not expected to omit the required information for these items.
- Studies are to be assessed based on the information provided in the report⁶. Additional information may be provided in (online) supplemental material, assuming this is mentioned in the report. The "not stated clearly" option should only be chosen if relevant information is not stated clearly in the report or in a supplement. Consequently, raters are expected to be make objective and justifiable assessments based on the available information. This notwithstanding, we also encourage note-taking on the ways quality items were fulfilled in a study. Such notes can be used to conduct a qualitative quality appraisal or to resolve inter- and intra- rater inconsistencies.
- Scoring involves dividing the YES items by the number of APPLICABLE total items multiplied by 100. The number of items to assess will vary as a function of study design (cross-sectional or comparative). A score of ≥ (70% or 72% or 73% or 75%, depending on applicable items) suggests that the study may be of acceptable quality, and a score of < (70% or 72% or 73% or 75%, depending on applicable items) suggests that the study may be of acceptable quality, and a score of < (70% or 72% or 73% or 75%, depending on applicable items) suggests that the study may be of questionable quality. These recommended cut-off points have been used in several existing critical appraisal, methodological quality, and risk-of-bias checklists (e.g., Catalano, 2013; Glynn, 2006; Oliveira, Gomez, & Toscano, 2011). However, raters may choose to modify the numerical cut-off points —making them more-or-less stringent—to suit their research aims.</p>
- Assigning numerical scores and categorizing studies as having "acceptable or questionable quality" are **optional** endeavours, to be undertaken when those serve the aims of the rater. For example, in the context of a meta-analysis, categories of "acceptable" or "questionable" studies could be used in a moderator analysis. In another scenario, a practitioner may want to get an overall sense of the quality of a body of literature compared to another, with the aim to inform their practice. In such cases, assigning numerical quality scores may be useful. Examples of situations where assigning overall quality numerical scores may not be necessary include narrative or scoping reviews; descriptions of aspects of a body of literature; and educational/ training programmes; elucidating what constitutes a study of acceptable/ questionable quality.
- Calculating numerical scores per study domain is also optional and at the discretion of the rater. We have recommended a simple ratio system to organize the scoring. The Q-SSP indicates study domains to help raters identify the most salient research areas assessed per quality item, quickly (and hence the colour shading scheme).
- The Q-SSP rests on the assumption that reporting quality and study quality are interlinked. Even though "reporting well" doesn't necessarily equate to "having conducted well", study quality can only be appraised in the context of transparent reporting; the core message of a key position paper by Asendorpf et al. (2013). Behaviour health researchers across disciplines tend to agree that non-transparent reporting is strongly associated with biased findings, as well as with misuse of funding—and other—resources (Buccheri & Sharifi, 2017; Mullins, DeLuca, Crepaz, & Lyles, 2014).

Checklist items, definitions and options.

1. Was the problem or phenomenon under investigation defined, described, and justified? Introduction (Rationale)

Definitions⁷. The problem or phenomenon under investigation is the area of concern or interest of the study. If, for example, the problem under investigation is sexual risk-taking, then sexual risk-taking should be given a definition, description, and justification (explanation) of why it is a problem. If there are more than one problem or phenomenon under investigation, then all need to be defined, described, and justified.

- ✓ Check YES if the problem/phenomenon under investigation was defined, described, and justified.
- ✓ Check NO if the problem/phenomenon under investigation was not defined, described, and justified.
- Check NOT STATED CLEARLY if the report provided limited or unclear information about the problem/phenomenon under investigation (e.g., if the problem is described but not justified as being worthy of investigation; if only one of many problems/phenomena were defined and justified).
- û Do not check NOT APPLICABLE for this item.

2. Was the population under investigation defined, described, and justified? Introduction (Rationale)

Definitions. The *population under investigation* is the **entire** set of people under consideration. The study sample is a subset of the population under investigation. If, for example, the population under investigation is university students, then university students should be defined and described. Also, a justification (explanation) should be provided as to why / how the population is affected by the problem or phenomenon under investigation.

- \checkmark Check YES if the population under investigation was defined, described, and justified.
- ✓ Check NO if the population under investigation was not defined, described, and justified.
- Check NOT STATED CLEARLY if the report provided limited or unclear information about the population under investigation (e.g., if the problem is described but not justified as being worthy of investigation).
- û Do not check NOT APPLICABLE for this item

3. Were specific research questions and/or hypotheses stated? Introduction (Questions)

Definitions. Research question: an interrogative question or statement the investigator aims to answer. Hypothesis: a tentative and testable explanation of the relationship between two or more variables, often stated as a prediction that a certain outcome will result from a certain condition. To check YES for this question, the report needs to state a set of specific research questions and/or hypotheses to be addressed in the study. Studies may report hypotheses, research questions, or both. A generalized statement of purpose or aim or goal of the study is insufficient. Explicit statements of research questions or hypotheses are necessary for them to be aligned with data analysis techniques (see question 10).

- ✓ Check YES if specific research questions and/or hypotheses were stated.
- ✓ Check NO if specific research questions or hypotheses were not stated.
- û Do not check NOT STATED CLEARLY for this item.
- û Do not check NOT APPLICABLE for this item.

4. Were operational definitions of all study variables provided? Introduction (Variables)

Definitions. Operational definition: a definition of the variable in terms of precisely how it is used and measured in the study. Variable: a quantity or quality that varies across people or situations. Operational definitions may also be reported in other sections of the report (e.g., method, measures); still, operational definitions should be regarded as important 'introductory', or, 'background', information.

- ✓ Check YES if the report offered operational definitions of all study variables.
- ✓ Check NO if the report did not offer operational definitions of some or all of study variables.
- û Do not check NOT STATED CLEARLY for this item
- û Do not check NOT APPLICABLE for this item.

5. Were participant inclusion criteria stated? Participants (Sampling

Definitions. Inclusion criteria: a set of predefined characteristics used to identify individuals to be included in a research study.

- ✓ Check YES if the report provided the participant inclusion criteria.
- ✓ Check NO if the report did not provide the participant inclusion criteria.
- û Do not check NOT STATED CLEARLY for this item.
- **û** Do not check NOT APPLICABLE for this item.

6. Was the participant recruitment strategy described? Participants (Sampling

Definitions. Recruitment strategy: the process of enlisting people for participation in a research study. In psychological research, typical recruitment strategies include advertisements, flyers, information sheets, notices, postings on internet bulletin boards, web pages, and social media sites; direct contact with potential study participants (e.g., through a presentation); letters and emails (e.g., from an agency, hospital, school); pre-existing participant pools (e.g., past research participants who have given permission for future contact).

⁷ Definitions of terms were extracted, or, adapted, from the encyclopedia of survey research methods (Lavrakas, 2008); the encyclopedia of research design (Salkind, 2010); research methods in psychology (Jhangiani, Chiang, & Price, 2015); and research design (Creswell, 2003).

⁶"Report" refers to the journal article, book chapter, thesis, and conference paper, i.e., any report that describes the study to be assessed.

- ✓ Check YES if the report described the recruitment strategy.
- ✓ Check NO if the report provided no description of the recruitment strategy.
- ✓ Check NOT STATED CLEARLY if the report provided limited or unclear information about the recruitment strategy
- û Do not check NOT APPLICABLE for this item.

7. Was a justification/ rationale for the sample size provided?

Participants (Sampling)

Definition. Sample size: the number of participants in a study. A justification/rationale for the sample size might be (1) a narrative explanation on why it is sufficient to answer the hypotheses, aims and research question; or (2) a statistical/mathematical calculation (e.g., a power analysis estimating sample size; ≥ 10 participants per independent variable); or both.

- ✓ Check YES if the report justified the sample size
- ✓ Check NO if the report did not justify the sample size.
- ✓ Check NOT STATED CLEARLY if the report provided limited or unclear information about sample size estimation/justification.
- û Do not check NOT applicable for this item

8. Was the attrition rate provided? (applies to cross-sectional and prospective studies) Data (Col

Definitions. Attrition: the loss of participants, or, the loss of participant data, during the study. Attrition rate (also known as drop-out rate or completion rate) is usually reported as a percentage of the number of participants (or data entries) lost at the end of the study, divided by the total number of participants (or data entries) at the beginning of the study. It could also be expressed as participants retained at the end of the study compared to those that entered the study at the beginning (c.f. retention rate). Attrition in cross-sectional studies might be due to incomplete or spoiled questionnaires, or questionnaires with large amounts of missing responses precluding imputation or replacement. Attrition rate differs from response rate, the latter being the percentage of people who respond to an initial survey call or invitation.

- ✓ Check YES if the attrition rate was provided.
- \checkmark Check NO if the attrition rate was not provided.
- ✓ Check NOT STATED CLEARLY if the report provided vague or insufficient information on attrition rates.
- û Do not check NOT APPLICABLE for this item.

9. Was a method of treating attrition provided? (applies to cross-sectional and prospective studies). Data (Analyses)

Definitions. Methods for *treating attrition* in the data analyses are excluding cases, imputing or replacing missing values, conducting intention-to-treat, as-treated, per-protocol, efficacy subset, complier average causal effect, and simulation analyses (Peugh et al., 2017), or conducting representative checks (e.g., testing for differences on key variables between participants that remained in the study and those that were excluded or dropped out).

- ✓ Check YES if a method of treating attrition was provided.
- \checkmark Check NO if a method of treating attrition was not provided.
- ✓ Check NOT STATED CLEARLY if the report provided vague or insufficient information to ascertain if attrition was treated.
- Check NOT APPLICABLE if attrition was zero or if completion rate was 100%.

10. Were the data analysis techniques justified (i.e., was the link between hypotheses/ aims / research questions and data analyses explained)? Data (Analyses)

Definitions. Data analysis: the process of inspecting, cleansing, transforming, and modelling data, aiming to obtain useful information to draw conclusions for research and practice. To be *justified*, data analyses techniques should match the study's research questions/ hypotheses. Authors should provide a clear *justification* for the selection of their analyses and indicate how they are aligned with the research questions/hypotheses of the study.

- ✓ Check YES if data analysis techniques were justified.
- ✓ Check NO if the data analysis techniques were not justified.
- Check NOT STATED CLEARLY if the report provided vague or insufficient information to justify the data analysis techniques (e.g., may justify some but not all techniques).
- û Do not check NOT APPLICABLE for this item.
- 11. Were the measures provided the report (or in a supplement) in full? Data (Measures)

Definitions. Measures: the questions or items used in survey research to elicit responses from

participants.

- ✓ Check YES if the report or supplement provided the measures in full.
- ✓ Check NO if the report or supplement did not provide the measures in full.
- û Do not check NOT STATED CLEARLY for this item.
- û Do not check NOT applicable for this item

12. Was evidence provided for the validity of all measures (or instrument)

used? Data (Measure

Definitions. Evidence to support the validity of a measure (or an instrument) can be provided by reporting a process of validation. *Validation:* a procedure undertaken to ensure that measures are appropriate means to measure their intended variable, construct, or entity. Authors should provide evidence of measurement validation procedures conducted as part of the study, or clearly cite prior validation may refer to the psychometric properties of the measures or instrument used in the survey, and may be the result of pilot testing with validity analyses (e.g., exploratory or confirmatory factor analysis, principal components analysis).

- ✓ Check YES if there was evidence for the validity of the measures/instrument used.
- ✓ Check NO if there was no evidence for the validity of the measures/instrument used.
- û Do not check NOT STATED CLEARLY for this item.
- û Do not check NOT APPLICABLE for this item.

13. Was information provided about the person(s) who collected the data (e.g., training, expertise, other demographic characteristics)? Collection

Definitions. At minimum, the report should indicate who (e.g., study authors, research assistants, research students) collected the data. The characteristics of those who collect data can impact study findings (and thus quality) in several ways; in fact, it has been suggested that up to 56 types of biases may be introduced to the research, as a result of the characteristics of the people involved in the data collection and analysis (Sackett, 1979). For instance, knowledge of, or relationship to, the person or people collecting the data by participants may affect their participantion (e.g., response rate) and responses (e.g., attrition rate). In addition, information about the people who collected the data should be provided to facilitate study replication (Schroter, Glasziou & Heneghan, 2012).

- \checkmark Check YES if the report provided information about the person(s) who collected the data.
- ✓ Check NO if the report did not provide information about the person(s) who collected the data
- û Do not check NOT STATED CLEARLY for this item.
- û Do not check NOT applicable for this item.

14. Was information provided about the context (e.g., place) of data collection? Data (Collection

Definitions. At minimum, the report should indicate the physical place of data collection (e.g., hospital, classroom, home, neighborhood, the internet). Context characteristics at data collection have been found to influence findings, and thus study quality (Norris, Plonsky, Ross, & Schoonen, 2015). The context must be mentioned to facilitate study replication too (Schroter, Glasziou & Heneghan, 2012).

- ✓ Check YES if the report provided information about the context of data collection
- ✓ Check NO if the report did not provide information about the context of data collection.
- Check NOT STATED CLEARLY if the report provided vague or insufficient information to ascertain the context of data collection (e.g., report could state that questionnaires were "mailed to participants", without specifying where questionnaires were mailed to).
- û Do not check NOT applicable for this item.

15. Was information provided about the duration (or start and end date) of data collection? Data (Collection

Definitions. Data collection duration should be reported to facilitate study replication (Schroter, Glasziou & Heneghan, 2012). Data collection duration also touches upon ethical considerations, as it is more ethical to demand less of participants' time, especially when participants cannot decide when data are collected. These ethical concerns are minimized for online surveys, whereby participants can control the length and speed of their reports.

- ✓ Check YES if the report provided information about the duration of the data collection
 - ✓ Check NO if the report did not provide information about the duration of the data collection.
 - Check NOT STATED CLEARLY if the report provided vague or insufficient information to ascertain the duration of data collection (e.g., may only report the start of
 - û Do not check NOT applicable for this item.

16. Was the study sample described in terms of key demographic

characteristics? Data (Results

data collection).

Definitions. Demographic characteristics: information about research participants that is necessary for the determination of whether they are a representative sample of the target population. The American Psychological Association recommends describing the participants in terms of "age; sex; ethnic and/or racial group; level of education; socioeconomic, generational, or immigrant status; disability status; sexual orientation; gender identity; and language preference as well as important topic-specific characteristics (e.g., achievement level in studies of educational interventions)" (APA, 2010, p. 29). While the sample should be described as precisely as possible, we argue, in line with <u>Sifers, Puddy, Warren, and Roberts (2002)</u> that psychological studies should, at minimum, report age, gender, ethnicity/race, and socio-economic status (SES).

- ✓ Check YES if the report provided key demographic characteristics (i.e., age, gender, ethnicity/race, and SES)
- ✓ Check NO if the report did not provide essential demographic characteristics (i.e., age, gender, ethnicity/race, and SES).
- û Do not check NOT STATED CLEARLY for this item.
- û Do not check NOT applicable for this item.

17. Was discussion of findings confined to the population from which the sample was drawn (target population)? Data (Disc

Definitions. Findings should apply/extend to the population from which the study sample was drawn (i.e., target population). For example, if the study sampled French psychology undergraduates, then findings should apply to that population only. If the discussion of findings extends beyond the target population then it should be clearly labelled as 'speculative'.

- Check YES if the discussion of findings was confined to the target population.
- Check NO if the discussion of findings extended beyond the target population and the discussion was not described as speculation.
- ✓ Check NOT STATED CLEARLY if it was unclear whether the findings were discussed with the target population, only, in mind.
- û Do not check NOT APPLICABLE for this item

18. Were participants asked to provide (informed) consent or assent? Ethics

Definitions. Informed consent: voluntary agreement by people to participate in a research study, subsequent to their being informed about study aims, procedures, potential risks and benefits of participation, including rights to withdraw. In research where participant deception is involved, participants provide consent, without being fully informed about the study. Assent: agreement to participate in research by people who are, by definition, too young to give (informed) consent (typically < 18 or 16 years of age, depending on country or state legislation), but are old enough to understand the aims of the research and their rights to withdraw without punishment or consequence. Assent may be requested from the ages of six or seven. In addition to assent, parental or guardian consent may also be required. Participant consent or assent may be waived under certain circumstances (e.g., neglected, abused, emancipated, self-sufficient minors; non-FDA- regulated research that could not be practically carried out without the waiver; the consent form poses a breach to anonymity/confidentiality; research that poses no known harm to participants).

- ✓ Check YES if participants were asked to provide informed consent / and / or assent.
- ✓ Check NO if participants were not asked to provide informed consent / and / or assent.
- Check NOT STATED CLEARLY if the report provided no or insufficient evidence to ascertain whether informed consent / and / or assent was provided.
- ✓ Check NOT applicable if consent/assent was justifiably waived.

19. Were participants debriefed at the end of data collection? Ethics

Definitions. Debrief: the process of giving participants further information about the study, subsequent to their participantion. If participant deception was necessary to conduct the study, a debrief offers participants an explanation for the deception, and a chance to withdraw their consent and data, retrospectively. Examples of debrief content include providing participants the opportunity to ask questions about the study and voice thoughts or emotions in relation to the study, and thanking participants for their time. Sometimes, debriefing provides information about ways participants can get help in dealing with issues addressed in the study (e.g., websites or referrals to health care centers, contact details of the research team, etc.). If participants are minors, then parents/guardians might also be debriefed. Sometimes, debrief can be justifiably waived (e.g., debriefing may pose more harm than good, the deception is harmless, debriefing is impractical, participants are experts on the study topic).

- ✓ Check YES if participants were debriefed.
- Check NO if participants were not debriefed.
- ✓ Check NOT STATED CLEARLY if the report provided no or insufficient evidence to ascertain whether debriefing occurred.
- ✓ Check NOT applicable if debrief was justifiably waived.

20. Were funding sources or potential conflicts of interest disclosed? Ethics

Definitions. Funding source: a source of money supporting the research study, typically a government, corporation, institution, or foundation. Conflict of interest: a situation where financial or personal issues may compromise (or seem to compromise) a researcher's professional judgment in conducting or reporting the research.

- Check YES if funding sources or potential conflicts of interest were disclosed.
- ✓ Check NO if funding sources or potential conflicts of interest were not disclosed.
- Check NOT STATED CLEARLY if the information provided about funding sources or conflicts of interest was insufficient (e.g., reported vaguely or for some but not all authors).
- û Do not check NOT applicable for this item.

D: Measure Properties for Included Studies in Systematic Review and Meta-analysis

Alkhaldi (2019a,b; 2021)

First Impressions Scale (adapted from Sasson et al. 2017)		
Question	Item	
How much would you like to talk to this person?	Talk to	
How awkward is this person?*	Awkward	
How attractive is this person?	Attractive	
How trustworthy is this person?	Trust	
How dominant is this person?	Dominant	
How likable is this person?	Likable	
How intelligent is this person?	Intelligent	
How good is this person's self-esteem?	Self-esteem	
How empathic is this person?	Empathy	
Scale	1-6; high scores = more positive responses.	
	*Reverse scored	

Stagg (2014)

Social Perception Measure		
Question	Item	
Would you tell him/her a secret?	Trustworthiness	
Would you play with him/her?	Play	
Would you want to be friends with him/her?	Friendship	
Do you think this person could help you with a maths problem?	Helpfulness	
Would he/she be unkind to you?*	Kindness	
Do you think they would like the same things as you?	Similarity	
How expressive do you think this child's face is?	Expressivity	
Do you think this person looks Anchor points: unattractive, good	Attractiveness	
looking		
Scale	0-8; high scores represent more	
	positive responses. *Reverse scored	

Aube (2020)

Explicit Stigma Measure			
Question	Item		
Would you be happy if this child invited you to play at home?	Attitude (happiness)		
Would you like to be his/her friend?	Attitude (happiness)		
Would you be worried about sitting next to him/her in class?	Attitude (anxiety)		
Would you mind drinking in the same glass as him/her?	Attitude (disgust)		
Would you like to hold his/her hand when you are lined up in the	Attitude (disgust)		
_playground?			
Would you mind playing with him/her in the playground?	Attitude (shame)		
Would you want to invite him/her to your birthday party?	Behavioural intention		
Would you choose him/her to be on your team?	Behavioural intention		
Would you agree to lend him/her your eraser?	Behavioural intention		
Could you share your snack with him/her?	Behavioural intention		
Do you think he/she looks friendly?	Warmth		
Do you think he/she looks kind?	Warmth		
Do you think he/she looks smart?	Competence		
Do you think he/she is a good student?	Competence		
Do you think he/she looks different from the others?	Similarity with others		
Do you think he/she is different from you?	Similarity with the participant		

Question	Item
Character Traits	
How awkward is this person? *	Awkwardness
How attractive is this person?	Attractiveness
How trustworthy is this person?	Trustworthiness
How dominant is this person?*	Dominance/Submissiveness
How likable is this person?	Likeability
How intelligent is this person?	Intelligence
Behavioural intentions towards target	
Willingness to live near the stimulus participant.	Live near
Likelihood of hanging out with the stimulus participant in their free	Hangout
time	
Level of comfort sitting next to the stimulus participant	Sit next to
Likelihood of starting a conversation with the stimulus participant	Talk to
Scale	4-point (0–3). Higher scores indicate
	more positive responses. *Reverse
	scored.

Cola (2020)

Conversation Rating Scale – Extended (CRS-E)
The other person was interested in what I had to say.
This person was warm and friendly.
The conversation flowed smoothly.
The other person acted bored by our conversation*
The other person created a sense of distance between us*
The other person made appropriate eye contact with me during our conversation.
Scale $1 - 7$ ($1 =$ strongly disagree; $7 =$ strongly agree). *Reverse Scored.
Sum of all CRS-E questions was calculated. Possible total score range = $6-42$.

Morrison (2020)

First Impressions Scale (adapted from Sasson 2017a)		
Question	Item	
Character Traits		
My partner is awkward *	Awkwardness	
My partner is attractive	Attractiveness	
My partner is trustworthy	Trustworthiness	
My partner is dominant*	Aggressive/Dominant	
My partner is likeable	Likeability	
My partner is intelligent	Intelligence	
Behavioural intentions towards target		
Willingness to live near the stimulus participant.	Live near	
Likelihood of hanging out with the stimulus participant in their free	Hangout	
time		
Level of comfort sitting next to the stimulus participant	Sit next to	
Likelihood of starting a conversation with the stimulus participant	Talk to	
Scale	4-point (0–3). Higher scores indicate	
	more positive responses. *Reverse	
	scored.	

The composite metric average of the four behavioural intention items was used in analyses.

Morrison (2020). This scale measures interaction quality, disclosure, engagement, and intimacy

	Interaction Quality Scale
Question	
How much they enjoyed the interaction	

The extent to which the interaction was smooth, natural, and relaxed

How much they would like to interact with their partner again

How much their partner disclosed to them

How much they disclosed to their partner

The extent to which the interaction was forced, strained, and awkward

The extent to which they influenced the interaction

The extent to which their partner influenced the interaction

The extent to which the interaction was intimate

The extent to which the interaction was satisfying

The extent to which the interaction was pleasant

Scale: not at all(1) and very much(8), where higher values indicate more positive perceptions of the interaction.

Morrison (2020)

Closeness Scale

Inclusion of Other in the Self (IOS Scale) Participants indicate how close they feel to their partner by selecting one of seven overlapping circles representing the self and the partner.

Subjective Closeness Index (SCI Scale)

How their relationship with their partner compares to their other relationships

Compare this relationship with what he or she knows about closeness of other people's relationships.

Participants rate on a 7-point scale. A composite closeness score was formed by averaging the raw scores of both measures together.

Morrison (2020)

International Personality Item Pool—Interpersonal Circumplex (IPIP-IPC)
IPC warmth (agreeable)
My partner is interested in people
My partner reassure others
My partner enquires about others' well-being
My partner gets along well with others
_IPC dominance (assured)
My parnter demands to be the centre of interest

My partner does most of the talking

My partner speaks loundly

My partner demands attention

Scale of 1 to 5, with 1 indicating very inaccurate and 5 indicating very accurate

Usher (2018)

Partner Perceptions Scale
How happy is?*
How outgoing is?*
How relaxed is?*
How talkative is?*
How boring is?
How insecure is?
How positive is?*
How quiet is?
How anxious or nervous is?
How negative is?
How unhappy is?
How cool is?*
How polite is?*
How mature is?*
How annoying is?
How funny is?*
How uncool is?
How shy is?
How serious is?

How immature is?
How helpful is?*
How confident is?*
How exciting is?*
How impolite is?
How entertaining is ?*

5-point scale from 1 (not at all) to 5 (the most). Positively-valenced perceptions reflect a person's ratings of liking for the peer, while negatively-valenced perceptions reflect ratings of disliking for the peer. *Positively-valenced items.

Sasson (2017c)

First Impression Rating Scale				
Question	Item			
Willingness to engage (behaviour intentions)				
"How likely is it that you would sit at lunch with this person?"	Sit near			
"How likely is it that you would start a conversation with this person?"	Talk to			
Assumptions (traits)				
"How likely is it that this person gets along well with others?"	Gets along with others			
"How likely is it that this person is socially awkward?"*	Socially awkward			
"How likely is it that this person spends a lot of time alone?"*	Spends time alone			

Non-graduated slider bar with 0 ("not likely") to 100 ("very likely"). Higher ratings reflect more positive judgments. **Reverse scored.*

Grossman (2019)

First Impression Rating Scale				
Question	Item			
Willingness to engage (behaviour intentions)				
"How likely is it that you would sit at lunch with this person?"	Sit near			
"How likely is it that you would start a conversation with this person?"	Talk to			
Assumptions (traits)				
"How likely is it that this person gets along well with others?"	Gets along with others			
"How likely is it that this person is socially awkward?"*	Socially awkward			
"How likely is it that this person spends a lot of time alone?"*	Spends time alone			
"How likley is it that this person has a lot of friends"	Has a lot of friends			

Non-graduated, continuous slider bar with -250 ("not likely") to 250 ("very likely"). Higher ratings reflect more positive judgments. *Reverse scored.

E: Publication – Chapter 4

https://link.springer.com/article/10.1007/s10803-021-05212-4
F: Sentencing Data Scoring Protocol

Aims

Qualitative analysis of 53 court case sentencing remarks with offenders on the autism spectrum.

- 1. Examine how the offender's remorse/absence of remorse was determined by the sentencing judge.
- Presence of offender's remorse
 - Present/absent/inconclusive
 - Presentation
 - Adjectives such as displayed, shown, expressed, demonstrated used in conjunction with remorse) not associated with expert witness/prosecution evidence.
 - Plea/level of cooperation with the police
 - Guilty or not guilty plea, early/late plea, assisted police with
 - investigations/not cooperative with police.
 - o Diagnosis (ASD) influenced judgment of remorse.
 - judged offender to have remorse although understood the presentation of remorse differed due to diagnosis/believed diagnosis would prevent offender experiencing emotion (e.g., lack of empathy). Diagnosis (see search terms) must be explicitly referenced with this evaluation.
 - o Expert witness/prosecution evidence
 - Judge relied on evidence to influence judgment of remorse e.g., opinion of psychologist/psychiatrist with reference to defendant's remorse.
- 2. Determine whether autism (suspected/diagnosed) impacted the judge's sentencing decision.
- Mitigating/aggravating/neither/inconclusive
- Moral culpability for the crime
- Ability to withstand prison environment.
- Rehabilitation potential

Researcher (coding judges) instructions

Transcripts of sentencing remarks will be analysed by 2 independent judges.

Search terms to be used within PDF include:

- Indicators of remorse
 - o Remorse
 - o Contrition
 - o Empathy
- Indicators of ASD diagnosis effects on sentencing
- Search terms in category (a) must be determined by (or made in reference to) search terms in category (b)
 - Terms (a)
 - Moral culpability
 - Prison
 - Rehabilitation
 - Mitigating
 - Aggravating
 - o Terms (b)
 - Mental
 - Diagnosis
 - Autism
 - Autistic
 - Asperger

- Judge required to read all paragraphs where search terms appear and determine whether it relates to specified indicators (caution check the paragraph relates to present case and not referencing a past case for comparison purposes).
- Coding data entered in excel spreadsheet (including paragraph/s number used to determine decision)
- The transcript index number will be recorded with each decision.
- Discrepancies will be addressed by discussion and final vote of a 3rd judge if required.

Sentencing Data Scoring Protocol 2 (14/12/20)

Similar aims and instructions as Protocol 1 without search terms. The whole document within the sample (n = 20) will be read by 2 independent judges and coded in the excel spreadsheet with associated index number. Inter-rater analysis to be performed on this sample of coding.

Part 1 – Determinations of remorse.

- Presentation
 - The judge used adjectives such as displayed, shown, expressed, demonstrated in conjunction with remorse. Not associated with expert witness/prosecution evidence
- Plea/level of cooperation with the police
 - Guilty/no guilty plea, early/late plea, assisted police with investigations/uncooperative with police.
- Diagnosis influenced judgement of remorse.
 - Judge made reference to his judgment on the offender's remorse although understood the
 presentation of remorse differed due to diagnosis/believed diagnosis would prevent offender
 experiencing emotion (e.g., lack of empathy). Diagnosis (or general reference to diagnosis
 e.g. characteristics/mental abilities etc.) must be explicitly referenced with this evaluation
- Expert witness/prosecution evidence
 - Judge relied on evidence to influence judgement of remorse e.g., opinion of psychologist/psychiatrist with reference to defendant's remorse.
- Overall conclusion of the defendant's remorse
 - Remorse present
 - Overall, the judge perceived the offender to be remorseful.
 - Remorse absent
 - Overall, the judge perceived the offender to be unremorseful.
 - Remorse inconclusive
 - It is not clear whether the sentencing judge perceived the offender to be remorseful or unremorseful.

Part 2 – Impacts of the diagnosis on sentencing decision.

- Moral culpability
 - 0 = did not consider diagnosis in assessment of moral culpability/responsibility for the crime
 - 1= Diagnosis was considered to impact moral culpability/responsibility for the crime
 - 2 = Diagnosis was considered to NOT impact moral culpability/responsibility for the crime Ability to withstand prison environment.
 - 0 =did not consider diagnosis in assessment of ability to withstand prison environment
 - 1= Diagnosis was considered to impact offender's ability to withstand prison environment
 - 2 = Diagnosis was considered to NOT impact offender's ability to withstand prison environment
- Rehabilitation potential
 - 0 = did not consider diagnosis in assessment of rehabilitation potential
 - 1= Diagnosis was considered to NOT impact rehabilitation potential (e.g. good prospects for rehabilitation due to diagnosis)
 - 2 = Diagnosis was considered to impact rehabilitation potential (e.g. minimal rehabilitation potential due to diagnosis)

Overall conclusion of diagnosis effects on sentencing

- Mitigating
 - Overall, the judge considered the diagnosis to be a mitigating factor in the sentencing decision (mainly 1s in previous category)
- Aggravating
 - Overall, the judge considered the diagnosis to be an aggravating factor or at least non-mitigating in the sentencing decision (mainly 2s in previous category)

- Neither mitigating nor aggravating
 - The judge did not take the diagnosis into consideration in sentencing decision (0s in previous category)
- Inconclusive
 It is
 - It is not clear whether the judge perceived the diagnosis to be mitigating or aggravating (1s and 2s in previous category)

G: Cited Case Transcripts

1. The offender told Mr Lavidis that he was *remorseful*, and he expressed his sorrow for his crimes in the witness box. He agreed in cross-examination that one way of expressing true *remorse* for his actions was to assist the victim's family to come to terms with what had happened ... and, importantly, why he did it. Despite that, the offender could not, or would not, answer the ... questions on these topics, pleading amnesia. Having watched the offender give his evidence, and considering all of the other available evidence, I found it difficult to accept that the offender was genuinely *remorseful*. He had the air in the witness box of someone playing a part, and saying what he thought he should say to present the best possible impression of himself. Whilst he was occasionally tearful, his distress seemed somewhat contrived... The offender's assertions of deep *remorse* need to be viewed against his conduct overall...In some circumstances a plea of guilty may be evidence suggestive of *remorse*. I do not so regard it in this case. Had the offender been genuinely *remorseful*, that is, felt a deep regret for the wrong he had done, and a wish to make such amends..., he would have given an honest account of what he did and why. I do not believe that the offender has done that, despite his testimony...I have concluded that the offender can give an account of these events; he has chosen not to.

R v Barrett (2017)

2. Notwithstanding that he pleaded guilty to the offences, that he told police when interviewed that he was sorry for what happened, and that he told the author of the Pre-Sentence Report that he regrets everything that happened, as he did not give evidence before me and I cannot therefore assess the genuineness of his *remorse* for myself, I am unable to say with any certainty that the offender is *remorseful* for what he did. Frankly, I think that his guilty pleas show his realisation of the strength of the Crown's cases, and I think that he is more sorry for himself and the situation in which he has placed himself, rather than he is sorry for what he did to Ms Bumpus and the family of Ms Cox.

Monfries v The Queen (2012)

3. Mr Chapman did not give evidence before me. However, he immediately admitted his role in the offence, cooperated with authorities, pleaded guilty at the first opportunity and has not thereafter sought to limit or minimise his role in the events that occurred. Having regard to his acknowledged lack of social skills, I do not treat his decision to say nothing on his own behalf as destructive of the fact that he has otherwise demonstrated he has accepted responsibility for his actions and acknowledged the injury and damage they have caused.

R v Chapman 2018

4. The pre-sentence report concludes that you have accepted responsibility for your offending and, as Mr Hockton has said to me, have expressed *remorse* and shame for the events the subject of the indictment. You do tend, on the other hand, to rationalise what happened and to couch your acceptance of responsibility in terms which in truth, to my way of thinking, aren't necessarily a complete or full acceptance of responsibility...I don't accept that you fully empathise with the victim. Rather, to my way of thinking, you do tend to attempt to share responsibility with him.

KS v The State of Western Australia 2011

5. When interviewed the offender said, "somehow my my hand went down her pants" and that he "must've woken up with it down there" and said he "didn't know what happened". That would appear to be fairly disingenuous and extremely unlikely and clearly contrary to the agreed facts. Dr Furst records that the offender lacks insight into his mental illness and the reasons for his offending. There is little if any evidence, beyond the plea, of *remorse*.

R v JP 2019

6. In this case you contested the trial and have not expressed any *remorse* for your behaviour. That is not surprising as you maintain that you did not kill Russell Hammond, nor do you have any real understanding or genuine feelings of empathy towards other people. You will not be punished for that, but you will fail to attract any reduction for *remorse* or a plea of guilty in the sentence that I will impose.

R v Giles 2014

7. Although Dr Holder has never presented as outwardly *remorseful* of his criminal behaviour, or the impact on his family, this needs to be seen in the context of his underlying impairments in emotional expression, particularly in interpersonal settings. As is characteristic of him I believe that intellectually he has processed the event in a way that displays regret over his behaviour and the impact on his family and victim. He has never expressed to me concern for the victim as such, but again his appearance of indifference is probably best understood by his Autism Spectrum Disorder and egocentric views. I do not think it represents an antisocial or psychopathic character style. He has not indicated any desire to contact the alleged victim and this does not appear to be an ongoing preoccupation. I do not think [that] he represents an ongoing risk to her.

R v Holder 2018

8. That a person with your education, background and record of serving the community could plan and execute this event is extraordinary. It suggests to me that there is some underlying pathology in you which remains undiagnosed. On the face of it, there appears to be a moral dimension missing. Your own evidence that you had always felt unconnected with the world provides some sort of insight as to that. I have been given a report by Dr Raeside which addresses this issue. He diagnoses you as having a schizoid personality disorder and/or autism spectrum disorder. He sees your crime as arising from stressors upon you in the weeks leading up to the crime. Dr Raeside puts the crime down to these stressors and expresses the view that, now they are removed, there is a 'low risk' of further offending. I do not consider that Dr Raeside is aware of the full details of your crime. Certainly, he does not have my findings. That is not to criticise anyone, but rather to explain why I cannot accept his opinion, either that you are *remorseful* or that there is a low risk of reoffending. There was no hint of *remorse* in your evidence. In my view, the risk you pose in the future cannot be quantified. Whatever the reason for your crime, I have reached the conclusion that you are and will remain a dangerous man.

R v Holder 2018

9. The appellant argues that there was no reason for the sentencing Judge to sentence on the basis of a lack of *remorse* by the appellant when, on his argument, Dr Raeside with his psychiatric expertise has a contrary opinion. There are two points to be made at the outset. It does not appear that, in fact, Dr Raeside is of the opinion that there was *remorse*. He said, as indicated above, that the appellant's appearance of indifference showing lack of *remorse* is best understood by the appellant's autism spectrum disorder. Dr Raeside does not at any time or at any stage say that the appellant showed *remorse*. The sentencing Judge clearly based her view that there was a lack of *remorse* on the conduct of the appellant at trial, as well as the opinion of Dr Raeside set out above. On her findings, his evidence was clearly fabricated and was hardly the response of a person who was at all *remorseful*. She was clearly entitled to form that view. Related to this topic, the appellant's education and background could commit such a crime, that "there [was] some underlying pathology in [the appellant] which remains undiagnosed. On the face of it, there appears to be a moral dimension missing". The appellant argues that this cuts across the opinion of Dr Raeside and is without basis. If one reads the whole of that passage of her Honour's sentencing remarks, it is clear that her musings as to why such a man could commit this crime do not cut across the diagnosis of Dr Raeside that the appellant has a schizoid personality disorder.

R v Holder 2019

10. I am not satisfied he is remorseful or has any real appreciation of the seriousness of the current offending. The reasons for that, despite his history, is the concrete thinking identified by Ms Wakely and his autism. These are factors that are also relevant in relation to assessing his prospects of rehabilitation.

Gilshennan v The Queen 2019

11. In the course of being interviewed by Dr Thomas and Professor Ogloff, you expressed some *remorse* for your offending. An issue arose in the course of your plea as to the genuineness and depth of that expression of *remorse* by you. In his report, Dr Thomas stated that you had been appropriately distressed and *remorseful* when discussing the offending and its impact on Eurydice Dixon, her family, and friends. On the other hand, Professor Ogloff was of the view that your capacity for empathy is limited, and that your expression of *remorse* and empathy was 'very much intellectual rather than emotional'.

In any case, it is difficult, if not impossible, to adequately gauge whether expressions of *remorse* are truly reflective of subjective *contrition*, or whether they amount to no more than regret for the consequences that have ensued to the offender as a result of his or her actions.

In this case, the question of your *remorse* has been complicated by the impact of your mild autistic disorder. Dr Thomas and Professor Ogloff have both noted that you tend to intellectualize the way you think about things. Thus, Dr Thomas stated, and I accept, that the *remorse* expressed by you is the product of you thinking the matter through, rather than being the consequence of an immediate emotional reaction to what you have done. Professor Ogloff stated that your expression of *remorse* does not have the emotional depth that an average person would have. However, I accept that that limitation is due to your autistic disorder. Taking that into account, I am prepared to accept, in your favour, that you do genuinely feel a degree of *remorse*, not simply in relation to the consequences that have and will flow to you, but because of the appalling harm that you have inflicted on Eurydice Dixon, and her family, and her close friends.

DPP v Todd 2019

12. The appellant had shown no insight into or *remorse* for his offending, continuing to insist that he thought the person with whom he was communicating was at least 18 years old...The appellant has been assessed to be at a moderate to high risk of reoffending and he has shown no insight into, or *remorse* for, his offending. It may be accepted that the appellant's lack of insight and *remorse* may at least to some extent be attributable to the appellant's mental impairment...

Vucemillo v The State of Western Australia 2017

13. An offender's *remorse* is available to be taken into consideration as a mitigating factor but only if he has provided evidence that he has accepted responsibility for his actions. There is no doubt that the offender has admitted responsibility for the physical acts that killed the deceased. He has not provided evidence that explains what he did or why he did it. The offender did not choose to give evidence at the sentencing proceedings, which might have informed these outstanding questions. It is not possible in such circumstances for me to be satisfied on the balance of probabilities that the offender has shown or demonstrated any *remorse* at all. In forming that view I have taken into account the fact that the offender reported the matter to the police immediately and has not sought to deny his involvement in the death of the deceased. His plea of guilty to manslaughter is a formal manifestation of that.

I should also observe that the offender's ability to show or to express *contrition* or *remorse* is likely to have been significantly impeded by the personality traits and characteristics that the evidence so clearly described. One of those was the medical opinion that the offender was unable to identify with or understand any point of view that was different to his own. He was found to have a fixed and rigid approach to ideas and concepts and was inflexible in his attitudes and interactions with others. The so-called feud with the deceased's family was one obvious manifestation of that personality style. It would not surprise me if his plea of not guilty to the murder of the deceased, in the face of what on any view was a very strong Crown case, were another. If genuine *remorse* includes the recognition and acceptance of the damage caused to others by a person's actions, it is probably absent in this offender. However, even though such an absence of *remorse* is not an aggravating factor, it is nevertheless important in the offender's case that his apparent lack of it is not misunderstood and thereby improperly counted against him.

R v Bretherton 2013

14. There is no doubt, by his words and actions, on the night in question, and what he has told people since, that the offender accepts that he is responsible for the death of the deceased. He has also acknowledged the injury and harm which his actions have caused.

It is a mitigating factor if an offender demonstrates that he is *remorseful* about his offence: s 21A(3)(i) Sentencing Act. In an interview with Professor Greenberg, a forensic psychiatrist, the offender told him that he did not mean to kill the deceased. He told Professor Greenberg that his actions constituted the biggest mistake of his life, and that he felt bad for the deceased's mother.

To that extent, particularly having regard to the fact of his ASD which makes it difficult for him to identify and discuss emotions, he has provided evidence of his *remorse*. I take this into account in mitigation of any sentence which may be imposed. 15. In sentencing you I take into account your plea of guilty and give you a discount for it. I take into account that your plea of guilty has facilitated the course of justice, saved the community the cost of a trial and the witnesses the ordeal of one. I take into account that you offered that plea prior to the committal hearing and that the issues canvassed at the committal enabled the Crown to more properly accept your plea of guilty to manslaughter. I take into account also that you accepted your responsibility for killing Mr Douros in the record of interview. I accept also that by reason of the Asperger's disorder you are unable to express true *remorse*, but I accept that you acknowledge your responsibility for killing Mr Douros and the senselessness of it, and that you regret your actions.

R v Van Zoelen 2012

16. Community protection and a concern about future dangerousness are problematic given the inability of the psychiatrists to express any firm view. But the Crown is right to point out that the law requires some assessment to be made where the evidence permits. In this case, the absence of a history of violence points in one direction whilst the circumstances of the crime itself point in the other. There is no conclusive psychiatric explanation for the offender's heinous conduct. There is no identifiable diagnosis of a psychiatric condition that is amenable to treatment.

- R v Kelsall 2015

17. ...the unfortunate position is that you have exceedingly *poor prospects of rehabilitation*, and that is tied in with the issue of *protection of the community*. You have pleaded guilty to these offences, and you know what you did was wrong, but there is nothing to indicate that you would not do it again, as you lack an emotional connectedness with people in general. In his evidence Dr Sullivan said in response to a question I asked him, that you were not a psychopath or a sociopath, but that you had some overlap in the criteria such as lack of empathy, a lack of emotional connectedness.

One of the reasons it is unknowable is that, to a large degree, the autism spectrum disorders and Asperger's are of recent diagnosis in the medical and wider world, meaning it has only become known, at least to the general public, in the last twenty plus years, so there is still much that is unknown. The most unfortunate aspect is that at this stage there is no treatment that will make persons empathetic and caring of others. That is something that may occur in the future, with the great leaps that medicine is making, but at this moment you remain incapable of feeling genuine empathy, sorrow or regret, for your fellow human beings.

R v Hemming 2014

- 18. On the question of *future dangerousness*, Ms Manuel emphasised the difficulty in making an assessment in a case in which, on any view, a very lengthy sentence must be imposed. She submitted that even Professor Greenberg accepted that the prospect of the offender *presenting a danger to the community* long into the future was "guarded". The conclusion in his report (which I have quoted earlier) recognised a possibility that the offender's response to treatment may change the current risk assessment.
 R v Stanford 2016
- 19. A mental disorder such as the offender has would normally result in some understanding and flexibility in the assessment of sentence. It is well recognised that there are various ways in which a mental condition can operate to reduce a sentence although it can work the other way in some cases by increasing the need to take into account the *protection of the community*.

I am not convinced that the offender's *moral culpability* is reduced on account of his autism spectrum disorder. But even if it was, the extent would be minimal. The calculating manner in which the offender carried out the various activities following the murder (and to some extent before) indicates that he was well capable of making well-considered choices about how to best serve his own interests and to achieve his objectives.

There can be no question that the offender is a very disturbed individual. The evidence... together with the assessment, albeit guarded, by Professor Greenberg, all indicate to me that the offender will, for a considerable period of time, represent a serious danger to the safety of the community. Whether he will always be so, or whether...this will moderate with advanced age, is difficult to say.

R v Stanford 2016

20. Mr Giles is a highly intelligent man who has never been able to use his abilities effectively either in education or relationships. If he were to find an outlet in real intellectual attainments rather than pseudo-philosophical ruminations, this might make him less alienated from others. If he were to learn to interact with others and value their company this would, in my opinion, reduce any *future risk of violence*. There was some evidence in the interviews that he has, perhaps for the first time, made effective contact with at least two or three fellow prisoners. The very fact of being forced out of his bedroom into contact with others seems to have been beneficial. If Mr Giles has a disorder in the schizophrenic spectrum, as I suspect, he may become more withdrawn and eccentric as time passes, or with luck improve in these areas. Unfortunately, the former is most likely. Should he deteriorate further it would be a tragedy for him but would reduce any risk there may be of violence towards others if not himself.

R v Giles 2014

- 21. The crime was entirely motiveless, except for your expressions to your friend about your curiosity and your desire to see what it felt like to kill, all of which makes you a person that in my view may be considered very *dangerous to our community*. Yours is also a case where *protection of the community* is an active consideration, and I will give that matter some weight in the sentence I will impose. In relation to the *prospects of rehabilitation*, I find it difficult to know where you will fall in that area. I do not presume you to have no prospects, but they are certainly and unfortunately not high prospects of being *rehabilitated*. *R v Giles* 2014
- 22. The disorders that affect you, as diagnosed by Dr Thomas and Professor Ogloff, are relevant to an assessment of your prospects of rehabilitation... There was some common ground in their evidence, but they ultimately disagreed as to their conclusions. In particular, Dr Thomas noted that in the course of his interviews with you, you had demonstrated a desire to explore the events and factors that led to the offending, and that you had been appropriately distressed and remorseful when discussing your offending and its impact on Eurydice and her family. As a consequence, and in light of your young age, he was reasonably optimistic about your prospects of rehabilitation.

On the other hand, Professor Ogloff was more pessimistic about the prospects of addressing the sexual disorder that underlay your offending. He noted that large scale studies have revealed that sexual deviance has been reliably found to be the most potent predictor of sexual re-offending. Like Dr Thomas, he noted that it is not possible to treat the paraphilic interest that underlies the disorder. Further, there is little evidence that the disorder itself can be effectively treated to prevent sexual re-offending, by remediating the behaviours that are part and parcel of the sexual sadism disorder. He considered that the Cochrane Report, relied on by Dr Thomas, does not provide sufficient evidence that pharmacological treatment results in a reduction in sexual *recidivism*. Further, medication is only effective while the subject takes it, and a high percentage of people drop out of that treatment because of the undesirable side effects of it.

DPP vs Todd 2019

23. It is thus clear, on the evidence, that in the absence of appropriate and effective treatment, there is an unacceptable risk that, on your release into the community, you would re-offend in the same manner in which you have in this case. In particular, there is an unacceptable risk that you would re-offend in a manner which would involve the enactment by you of the whole of your sexual fantasy, culminating in the death of a victim. As Professor Ogloff stated in his report, and in his evidence, the conclusion, to be drawn from some 82 large scale studies, involving almost thirty thousand sexual offenders internationally, is that the presence of sexual deviancy has the strongest relationship with sexual re-offending.

In those circumstances, it is inevitable that I must conclude that, based on the present evidence, the *prospects of successfully addressing the disorder* that underlay your offending are poor. Accordingly, I am satisfied that your *prospects of rehabilitation* are very limited. The evidence adduced on your plea is such that it must be concluded that, at least for the foreseeable future, you would pose an *unacceptable risk to the community*, and in particular to women, if you were to be released.

DPP vs Todd 2019

24. In summary, [mitigating circumstances] include making some allowance for the indirect contribution that your autism made, not to the offending, but to the development of the sexual sadism disorder that precipitated the offending. The early plea of guilty by

you was of considerable value, both to the community, and also to the victims. Your cooperation with the police, albeit somewhat limited, was also of value and importance. Your youth is a relevant mitigating circumstance, but in light of the seriousness of your offending, the weight to be given to it is limited. You have no previous convictions, which is to your credit, given your autism disorder and the circumstances of your upbringing. As I have found, you have come to feel remorse for what you have done to Eurydice and her family. I take into account the dysfunctional circumstances in which you were living, and I also take into account that, because of your autism, and because of the nature of the offences for which you have been convicted, you will *suffer some hardship during the sentence of imprisonment* which I am to impose upon you.

... the sentencing purposes of *general deterrence*, *community protection and denunciation* must assume a much greater role in the determination of your sentence than your youth and your *rehabilitation*.

DPP vs Todd 2019

25. It is clear that Mr Brown's autistic disorder means that he has a markedly limited ability to feel normal emotions, to express his own emotions, or to feel empathy with other people. He finds it very difficult to understand the effects his behaviour might have on others. He has a very concrete view of what he must and must not do, at times sticking rigidly to rules and at other times blandly disregarding them. Whilst this is a very significant impairment which would affect his ability to know that he ought not carry out the acts for which he is charged, in my opinion he was not totally deprived of that capacity.

R v Brown 2016

26. An abnormality may reduce the *moral culpability* of the offender and the deliberation which attended his criminal conduct; yet it may mark him as a more *intractable subject for reform* than one who is not so affected, or even as one who is so *likely to offend again* that he should be *removed from society* for a lengthy or indeterminate period. The abnormality may seem, on one view, to lead towards a lenient sentence, and on another to a sentence which is severe.

R v Goodger 2009

27. In the present case, the aggravating features of note were that the respondent committed the 2014 and 2015 offences while on bail and that, viewed overall, his *offending conduct* showed an established continuing pattern of offending using the methodology described above. The need for *protection of the public* from such conduct by him is reinforced, in addition to those aggravating features, by the medical evidence which bears upon his *capacity to change his behaviours and thereby be rehabilitated*.

R v Brown 2016

28. It is clear, however, that while a mental impairment will ordinarily be relevant to the sentencing of an offender, it is not the case that it will always result in a lesser sentence. The existence of a mental impairment is simply one factor which must be balanced with other factors to produce a just sentence. The part that it plays in the sentencing of an offender must always depend upon the particular facts and circumstances of the case. In some cases, it may be relevant in more than one respect and not affect the outcome because it weighs in the balance both positively and negatively. Thus, for example, the existence of a *causal connection between the mental impairment and the offence* might reduce the importance of general deterrence but increase the importance of particular deterrence or of the *need to protect the public*.

Vucemillo v WA 2017

29. Dr Brett said in his report that the appellant denied he was sexually interested in children and explained that he thought he was communicating with an adult who was role-playing as a 14-year-old girl. It is an explanation that Dr Brett accepted. Dr Brett went on to express the opinion that it was consistent with how the appellant's autistic brain works that the appellant believed that anyone communicating on the site must be an adult because the website was an adult-only website. It is evident that Dr Brett considered that what he described as the appellant's 'stunning naivety' in that respect was the explanation for the appellant's sexually explicit communications with the child persona. Dr Brett did not discuss in his report the appellant's possession of the child exploitation material.

However, in finding the appellant guilty of the offence on count 1 the jury necessarily rejected the appellant's explanation, and the sentencing judge found as a fact for sentencing purposes that the appellant was communicating with a person he believed to

be a 14-year-old girl. His Honour also found that the appellant had a sexual interest in young girls. Those findings are not challenged. Dr Brett did not suggest that autism spectrum disorder would explain the appellant's sexually explicit communications with a person he believed to be a 14-year-old girl, his possession of images of young girls in sexually provocative poses or, more generally, his having a sexual interest in young girls. Dr Brett noted in his report that the appellant's sexual deviancy was not thoroughly explored. Dr Brett did not make any assessment of the *risk of reoffending*. Nothing in Dr Brett's report doubted or undermined Ms Zuin's assessment, accepted by the sentencing judge, that the appellant posed a moderate to high *risk of reoffending*.

30. It is also apparent that the symptoms of autism spectrum disorder to which Dr Brett referred were in substance described in Ms Zuin's psychological report, in which it was specifically noted that certain of the appellant's attributes were consistent with Asperger's Syndrome. It is evident from his sentencing remarks that the sentencing judge took those matters into account.

Vucemillo v WA 2017

31. I am not satisfied he is remorseful or has any real appreciation of the seriousness of the current offending. The reasons for that, despite his history, is the concrete thinking identified by Ms Wakely and his autism. These are factors that are also relevant in relation to assessing his *prospects of rehabilitation*...In all of the circumstances I cannot make a finding that he has good *prospects of rehabilitation* or is unlikely to *reoffend*....His Autism, of course, is an underlying difficulty for him in functioning and managing, not only this custodial system, but also the community. Despite my findings in relation to the existence of those factors, there is no evidence before me that those issues identify a reduction in his *moral culpability* or that they are *causally connected to the commission of these offences*. None has been suggested by Ms Wakely in her report.

In relation to this offender, particularly, in view of his offending whilst on parole [for] similar offences he had been previously convicted of, indicate there is a need for emphasis on specific deterrence. In addition to those factors and, particularly in light of his comments to Ms Wakely and his attitude in relation to the commission of these offences, there is real need for the *protection of the community*. That is a factor that looms large, in my view, in the sentencing process and has to be balanced against the need to encourage his rehabilitation.

Gilshenan v R 2019

32. Expert 1: Ms Matthews was of the view that the applicant had a history of Asperger's disorder, which was a life-long condition, that impacted on his 'thought stream, focus of interest and interpersonal relatedness'. She considered that it was highly unlikely that the condition would change, and that it was difficult (but not impossible) to ameliorate it through pharmacological or counselling treatments. Ms Matthews also considered that, given the applicant's history of physical, sexual and emotional abuse and victimisation, he at least partially met the diagnostic criteria of post-traumatic stress disorder as defined by DSM-IV. She observed that the applicant did not appear to be coping in the challenging intimate environment in prison, and she expressed the view that his *time in prison would be more onerous* than for most prisoners. She also considered that prison, and treatment within the prison, was unlikely to prepare the applicant with the coping skills necessary for him when he would be released.

Expert 2: Certainly his psychological condition in my view is relevant to his *offending behaviour*. It is arguable that his Autism Spectrum Disorder has led to an impairment of his judgment, which in turn impacts upon his *culpability*. In saying this I am not for a moment suggesting that he is unaware of his criminality. There is no indication from my protracted involvement with him of a Personality Disorder but rather clear signs of autism spectrum disorder, in addition to his high levels of anxiety. Autism spectrum disorder is not a personality disorder. It is a life-long condition and likely has genetic causes ...

Davies v R 2019

33. The judge then considered the applicant's prospects for *reform* and *risks of re-offending*. He noted that the applicant had refused to be examined by expert psychiatrists or psychologists from Forensicare. The judge considered that the applicant was an ongoing *danger to the community*, and that the likelihood of his *re-offending* in the future was very high. He further considered that his *prospects for reform and rehabilitation* were 'very slim at best and most likely non-existent'. He considered that nothing in the evidence of Mr Watson-Munro revealed that the applicant had any insight into his criminality. *Davies v R 2019*

34. I do not intend to cover each and every aspect of his evidence. What stands out is that Mr Watson-Munro, having considered all the matters put to him by you, the prosecution and by me, in the end, was firmly of the view that none of the Verdins matters were engaged except the one being that *jail would be harder for you because of your impaired mental functioning* than it would be if you did not have that impaired mental functioning.

So to be clear, your *moral culpability* remains very high and is not, in my view, to be seen as diminished by reason of any aspect of your impaired mental functioning of anxiety, post-traumatic stress disorder or autism taken separately or in combination. You knew precisely what you were doing by committing each of the arsons and that it amounted to what you intended which is a deliberate attack on our community. It was a considered, deliberate campaign all planned and executed by you. There was, and is, *no causal connection* or link between your post-traumatic stress disorder, anxiety or your autism and these five fires.

Davies v R 2019

35. The disorder is lifelong, but will not deteriorate. Nonetheless, Dr Sullivan was of the opinion that there were guarded *prospects for your rehabilitation* if you are provided with psychological and social support, and possibly medication.

I take into account that Asperger's disorder, being a sub-category of autism, is a lifelong condition and that, while you may benefit from appropriate psychological therapy and social supports, the condition will not abate. Therefore, you will always have difficulties with impulsive behaviour and regulation of it and this must impact upon your *prospects for rehabilitation* and the likelihood of you presenting as a *further risk to the community*. Nonetheless, you have been able to maintain at least menial employment, complete your secondary studies and various vocational courses. You are literate and very articulate, but nonetheless, the Court must be cautiously guarded about your prospects for rehabilitation.

R v Van Zoelen 2012

36. Any sentence imposed must therefore give due consideration to the *nature and gravity of the offence* here committed and your role in it. Such sentence must also act in denunciation of your conduct and serve to punish you. The sentence must, of course, give due weight to considerations of specific and general deterrence and the need to *protect the community* from you. I accept that your *moral responsibility is to be reduced* on the application of the principles of Verdins by reason of the Asperger's disorder, but that reduction is to be only to a limited degree. Likewise, considerations of specific and general deterrence are to be appropriately moderated, because although the evidence of Dr Sullivan is that there is a link between the offending and the Asperger's disorder, it is not, in Dr Sullivan's opinion, a strong one. I accept, however, that the *Asperger's disorder will impact upon the way in which you serve your prison sentence*.

R v Van Zoelen 2012

37. In your counsel's submissions it was made clear that you bear the sole responsibility for this offending, I agree that this is so. However, I also regard your moral culpability for the offending as being diminished to some extent by the nature of your disability as I have outlined it in these sentencing remarks. It will be apparent from what I have said so far that I regard the case as being a very unusual one. I have reduced the sentence overall because of this material that has been provided on your behalf.

...Dr Cunningham administered an often used test designed to provide some information as to the *likelihood of your re-offending, and he found that your risk of re-offending is moderate.* He said that there were in fact few risk factors, but those risk factors were significant. Although he identified the protective factors, such as the support of your family, your acknowledgement that you need help and the lack of other factors such as drugs or social instability, he pointed out the *significant problem of your condition of autism* and particularly the way in which that condition has led you to form the views that are represented in the quotations which I have read out. His view is that you need ongoing treatment regarding your sexual deviance and ongoing monitoring of the risks that you represent.

The difficulty is, Mr Hladik, that your *condition of autism cannot be cured*. I accept Dr Cunningham's evidence, and I particularly accept that although the risk factors in re-offending are not numerically great, the *risk factor of your condition of*

autism is very important in assessing your future risk of offending...And in assessing that risk, I note your lack of empathy which is fundamental to your condition contributes significantly to that risk...

... I note also at this point that I accept your counsel's submissions that your *condition of autism will mean that imprisonment will weigh much more* heavily on you.

Hladik v R 2015

38. His Honour also accepted the evidence of Dr Canaris, psychiatrist, that the applicant was *unlikely to re-offend*, and noted that he had no criminal record. The sentencing judge further noted that the criminal acts in respect of Count 1 were spontaneous and they were not part of any planned criminal activity.

Leung v R

39. Expert: Mr Leung's social skills deficits and personality style, which are most likely due to autism spectrum disorder, left him vulnerable to developing an anxiety and interpersonal problems. In particular, deficits in assertive skills left Mr Leung vulnerable to a pattern of passive acceptance of interpersonal frustration leading to a build-up of tension which is followed by an aggressive outburst.

Appeal judge: Mr Milic expressed the opinion that the offences committed by the applicant appeared to be incongruous with his otherwise pro-social character and were most likely triggered by his mental health conditions. He noted that due to his autism spectrum disorder the applicant has struggled to communicate assertively and understand people's motivations. That deficit was exacerbated, he considered, by high levels of chronic anxiety.

I am of the opinion that appellable error has been established in terms of Ground 3 of the Grounds of Appeal. The medical opinion of Dr Canaris and the psychological assessment of Mr Milic both establish a *clear contribution or causal association between the commission of the reckless wounding offence and the applicant's Asperger's syndrome aggravated as it was by his diagnosed anxiety disorder*. The attack upon the victim plainly was completely out of character with his pre-offending history and was a major contributing factor to the reckless wounding offence under s 35(4) of the Crimes Act.

Whilst the sentencing judge took the applicant's medical condition into account on the question of general deterrence, he did not give effect to the medical evidence on the issue of causation and its significance in terms of its relevance to the moral culpability of the applicant. The medical evidence clearly established that his out-of-character and bizarre behaviour had its explanation in his impaired judgment and his ability to control his faculties and emotions. Furthermore, given the medical evidence...appropriate allowance had to be given to the additional hardship, in the prison context, likely to result from the applicant's mental condition.

In those circumstances, the sentence imposed for the reckless wounding offence must be set aside and the applicant resentenced.

Leung v R

40. The offender appreciates that he has a long-standing emotional issue of low self-esteem and feelings of lack of acceptance. I infer that the offences were partly motivated by the offender's desire to gain acceptance...

The offender was assessed by the authors of the pre-sentence report as at *medium risk of general reoffending*, primarily due to his substance abuse and mental health problems, history of associating with antisocial peers, and financial problems (he has significant debts). Ms Morris agreed that the offender was at *moderate risk of reoffending but added that, with appropriate psychological intervention and ongoing support post release, he would be at low risk of reoffending.*

I agree with the assessment of Ms Morris that, if adequate support is provided, it is likely that the offender will maintain his motivation to *rehabilitate* and the *risk of reoffending* will be greatly reduced.

The offender has been assaulted in prison and is serving his sentence in protective custody. *There was no material before the Court to the effect that serving a sentence in protective custody is particularly onerous*, but I infer that it does involve some disadvantage in the sense of restricted opportunities to associate with other inmates.

Having regard to the offender's substance abuse and *neurological and psychological problems at the time when the offences were committed*, and his *apparent commitment to rehabilitation in relation to those problems*, rehabilitation is also an important sentencing objective. It will be recognised partly in the new non-parole period that I fix.

R v Sharp

41. Dr Anthony Cidoni, consultant psychiatrist, in a report dated 22 September 2008 said that the appellant had a history consistent with a major depressive disorder and that he had concerns in terms of the appellant's intellectual capacity. In relation to the offending, Dr Cidoni said that it appeared the appellant had been involved in the offence in the context of peer pressure, and did not appear to have a particular predisposition to violence or an anti-social personality. He said that imprisonment would most likely lead to a deterioration in his depression.

[The appellant's] offence specific risk factors appear to be his alcohol use and his negative peer associations. Both of these factors were present at the time of the offence. Underlying these offence specific risk factors, [the appellant] presents with offence related risk factors in the form of Asperger's Syndrome and environmental instability. Asperger's Syndrome is a pervasive developmental disorder, meaning that it is normally diagnosed in early childhood and remains a lifelong condition. ... Asperger's Syndrome is characterised by social impairment with lack of empathy, limited interests and prooccupations, repetitive routines and non-verbal communication problems. Asperger's Syndrome may have impacted on [the appellant's] offending behaviour, in that his social and emotional reciprocity, and his understanding of the social and moral acceptability of certain conduct, would have been impaired relative to an individual without Asperger's Syndrome. He would most likely have had an impaired ability to empathise with the victim's situation and to understand the moral appropriateness of his behaviour.

I accept you suffer with Asperger's syndrome and have suffered in the past from depression. In my opinion, it is *appropriate there be some moderation but not significant moderation of both general and specific deterrence* in your case based on these principles. Even making allowance in your for these matters I cannot ignore your previous relevant offending, (even considered against a background of Asperger's syndrome) and that your offending occurred after being placed on an undertaking on 8 October 2008 by which time you had seen Dr Cidoni and would have had some awareness of your previously inappropriate and violent behaviour. In sentencing you, I do moderate your sentence to some degree in relation to both specific and general deterrence, taking into account the principles in R v Verdins & ors.

On re-sentencing the appellant, it is appropriate to take into account the possible *impact of the appellant's psychiatric condition in relation to his moral culpability* and with respect to moderating the principles of general and specific deterrence. It is also appropriate to take the appellant's said condition into account in relation to the *likely effect upon him of imprisonment* - although it is very likely, and I would think, appropriate, that the whole of any sentence will be served in a Youth Justice Centre.

R v Sieden

42. Ms Vittori has a number of psychological vulnerabilities, described above, that have resulted in a susceptibility to peer influence and a substance use disorder...

Then there is a discussion of her *prospects for rehabilitation, and there are protective factors identified in her condition with her young age.* Recommendations include management of her depressive disorder and Asperger Syndrome, and the ADHD. Substance use disorder needs to be addressed. She would benefit from vocational rehabilitation, appropriate accommodation support, and she needs to avoid the peers that have contributed to her pattern of offending.

I am reminded of the psychiatric assessment supported by the historical assessments given through the reports of Dr Chan. *Moral culpability, he said, is reduced by reason of the diagnoses* that the Court, he submits, must accept.

The extent to which there are *prospects of rehabilitation must be guarded in light of the history that I have before me.* Accepting that she might be sincere in wanting to change her ways, having seen other inmates with greater experience of that environment than her, and the deleterious effect that might have upon them, there is a great motivator I would accept; but she has easily gone astray when given the opportunity to return to the community, so though accepting sincerity in that regard, *I cannot conclude that her prospects for rehabilitation are strong*; but one hopes that she has the strength supported by her mother and family, to take the opportunity that I will give her by way of a finding of special circumstances as I intend to make in this case.

R v Vittori

43. The Crown contended that his Honour's remarks at [38], which indicated that he had moderated the sentence because of the applicant's disabilities, could only have been a reference to the *applicant's moral culpability*.

His Honour, at [34], considered that *general deterrence* was a very important factor. His concern was the fact that the applicant, who had a *reduced capacity to react to an argument in an appropriate way*, had access to firearms and having become embroiled in the argument with his neighbour, committed a series of extremely serious crimes...

Although his Honour *moderated the sentence because of the applicant's disabilities*, he nonetheless, at [34], considered that the sentence "must carry a significant component of *general deterrence*". His Honour repeated, "[i]llegal firearms can fall into the hands of people with limited ability to control themselves". In placing this emphasis on *general deterrence*, his Honour expressly did so in the context of persons in the community, such as the applicant, with a reduced capacity to control their behaviour.

The sentencing judge was inclined to accept that the applicant had a *low risk of re-offending* and that these offences arose out of "a regrettable combination of circumstances". His Honour observed that he was:

"... dealing with a man who has a shocking background of abuse and disability and who had *limited cognitive capacity, falling short of an impairment or a dysfunction.*"

His Honour accepted the account provided by the applicant's mother in respect of the *difficulties that the applicant was having in prison*. His Honour stated, at [33], that he had given weight to that account and slightly reduced the non-parole period for that reason.

Jeffree v R

44. Expert: Mr Stacker has an established diagnosis of psychotic illness, namely schizophrenia as set out in (DSM V). The course of this illness has been relapsing and is associated with poor insight, substance use and non-compliance with prescribed medication. Mr Stacker has a severe substance abuse disorder involving cannabis, alcohol and amphetamines, as well as problems with gambling which might be accentuated with intoxication. He has features of autism and also of attention deficit/hyperactivity disorder, which are clinically significant. These diagnoses are associated with poor judgment or rash, ill-conceived ideas, related to the impaired social knowledge of autism spectrum disorders, as well as the poor attention to detail and reduced impulse control seen in attention deficit/hyperactivity disorder.

Judge: In this case, there are significant subjective factors arising from the offender's mental health condition and the series of diagnoses provided by Dr Sullivan...The offender has a significant criminal history. It has no doubt been influenced by his inability to distance himself from unlawful drugs.

R v Stacker

H: Content Validity Survey

Instructions

You will be provided with statements about a defendant's behaviour during criminal court proceedings. Please select 1 of the 4 options you believe relates most to the statement about the defendant's behaviour.

Categories and associated statements (categories were not visible on the survey)

Implicit 1: The defendant's body posture indicated he was remorseful

Implicit 2: The defendant's demeanour appeared to match their testimony

Implicit 3: The defendant appeared to be experiencing distress due to his actions

Implicit 4: The defendant's facial expression indicated he was remorseful

Implicit 5: The defendant's tone of voice indicated he was remorseful

Implicit 6: The defendant's appeared emotional

Explicit 1: The defendant's word expressed their feelings of remorse

Explicit 2: The defendant's words expressed concern for the victim

Explicit 3: The defendant's words indicated that he apologised for the crime he committed **Admission 1:** The defendant's testimony indicated that he recognised how his behaviour impacted the victim/s

Admission 2: The defendant's testimony did not attempt to justify the crime they committed Admission 3: The defendant's testimony indicated that he agreed with the charges laid against him

Admission 4: The defendant's testimony indicated that he recognised the wrongfulness of the criminal act

Admission 5: The defendant's testimony indicated he acknowledged it was his choice to commit the crime

Self-transformation 1: The defendant's testimony indicated that he would behave differently in the future

Self-transformation 2: The defendant's testimony indicated he is willing to change **Self-transformation 3:** The defendant's testimony indicated that he had strategies in place to prevent similar behaviour in the future

Available options feature per statement

- Admission of responsibility (the offender provided evidence that he accepted responsibility for his actions and acknowledged the impact his actions had on others)
- Implicit expressions (range of behaviours that indicate feelings of remorse/psychological discomfort e.g. demeanour; facial expressions, body posture/movements, tone of voice)
- Explicit expressions (verbal/written expressions of an apology, feelings of remorse, and concern for the victim)
- Self-transformation and future behaviour (the defendant expressed a desire for self- improvement and behavioural change)

I: Offence Vignettes

Court case vignettes (x 8) based on real court cases where the offender was diagnosed or suspected of having ASD.

Criminal offences include:

- Manslaughter
- Aggravated Assault
- Using a carriage service in an offensive way
- Using electronic communication with intent to procure person believed to be under
- 16 to engage in sexual activity
- Indecent assault
- Arson
- Using a carriage service to access child pornography material
- Manufacture of a commercial quantity of a controlled drug with intent to sell

Online Survey Instructions for Actors

Please read the following eight scenarios which describe the facts of an incident that resulted in the commission of a criminal offence. You are required to imagine you are the person who committed the offence in each of the scenarios. You will then be asked some questions regarding the offence in each scenario that will form your testimony which will be provided to the judge before he sentences you for the crime. Your answers will prepare you for when you will be required to provide your testimony in front of the judge (in person) in the next stage of the study.

Offence 1

Offence Details - case citation not provided to participant

R v Chapman, 2016 Offence: Manslaughter Definition: the crime of killing a human being without malice aforethought, or in circumstances not amounting to murder Maximum penalty of manslaughter: Life imprisonment (25 years NPP) (SA Criminal Law Consolidation Act, 2018)

Vignette Description (online and mock courtroom)

You are 20 years old and live at home with your parents. You spend most of your time playing online video games such as Dungeons and Dragons. You also love medieval weaponry and collects swords, helmets, and spears.

One night your mother called you down for dinner while you were in the middle of playing an online game in your bedroom upstairs. You did not respond. She called you again and you yelled out that you would be down in 5 minutes as you were playing an online game and you were unable to leave. Your father went to the family office and turned off the modem for the internet. He then came up to your bedroom and tried to remove the cables from the computer. As a result, you have picked up one of your knives from your medieval collection and stabbed your father in the shoulder. Your mother told you to alert the neighbours and ring an ambulance which you did.

Your father died later that night and you were arrested by the police and charged with manslaughter. You plead guilty to the offence in front of a judge. The maximum sentence for this offence is life imprisonment with a non-parole period of 25 years.

You are now in the sentencing stage of the criminal court proceedings where a judge will decide how long you will go to gaol for your crime. Before you are sentenced, you have an opportunity to tell the judge how you feel about the crime you committed. This information will help the judge determine how long your gaol sentence will be. Your lawyer has told you that the more remorseful you are, the more likely you will receive a shorter sentence.

Drawing upon the information provided in this scenario, in as much detail as possible please answer the following questions that will form your testimony which will be provided to the judge before you are sentenced.

Vignette Narrative in Judge's Online Survey

The defendant, Mr John Jones, resides with his parents where he spends most of his time playing online video games such as Dungeons and Dragons. He also has an interest in medieval weaponry and collects swords, helmets, and spears.

One night, Mr Jones's mother called him down for dinner while he was in the middle of playing an online game in his bedroom upstairs. Mr Jones did not respond. His mother called him again and he yelled out that he would be down in 5 minutes, as he was playing an online game and was unable to leave.

Mr Jones's father went to the family office and turned off the modem for the internet. Mr Jones's father then came up to his bedroom and tried to remove the cables from his computer. As a result, Mr Jones picked up one of his knives from his medieval collection and stabbed his father in the shoulder. Mr Jones's mother told Mr Jones to alert the neighbours, and ring an ambulance, which he did.

Mr Jones's father died later that night and Mr Jones was arrested by the police. He was charged with manslaughter and pleaded guilty to the offence in front of a judge. The maximum sentence for this offence is life imprisonment with a non-parole period of 25 years.

The defendant, Mr John Jones, is now in the sentencing stage of the criminal court proceedings where you, the judge, will decide how long he will go to gaol for his crime. Before he is sentenced, he will take the stand to answer some questions about the crime he committed. This information may help you determine how long his gaol sentence will be.

Offence 2

Offence Details - case citation not provided to participant

R v Seiden, 2009 Offence: Aggravated assault Definition: An attempt to cause serious bodily harm to an individual with disregard for human life. Maximum penalty of aggravated assault: 5 years (SA Criminal Law Consolidation Act, 2018)

Vignette Description (online and mock courtroom)

You are 19 years old and you attend a large beach party with a group of your friends. You have been drinking alcohol. A fight breaks out at the party and someone trying to break the fight up, a 17-year-old male, has fallen to the ground and hit his head on the concrete footpath.

A number of people start to assault this individual while he is on the ground. Even though you don't know the young man lying on the floor, you decide to join in and assault him too. All four of you are violently kicking and stomping him at this head while he is unconscious. Your friends pull you away from the victim and you all flee the scene.

The victim was taken to hospital by an ambulance where he was treated for severe facial injuries. You were later arrested and charged for aggravated assault. You plead guilty to the offence in front of a judge. The maximum sentence for this offence is 5 years imprisonment.

You are now in the sentencing stage of the criminal court proceedings where a judge will decide how long you will go to gaol for your crime. Before you are sentenced, you have an opportunity to tell the judge how you feel about the crime you committed. This information will help the judge determine how long your gaol sentence will be. Your lawyer has told you that the more remorseful you are, the more likely you will receive a shorter sentence.

Drawing upon the information provided in this scenario, in as much detail as possible please answer the following questions that will form your testimony which will be provided to the judge before you are sentenced.

Vignette Narrative in Judge's Online Survey

The defendant, Mr John Jones, attended a large beach party with a group of his friends. He had been drinking alcohol. A fight broke out at the party and a young man intervened to try and stop the fight from escalating. As a result, the man fell to the ground and hit his head on the concrete footpath.

A number of people started to assault this man while he was on the ground. Mr Jones did not know the young man lying on the floor but he decided to join the others in the assault. Mr Jones, and the other individuals, violently kicked and stomped the young man at his head while he was unconscious. Mr Jones's friends eventually pulled him away from the victim and they all fled the scene.

The victim was taken to hospital by an ambulance where he was treated for severe facial injuries. Mr Jones was later arrested and charged with aggravated assault. He pleaded guilty to the offence in front of a judge. The maximum sentence for this offence is 5 years imprisonment.

The defendant, Mr John Jones, is now in the sentencing stage of the criminal court proceedings where you, the judge, will decide how long he will go to gaol for his crime. Before he is sentenced, he will take the stand to answer some questions about the crime he committed. This information may help you determine how long his gaol sentence will be.

Offence 3

Offence Details - case citation not provided to participant

R v Hampson, 2011Offence: Using a carriage service in an offensive wayDefinition: Using a carriage service in a way that would be regarded as being menacing, harassing or offensive.Maximum penalty of offence: 3 years (SA Criminal Law Consolidation Act, 2018)

Vignette Description (online and mock courtroom)

You have subscribed to tribute pages on Facebook relating to the deaths of two young individuals where people can post expressions of sympathy for the families.

Several posts began to appear on this page by a number of users that contained offensive and insulting material. You created a false account and contributed to these posts by posting offensive material. This conduct had the potential to augment the grief already being experienced by the families of the children in which this tribute page was dedicated.

The police were able to track the posts to your address and proved you created the false account and created the posts on the facebook page. You are charged with using a carriage service in an offensive way. You plead guilty to the offence in front of a judge. The maximum sentence for this offence is 3 years imprisonment.

You are now in the sentencing stage of the criminal court proceedings where a judge will decide how long you will go to gaol for your crime. Before you are sentenced, you have an opportunity to tell the judge how you feel about the crime you committed. This information will help the judge determine how long your gaol sentence will be. Your lawyer has told you that the more remorseful you are, the more likely you will receive a shorter sentence.

Drawing upon the information provided in this scenario, in as much detail as possible please answer the following questions that will form your testimony which will be provided to the judge before you are sentenced.

Vignette Narrative in Judge's Online Survey

The defendant, Mr John Jones, subscribed to tribute pages on Facebook, for the deaths of two young individuals, where people can post expressions of sympathy for the families.

Several posts began to appear on this page by a number of users that contained insulting and offensive material. Mr Jones created a false account and contributed to these posts adding more offensive material. This conduct had the potential to augment the grief already being experienced by the families of the children in which this tribute page was dedicated.

The police were able to track the posts to Mr Jones's address proving he created the false account and the offensive material posted on the facebook page. Mr Jones was charged with using a carriage service in an offensive way. He pleaded guilty to the offence in front of a judge. The maximum sentence for this offence is 3 years imprisonment.

The defendant, Mr John Jones, is now in the sentencing stage of the criminal court proceedings where you, the judge, will decide how long he will go to gaol for his crime. Before he is sentenced, he will take the stand to answer some questions about the crime he committed. This information may help you determine how long his gaol sentence will be.

Offence 4

Offence Details - case citation not provided to participant

R v Vucemillo, 2017 Offence: Using electronic communication with intent to procure person believed to be under 16 to engage in sexual activity Maximum penalty of offence: 15 years (Crimes Legislation Amendment Act, Telecommunications Offences and Other Measures, 2006)

Vignette Description (online and mock courtroom)

You are 24 years old and have placed an online advertisement on Craigslist – an adult networking site where classified ads can be posted that cover a variety of categories such as housing, job postings, and people seeking relationships.

Your ad is seeking 'young girls/boys that want to have some fun' and may be perceived as though you are seeking a sexual relationship. Even though Craigslist requires the user to be 18 years of age or older, you receive a reply from a girl/boy who is interested in your ad and tells you she/he will be 15 in a few weeks.

You have engaged in numerous text messages with the girl/boy which detailed plans that you would eventually meet and commence a sexual relationship. You finally arrange to meet up at a shopping centre. When you arrive, you are arrested by the police and find out that you were in fact texting a police officer posing as a 14-year-old girl/boy.

You are charged with using electronic communication with intent to procure person believed to be under 16 to engage in sexual activity. You plead guilty to the offence in front of a judge. The maximum sentence for this offence is 15 years imprisonment. You are now in the sentencing stage of the criminal court proceedings where a judge will decide how long you will go to gaol for your crime. Before you are sentenced, you have an opportunity to tell the judge how you feel about the crime you committed. This information will help the judge determine how long your gaol sentence will be. Your lawyer has told you that the more remorseful you are, the more likely you will receive a shorter sentence.

Drawing upon the information provided in this scenario, in as much detail as possible please answer the following questions that will form your testimony which will be provided to the judge before you are sentenced.

Vignette Narrative in Judge's Online Survey

The defendant, Mr John Jones, placed an online advertisement on Craigslist – an adult networking site where classified ads can be posted that cover a variety of categories such as housing, job postings, and people seeking relationships.

Mr Jones's ad was seeking 'young girls that want to have some fun', which may have been perceived as though he was seeking a sexual relationship. Craigslist requires the user to be 18 years of age or older. However, Mr Jones received a reply from a girl who was interested in his ad and told him she would be 15 in just a few weeks.

Mr Jones engaged in numerous text messages with the girl, which detailed plans that he would eventually meet and commence a sexual relationship with her. Mr Jones finally arranged to meet up with the girl at a shopping centre. When Mr Jones arrived, he was arrested by the police and found out that he was, in fact, texting a police officer posing as a 14-year-old girl.

Mr Jones was charged with using electronic communication with intent to procure person believed to be under 16 to engage in sexual activity. Mr Jones pleaded guilty to the offence in front of a judge. The maximum sentence for this offence is 15 years imprisonment.

The defendant, Mr John Jones, is now in the sentencing stage of the criminal court proceedings where you, the judge, will decide how long he will go to gaol for his crime. Before he is sentenced, he will take the stand to answer some questions about the crime he committed. This information may help you determine how long his gaol sentence will be.

Offence 5

Offence Details - case citation not provided to participant

R v Hopper, 2003 Offence: Indecent assault Definition: Any kind of touching (or threat of touching) without a person's genuine consent Maximum penalty of offence: 10 years (SA Criminal Law Consolidation Act 1935, 2018)

Vignette Description (online and mock courtroom)

A girl you are interested in joins you and two of your friends for drinks at a hotel in the city. You have had a few drinks and become intoxicated. After some time spent together, she/he decides that she/he wants to go home. You offer to walk her/him to the taxi rank so you both leave without your friends. You ask her/him to spend some time with you by going for a walk before she/he goes home. She/he agrees.

You stop somewhere along the way and you kiss her/him. You then proceed to touch her/him sexually when she/he asks you to stop. You stop but then start again and you get carried away committing a number of sexual acts against her/him. She/he falls to the floor and you try to assist her/him to get up. In that moment, you realised what you had done and decided to run away.

A witness stopped to help the girl/boy and phoned the police. You are later arrested and charged with sexual assault. You plead guilty to the offence in front of a judge. The maximum sentence for this offence is 10 years imprisonment.

You are now in the sentencing stage of the criminal court proceedings where a judge will decide how long you will go to gaol for your crime. Before you are sentenced, you have an opportunity to tell the judge how you feel about the crime you committed. This information will help the judge determine how long your gaol sentence will be. Your lawyer has told you that the more remorseful you are, the more likely you will receive a shorter sentence.

Drawing upon the information provided in this scenario, in as much detail as possible please answer the following questions that will form your testimony which will be provided to the judge before you are sentenced.

Vignette Narrative in Judge's Online Survey

The defendant, Mr John Jones, went to a hotel in the city with some friends for drinks, one of which was a girl he fancied, Miss Myers. After a few drinks, Mr Jones started to become intoxicated. A few hours passed and Miss Myers decided that she wanted to go home. Mr Jones offered to walk her to the taxi rank and they left together leaving the other friends behind. Mr Jones asked Miss Myers if she would like to go for a walk with him to spend some time before she went home. She agreed.

They stopped somewhere along the way and Mr Jones began to kiss Miss Myers. He then proceeded to touch her in a sexual manner. Miss Myers asked him to stop. Mr Jones complied, but then started to touch her again and got carried away committing a number of sexual acts against her. Miss Myers fell to the floor and Mr Jones tried to assist her. In that moment, he realised what he had done and decided to run away.

A witness stopped to help Miss Myers and phoned the police. Mr Jones was later arrested and charged with sexual assault. He pleaded guilty to the offence in front of a judge. The maximum sentence for this offence is 10 years imprisonment.

The defendant, Mr John Jones, is now in the sentencing stage of the criminal court proceedings where you, the judge, will decide how long he will go to gaol for his crime. Before he is sentenced, he will take the stand to answer some questions about the crime he committed. This information may help you determine how long his gaol sentence will be.

Offence 6

Offence Details - case citation not provided to participant

R v Davies, 2019 Offence: Arson Maximum penalty of offence: Life (NPP 25 years) (SA Criminal Law Consolidation Act 1935, 2018)

Vignette Description (online and mock courtroom)

You have a YouTube channel where you post videos of yourself providing instructions on how to commit arson. You say in these videos that you believe it is ok to commit arson because arsonists are tortured victims of society that have been subjected to abuse and victimised by society.

The police have found these videos during the investigation of fires started in the community. As a result, you have been charged and found guilty of setting fire to a police station, two churches, a bakery and a childcare centre over the course of a week. You plead guilty to the offence in front of a judge. The maximum sentence for this offence is life imprisonment with a non-parole period of 25 years.

You are now in the sentencing stage of the criminal court proceedings where a judge will decide how long you will go to gaol for your crime. Before you are sentenced, you have an opportunity to tell the judge how you feel about the crime you committed. This information will help the judge determine how long your gaol sentence will be. Your lawyer has told you that the more remorseful you are, the more likely you will receive a shorter sentence.

Drawing upon the information provided in this scenario, in as much detail as possible please answer the following questions that will form your testimony which will be provided to the judge before you are sentenced.

Vignette Narrative in Judge's Online Survey

The defendant, Mr John Jones, had a YouTube channel where he posted videos of himself providing instructions on how to commit arson. In these videos, Mr Jones said he believed it was ok to commit arson, because arsonists are tortured victims of society who have been subjected to abuse and are victimised by society.

The police found these videos during an investigation into a range of suspicious fires that were started in the community. As a result, Mr Jones was charged with arson for setting fire to a police station, two churches, a bakery, and a childcare centre over the course of a week. He pleaded guilty to the offence in front of a judge. The maximum sentence for this offence is life imprisonment with a non-parole period of 25 years.

The defendant, Mr John Jones, is now in the sentencing stage of the criminal court proceedings where you, the judge, will decide how long he will go to gaol for his crime. Before he is sentenced, he will take the stand to answer some questions about the crime he committed. This information may help you determine how long his gaol sentence will be.

Offence 7

Offence Details - case citation not provided to participant

R v Cluett, 2019 Offence: Using a carriage service to access child pornography material Maximum penalty of offence: 10 years (Crimes Legislation Amendment Act, Telecommunications Offences and Other Measures, 2006)

Vignette Description (online and mock courtroom)

You were sitting outside a deli watching a video on your mobile phone. A police car drove past and parked nearby. You put your mobile phone away in a bag and started walking off. The two police officers in the car approached you and asked you to stop. They hear audio coming from your bag and it sounded as though it was pornographic material and the voices of children. The police officers tell you to hand over your phone. You tried to stop the video, but it continued to play, and the police officer removed the phone from your hand. When the police asked you questions about the video, you told them that the video is in relation to a personal research project you were conducting.

As a result, your home was searched where numerous child pornography material was found on your devices. You were able to provide evidence that you had been researching childhood developmental issues and trauma for a number of years. Nonetheless, the material was accessed illegally, and you was charged with possession of child pornography. You plead guilty to the offence in front of a judge. The maximum sentence for this offence is 10 years imprisonment.

You are now in the sentencing stage of the criminal court proceedings where a judge will decide how long you will go to gaol for your crime. Before you are sentenced, you have an opportunity to tell the judge how you feel about the crime you committed. This information will help the judge determine how long your gaol sentence will be. Your lawyer has told you that the more remorseful you are, the more likely you will receive a shorter sentence.

Drawing upon the information provided in this scenario, in as much detail as possible please answer the following questions that will form your testimony which will be provided to the judge before you are sentenced.

Vignette Narrative in Judge's Online Survey

The defendant, Mr John Jones, was sitting outside a deli watching a video on his mobile phone. A police car drove past and parked nearby. Mr Jones put his mobile phone away in his bag and started walking off. The two police officers in the car approached Mr Jones and asked him to stop. They hear audio coming from his bag. It sounded as though it was pornographic material and the voices of children. The police officers tell Mr Jones to hand over his phone. He tried to stop the video, but it continued to play, and the police officer removed the phone from his hand. When the police asked Mr Jones about the video, he told them that the video was in relation to a personal research project he was conducting.

As a result, Mr Jones's home was searched where numerous child pornography material was found on his devices. Mr Jones was able to provide evidence that he had been researching childhood developmental issues and trauma for a number of years. Nonetheless, the material was accessed illegally, and he was charged with possession of child pornography. Mr Jones

pleaded guilty to the offence in front of a judge. The maximum sentence for this offence is 10 years imprisonment.

The defendant, Mr John Jones, is now in the sentencing stage of the criminal court proceedings where you, the judge, will decide how long he will go to gaol for his crime. Before he is sentenced, he will take the stand to answer some questions about the crime he committed. This information may help you determine how long his gaol sentence will be.

Offence 8

Offence Details - case citation not provided to participant

R v Chandler, 2007

Offence: Manufacture of a commercial quantity of a controlled drug with intent to sell Maximum penalty of offence: 25 years (Controlled Substances Act, 1984)

Vignette Description (online and mock courtroom)

You have a fascination for chemical science. You and two of your friends are involved in manufacturing methamphetamine. You have a drug lab set up in a garage and are experimenting with a new way to make the drug.

The police have had surveillance on this property and receive a warrant to search it. They seize over 1kg of methamphetamine and you are charged and convicted of trafficking in a large commercial quantity of methamphetamine. You plead guilty to the offence in front of a judge. The maximum sentence for this offence is 25 years imprisonment.

You are now in the sentencing stage of the criminal court proceedings where a judge will decide how long you will go to gaol for your crime. Before you are sentenced, you have an opportunity to tell the judge how you feel about the crime you committed. This information will help the judge determine how long your gaol sentence will be. Your lawyer has told you that the more remorseful you are, the more likely you will receive a shorter sentence.

Drawing upon the information provided in this scenario, in as much detail as possible please answer the following questions that will form your testimony which will be provided to the judge before you are sentenced.

Vignette Narrative in Judge's Online Survey

The defendant, Mr John Jones, has a fascination for chemical science. Mr Jones, and two of his friends, were involved in the manufacture of methamphetamine using a drug lab that was set up in the garage of his house. They were experimenting with a new way to make the drug.

The police had surveillance on the property and eventually received a warrant to search the premises. They seized over 1kg of methamphetamine during the raid. Mr Jones was charged

with trafficking in a large commercial quantity of methamphetamine. He pleaded guilty to the offence in front of a judge. The maximum sentence for this offence is 25 years imprisonment.

The defendant, Mr John Jones, is now in the sentencing stage of the criminal court proceedings where you, the judge, will decide how long he will go to gaol for his crime. Before he is sentenced, he will take the stand to answer some questions about the crime he committed. This information may help you determine how long his gaol sentence will be.

J: Testimony Interview Questions

The following questions were featured in the online actor survey. The mock courtroom interviews conducted by the offender's barrister were based on these questions; however minor deviations may have occurred due to the real life setting and conversational prompts.

- 1. Please explain what led you to commit this criminal offence.
- 2. How do you feel about your behaviour now?
- 3. How do you feel about the victim/s of your offending?
- 4. What would you say to the victim/s if they were here right now?
- 5. Do you believe you deserve to be punished?
- 6. What do you think you would do if you were faced with a similar situation in the future?
- 7. What could you implement in your life now that would help prevent you from behaving this way again?
- 8. Do you think this event has changed you as a person?

K: You be the Judge Survey

Example for Manslaughter offence

Start of Block: Instructions

Instructions Imagine you are a judge in a criminal court.

The offender in this case has pleaded guilty to the offence and is now at the sentencing stage in your criminal court.

After you listen to the details of the court case presented in the video on the next page, you will watch up to 16 different offenders provide their testimony at their sentencing hearing.

These testimonies will be presented randomly so please disregard the offender number labelled on the video.

Consider each offender's testimony when you answer a series of questions about the offender, the crime committed, and your sentence recommendation.

End of Block: Instructions

Start of Block: Introduction for Manslaughter

1_Intro

Please click play on the video to listen and read the details of the offence. You will be able to progress to the next page after you have watched the video. Audio volume in the videos vary. Please adjust accordingly.

End of Block: Introduction for Manslaughter

Start of Block: Offender 1 Testimony - Manslaughter

1_1_Testimony

Click on the video to watch the offender's testimony. You will be able to progress to the next page after you have watched the video. Audio volume in the videos vary. Please adjust accordingly.

Page Break

1_1_VideoProblems Did you have any problems watching and listening to the video? Please explain in the box below.

End of Block: Offender 1 Testimony - Manslaughter

Start of Block: Offender 1 Description - Manslaughter

1_1_Description

In just a few words, please describe the appearance of the offender in the video.

End of Block: Offender 1 Description - Manslaughter

Start of Block: Offender 1 Testimony Questions - Manslaughter

1_1_TestimonyAssess

Please indicate how much you agree with the following statements regarding the offender and their testimony.

1_1_Remorse The offender's testimony indicated he was remorseful.

 \bigcirc Completely disagree (0)

 \bigcirc Slightly disagree (1)

 \bigcirc Neither agree nor disagree (2)

 \bigcirc Slightly agree (3)

 \bigcirc Completely agree (4)

1_1_Transform3

The offender's testimony indicated that he had strategies in place to prevent similar behaviour in the future.

 \bigcirc Completely disagree (0)

- \bigcirc Slightly disagree (1)
- \bigcirc Neither agree nor disagree (2)
- \bigcirc Slightly agree (3)
- O Completely agree

(4) 1_1_Transform2

The offender's testimony indicated that he would behave differently in the future.

 \bigcirc Completely disagree (0)

 \bigcirc Slightly disagree (1)

 \bigcirc Neither agree nor disagree (2)

 \bigcirc Slightly agree (3)

O Completely agree

(4) 1_1_Transform1

The offender's testimony indicated he is willing to change.

 \bigcirc Completely disagree (0)

- \bigcirc Slightly disagree (1)
- \bigcirc Neither agree nor disagree (2)
- \bigcirc Slightly agree (3)
- \bigcirc Completely agree (4)

1_1_Explicit3

The offender's words expressed concern for the victim.

Completely disagree (0)
Slightly disagree (1)
Neither agree nor disagree (2)
Slightly agree (3)
Completely agree (4)

1_1_Explicit2

The offender's words expressed his feelings of remorse.

 \bigcirc Completely disagree (0)

 \bigcirc Slightly disagree (1)

 \bigcirc Neither agree nor disagree (2)

 \bigcirc Slightly agree (3)

 \bigcirc Completely agree (4)

1_1_Explicit1

The offender's words indicated that he apologised for the crime he committed.

 \bigcirc Completely disagree (0)

 \bigcirc Slightly disagree (1)

 \bigcirc Neither agree nor disagree (2)

 \bigcirc Slightly agree (3)

 \bigcirc Completely agree (4)

1_1_Implicit6

The offender's tone of voice indicated he was remorseful.

Completely disagree (0)
 Slightly disagree (1)

 \bigcirc Neither agree nor disagree (2)

 \bigcirc Slightly agree (3)

○ Completely agree

(4) 1_1_Implicit5

The offender's body posture indicated he was remorseful

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\smile	COIII	pictury	uisagice	(\mathbf{U})

- \bigcirc Slightly disagree (1)
- \bigcirc Neither agree nor disagree (2)
- \bigcirc Slightly agree (3)
- Completely agree
- (4) 1_1_Implicit4

The offender's facial expression indicated he was remorseful.

- \bigcirc Completely disagree (0)
- \bigcirc Slightly disagree (1)
- \bigcirc Neither agree nor disagree (2)
- \bigcirc Slightly agree (3)
- \bigcirc Completely agree (4)

1_1_Implicit3

The offender's demeanour matched their testimony.

 \bigcirc Completely disagree (0)

- \bigcirc Slightly disagree (1)
- \bigcirc Neither agree nor disagree (2)
- \bigcirc Slightly agree (3)
- Completely agree

(4) 1_1_Implicit2

The offender appeared emotional.

\bigcirc	Comp	letelv	disagree	(0)
\smile	Comp	letery	uisagice	(\mathbf{v})

- \bigcirc Slightly disagree (1)
- \bigcirc Neither agree nor disagree (2)
- \bigcirc Slightly agree (3)
- Completely agree
- (4) 1_1_Implicit1

The offender appeared to be experiencing distress due to his actions.

- \bigcirc Completely disagree (0)
- \bigcirc Slightly disagree (1)
- \bigcirc Neither agree nor disagree (2)
- \bigcirc Slightly agree (3)
- \bigcirc Completely agree (4)

1_1_Admission5R

The offender's testimony attempted to justify the offence they committed.

Completely disagree (4)

- \bigcirc Slightly disagree (3)
- \bigcirc Neither agree nor disagree (2)
- \bigcirc Slightly agree (1)
- Completely agree

(0) 1_1_Admission4

The offender's testimony indicated that he recognised how his behaviour impacted the victim/s.

- \bigcirc Completely disagree (0)
- \bigcirc Slightly disagree (1)
- \bigcirc Neither agree nor disagree (2)
- \bigcirc Slightly agree (3)
- Completely agree

(4) 1_1_Admission3

The offender's testimony indicated he acknowledged it was his choice to commit the offence.

- \bigcirc Completely disagree (0)
- \bigcirc Slightly disagree (1)
- \bigcirc Neither agree nor disagree (2)
- \bigcirc Slightly agree (3)
- \bigcirc Completely agree (4)

1_1_Admission2

The offender's testimony indicated that he understood the wrongfulness of the criminal act.

 \bigcirc Completely disagree (0)

- \bigcirc Slightly disagree (1)
- \bigcirc Neither agree nor disagree (2)
- \bigcirc Slightly agree (3)
- Completely agree

(4) 1_1_Admission1

The offender's testimony indicated that he agreed with the charges laid against him.

 \bigcirc Completely disagree (0)

- \bigcirc Slightly disagree (1)
- \bigcirc Neither agree nor disagree (2)

 \bigcirc Slightly agree (3)

- \bigcirc Completely agree (4)
- 1_1_RehabR

The offender is likely to reoffend.

- \bigcirc Completely disagree (4)
- \bigcirc Slightly disagree (3)
- \bigcirc Neither agree nor disagree (2)
- \bigcirc Slightly agree (1)
- \bigcirc Completely agree (0)

$1_1_MoralCulp$

The offender's explanation for the offence excuses their immoral behaviour.

Completely disagree (0)
Slightly disagree (1)
Neither agree nor disagree (2)
Slightly agree (3)
Completely agree (4)

End of Block: Offender 1 Testimony Questions - Manslaughter

Start of Block: Offender 1 Characteristics - Manslaughter

1_1_Characteristics

Please indicate how much you agree with the following characteristic traits of the offender.

1_1_AwkwardR

This person is socially awkward.

- \bigcirc Strongly disagree (4)
- \bigcirc Slightly disagree (3)
- \bigcirc Neither agree nor disagree (2)
- \bigcirc Slightly agree (1)
- O Strongly agree

(0) 1_1_Like This person is likable.

 \bigcirc Strongly disagree (0)

- \bigcirc Slightly disagree (1)
- \bigcirc Neither agree nor disagree (2)
- \bigcirc Slightly agree (3)
- \bigcirc Strongly agree (4)
1_1_AggressiveR

This person is aggressive.

- Strongly disagree (4)
 Slightly disagree (3)
 Neither agree nor disagree (2)
 Slightly agree (1)
- Strongly agree

(0) 1_1_Honest This person is honest.

- \bigcirc Strongly disagree (0)
- \bigcirc Slightly disagree (1)
- \bigcirc Neither agree nor disagree (2)
- \bigcirc Slightly agree (3)
- Strongly agree
- (4) 1_1_Intelligent This person is likely as intelligent as I am.
 - \bigcirc Strongly disagree (0)
 - \bigcirc Slightly disagree (1)
 - \bigcirc Neither agree nor disagree (2)
 - \bigcirc Slightly agree (3)
 - \bigcirc Strongly agree (4)

1_1_Attractive

This person is attractive.

Strongly disagree (0)
Slightly disagree (1)
Neither agree nor disagree (2)
Slightly agree (3)
Strongly agree (4)

End of Block: Offender 1 Characteristics - Manslaughter

Start of Block: Offender 1 Severity - Manslaughter

1_1_Severity

Please indicate how much you agree that the nature of this offence was more severe in comparison to most offences of manslaughter.

- \bigcirc Strongly disagree (0)
- \bigcirc Slightly disagree (1)
- \bigcirc Neither agree nor disagree (2)
- \bigcirc Slightly agree (3)
- \bigcirc Strongly agree (4)

1_1_Sentence

The average sentence an offender received for related offences in Australia last year was 8.7 years. The minimum sentences received were within 6 to under 12 months and maximum sentences were 10 years and over.

In this scenario, you are stepping into the role of a sentencing judge. Your task is to determine the appropriate sentence length you believe the offender should serve for this offence.

Please provide your judgment on the suitable duration of the sentence.

 \bigcirc Under 1 year (1)

- \bigcirc 1 to under 3 years (2)
- \bigcirc 3 to under 5 years (3)
- \bigcirc 5 to under 7 years (4)
- \bigcirc 7 to under 10 years (5)
- \bigcirc 10 years and over

(6) 1_1_Judgement

Please provide a short summary of your overall opinion of the offender's testimony and explain the reason for your judgement.

End of Block: Offender 1 Severity - Manslaughter

Page Break

			N (%)					
Offender	0	1	2	3	4	Mode	Mdn	Range
Autistic								
1	17 (15.3)	22 (19.8)	15 (13.5)	45 (40.5)	12 (10.8)	3	3	4
2	3 (2.7)	19 (17.1)	19 (17.1)	53 (47.7)	17 (15.3)	3	3	4
3	44 (39.6)	26 (23.4)	6 (5.4)	24 (21.6)	11 (9.9)	0	1	4
4	29 (26.1)	20 (18)	17 (15.3)	34 (30.6)	11 (9.9)	3	2	4
5	57 (51.4)	21 (18.9)	8 (7.2)	10 (9)	15 (13.5)	0	0	4
6	9 (8.1)	13 (11.7)	14 (12.6)	57 (51.4)	18 (16.2)	3	3	4
7	71 (64)	23 (20.7)	7 (6.3)	10 (9)	0 (0)	0	0	3
8	2 (1.8)	3 (2.7)	11 (9.9)	40 (36)	55 (49.5)	4	4	4
Non-autistic								
9	0 (0)	1 (.9)	2 (1.8)	25 (22.5)	83 (74.8)	4	4	3
10	2 (1.8)	7 (6.3)	4 (3.6)	34 (30.6)	64 (57.7)	4	4	4
11	2 (1.8)	4 (3.6)	4 (3.6)	41 (36.9)	60 (54.1)	4	4	4
12	21 (18.9)	23 (20.7)	13 (11.7)	43 (38.7)	11 (9.9)	3	2	4
13	2 (1.8)	10 (9)	7 (6.3)	47 (42.3)	45 (40.5)	4	3	4
14	6 (5.4)	7 (6.3)	40 (36)	51 (45.9)	7 (6.3)	4	4	4
15	3 (2.7)	11 (9.9)	22 (19.8)	54 (48.6)	21 (18.9)	3	3	4
16	22 (19.8)	9 (8.1)	8 (7.2)	34 (30.6)	38 (34.2)	4	3	4

Table 42. Frequencies (Percentages), Mode, Median, and Range for Remorse (Single Measure)by Offender Group

			N (%)					
Offender	0	1	2	3	4	Mode	Mdn	Range
Autistic								
1	64 (57.7)	30 (27)	12 (10.8)	5 (4.5)	0 (0)	0	0	3
2	66 (59.5)	24 (21.6)	18 (16.2)	3 (2.7)	0 (0)	0	0	3
3	75 (67.6)	19 (17.1)	13 (11.7)	2 (1.8)	2 (1.8)	0	0	4
4	66 (59.5)	23 (20.7)	14 (12.6)	6 (5.4)	2 (1.8)	0	0	4
5	72 (64.9)	23 (20.7)	7 (6.3)	5 (4.5)	4 (3.6)	0	0	4
6	60 (54.1)	31 (27.9)	11 (9.9)	8 (7.2)	1 (.9)	0	1	4
7	76 (68.5)	18 (16.2)	11 (9.9)	4 (3.6)	2 (1.8)	0	0	4
8	53 (47.7)	31 (27.9)	17 (15.3)	9 (8.1)	1 (.9)	0	1	4
Non-autistic								
9	60 (54.1)	33 (29.7)	12 (10.8)	4 (3.6)	2 (1.8)	0	0	4
10	55 (49.5)	33 (29.7)	14 (12.6)	9 (8.1)	0 (0)	0	1	3
11	58 (52.3)	36 (32.4)	10 (9)	7 (6.3)	0 (0)	0	0	3
12	63 (56.8)	28 (25.2)	15 (13.5)	4 (3.6)	1 (.9)	0	0	4
13	60 (54.1)	28 (25.2)	10 (9)	11 (9.9)	2 (1.8)	0	0	4
14	59 (53.2)	35 (31.5)	10 (9)	7 (6.3)	0 (0)	0	0	3
15	52 (46.8)	29 (26.1)	22 (19.8)	7 (6.3)	1 (.9)	0	1	4
16	65 (58.6)	24 (21.6)	9 (8.1)	9 (8.1)	4 (3.6)	0	0	4

Table 43. Frequencies (Percentages), Mode, Median, and Range for Moral Culpability (SingleMeasure) by Offender Group

			N (%)					
Offender	0	1	2	3	4	Mode	Mdn	Range
Autistic								
1	16 (14.4)	37 (33.3)	26 (23.4)	25 (22.5)	7 (6.3)	1	2	4
2	5 (4.5)	24 (21.6)	31 (27.9)	41 (36.6)	10 (9)	3	2	4
3	45 (40.5)	20 (18)	23 (20.7)	18 (16.2)	5 (4.5)	0	1	4
4	17 (15.3)	36 (32.4)	33 (29.7)	14 (12.6)	11 (9.9)	1	2	4
5	52 (46.8)	25 (22.5)	17 (15.3)	12 (10.8)	5 (4.5)	0	1	4
6	13 (11.7)	19 (17.1)	46 (41.4)	24 (21.6)	9 (8.1)	2	2	4
7	55 (49.5)	36 (32.4)	15 (13.5)	3 (2.7)	2 (1.8)	0	1	4
8	3 (2.7)	7 (6.3)	26 (23.4)	44 (39.6)	31 (27.9)	3	3	4
Non-autistic								
9	5 (4.5)	4 (3.6)	16 (14.4)	35 (31.5)	51 (45.9)	4	3	4
10	6 (5.4)	13 (11.7)	28 (25.2)	34 (30.6)	30 (27)	3	3	4
11	1 (.9)	6 (5.4)	22 (19.8)	39 (35.1)	43 (38.7)	4	3	4
12	26 (23.4)	29 (26.1)	38 (34.2)	14 (12.6)	4 (3.6)	2	1	4
13	3 (2.7)	10 (9)	28 (25.2)	34 (30.6)	33 (29.7)	3	3	4
14	12 (10.8)	8 (7.2)	24 (21.6)	41 (36.9)	26 (23.4)	3	3	4
15	5 (4.5)	16 (14.4)	48 (43.2)	28 (25.2)	14 (12.6)	2	2	4
16	22 (19.8)	24 (21.6)	19 (17.1)	27 (24.3)	19 (17.1)	3	2	4

Table 44. Frequencies (Percentages), Mode, Median, and Range for Rehabilitation (SingleMeasure) by Offender Group

Note. 0 =Completely disagree, 1 = Slightly disagree, 2 = Neither agree nor disagree, 3 = Slightly agree, 4 = Completely agree. Reverse scored. (n = 111)

			N (%)					
Offender	0	1	2	3	4	Mode	Mdn	Range
Autistic								
1	9 (8.1)	29 (26.1)	37 (33.3)	25 (22.5)	11 (9.9)	2	2	4
2	8 (7.2)	26 (23.4)	53 (47.7)	16 (14.4)	8 (7.2)	2	2	4
3	6 (5.4)	20 (18)	52 (46.8)	20 (18)	13 (11.7)	2	2	4
4	13 (11.7)	29 (26.1)	37 (33.3)	23 (20.7)	9 (8.1)	2	2	4
5	9 (8.1)	23 (20.7)	37 (33.3)	21 (18.9)	21 (18.9)	2	2	4
6	8 (7.2)	46 (41.4)	31 (27.9)	21 (18.9)	5 (4.5)	1	2	4
7	8 (7.2)	21 (18.9)	40 (36)	29 (26.1)	13 (11.7)	2	2	4
8	16 (14.4)	28 (25.2)	44 (39.6)	17 (15.3)	6 (5.4)	2	2	4
Non-autistic								
9	12 (10.8)	32 (28.8)	47 (42.3)	13 (11.7)	7 (6.3)	2	2	4
10	11 (9.9)	35 (31.5)	43 (38.7)	15 (13.5)	7 (6.3)	2	2	4
11	11 (9.9)	35 (31.5)	44 (39.6)	15 (13.5)	6 (5.4)	2	2	4
12	7 (6.3)	28 (25.2)	39 (35.1)	26 (23.4)	11 (9.9)	2	2	4
13	20 (18)	23 (20.7)	44 (39.6)	16 (14.4)	8 (7.2)	2	2	4
14	12 (10.8)	29 (26.1)	45 (40.5)	14 (12.6)	11 (9.9)	2	2	4
15	8 (7.2)	31 (27.9)	49 (44.1)	18 (16.2)	5 (4.5)	2	2	4
16	12 (10.8)	30 (27)	35 (31.5)	14 (12.6)	18 (16.2)	2	2	4

Table 45. Frequencies (Percentages), Mode, Median, and Range for Offence Severity (SingleMeasure) by Offender Group

			N (%)						
Offender	1	2	3	4	5	6	Mode	Mdn	Range
Autistic									
1	16 (14.4)	40 (36)	31 (27.9)	15 (13.5)	7 (6.3)	2 (1.8)	2	3	5
2	14 (12.6)	53 (47.7)	20 (18)	16 (14.4)	6 (5.4)	2 (1.8)	2	2	5
3	20 (18)	42 (37.8)	25 (22.5)	12 (10.8)	6 (5.4)	6 (5.4)	2	3	5
4	31 (27.9)	37 (33.3)	20 (18)	14 (12.6)	6 (5.4)	3 (2.7)	2	2	5
5	11 (9.9)	25 (22.5)	30 (27)	21 (18.9)	11 (9.9)	13 (11.7)	3	3	5
6	15 (13.5)	55 (49.5)	25 (22.5)	9 (8.1)	5 (4.5)	2 (1.8)	2	2	5
7	15 (13.5)	31 (27.9)	27 (24.3)	15 (13.5)	15 (13.5)	8 (7.2)	2	3	5
8	34 (30.6)	46 (41.4)	16 (14.4)	10 (9)	4 (3.6)	1 (.9)	2	2	5
Non-									
autistic									
9	45 (40.5)	38 (34.2)	18 (16.2)	6 (5.4)	2 (1.8)	2 (1.8)	1	2	5
10	35 (31.5)	40 (36)	19 (17.1)	12 (10.8)	3 (2.7)	2 (1.8)	2	2	5
11	41 (36.9)	36 (32.4)	22 (19.8)	9 (8.1)	1 (.9)	2 (1.8)	1	2	5
12	19 (17.1)	38 (34.2)	24 (21.6)	15 (13.5)	11 (9.9)	4 (3.6)	2	3	5
13	42 (37.8)	36 (32.4)	19 (17.1)	9 (8.1)	4 (3.6)	1 (.9)	1	2	5
14	38 (34.2)	35 (31.5)	20 (18)	10 (9)	6 (5.4)	2 (1.8)	1	2	5
15	25 (22.5)	49 (44.1)	17 (15.3)	12 (10.8)	5 (4.5)	3 (2.7)	2	2	5
16	26 (23.4)	38 (34.2)	22 (19.8)	10 (9)	9 (8.1)	6 (5.4)	2	2	5

Table 46. Frequencies (Percentages), Mode, Median, and Range for Sentence Length (SingleMeasure) by Offender Group

Note. 1 = Under 1 year, 2 = 1 to under 3 years, 3 = 3 to under 5 years, 4 = 5 to under 7 years, 5 = 7 to under 10 years, 6 = 10 years and over. (n = 111)

M: Summary Statistics for Impression Measure

		N (%)						
Offender	0	1	2	3	4	Mode	Mdn	Range
Autistic								
1	21 (18.9)	53 (47.7)	20 (18)	13 (11.7)	4 (3.6)	1	1	4
2	22 (19.8)	49 (44.1)	19 (17.1)	15 (13.5)	6 (5.4)	1	1	4
3	20 (18)	61 (55)	15 (13.5)	10 (9)	5 (4.5)	1	1	4
4	71 (64)	29 (26.1)	6 (5.4)	3(2.7)	2 (1.8)	0	0	4
5	10 (9)	19 (17.1)	19 (17.1)	40 (36)	23 (20.7)	3	3	4
6	26 (23.4)	50 (45)	14 (12.6)	15 (13.5)	6 (5.4)	1	1	4
7	66 (59.5)	35 (31.5)	7 (6.3)	3 (27)	0 (0)	0	0	3
8	30 (27)	38 (34.2)	23 (20.7)	15 (13.5)	5 (4.5)	1	1	4
Non-autistic								
9	4 (3.6)	21 (18.9)	23 (20.7)	42 (37.8)	21 (18.9)	3	3	4
10	1 (.9)	10 (9)	19 (17.1)	38 (34.2)	43 (38.7)	4	3	4
11	22 (19.8)	25 (22.5)	41 (36.9)	23 (20.7)	0 (0)	3	3	3
12	5 (4.5)	42 (37.8)	18 (16.2)	29 (26.1)	17 (15.3)	1	2	4
13	1 (.9)	18 (16.2)	22 (19.8)	39 (35.1)	31 (27.9)	3	3	4
14	3 (2.7)	23 (20.7)	18 (16.2)	45 (40.5)	22 (19.8)	3	3	4
15	3 (2.7)	27 (24.3)	24 (21.6)	40 (36)	17 (15.3)	3	3	4
16	12 (10.8)	46 (41.4)	19 (17.1)	24 (21.6)	10 (9)	1	1	4

 Table 47. Frequencies (Percentages), Mode, Median, and Range 'Awkward' by Offender Group

			N (%)					
Offender	0	1	2	3	4	Mode	Mdn	Range
Autistic								
1	23 (20.7)	46 (41.4)	30 (27)	12 (10.8)	0 (0)	1	1	3
2	13 (11.7)	26 (23.4)	48 (43.2)	22 (19.8)	2 (1.8)	2	2	4
3	23 (20.7)	30 (27)	51 (45.9)	6 (5.4)	1 (.9)	2	2	4
4	23 (20.7)	27 (24.3)	48 (43.2)	12 (10.8)	1 (.9)	2	2	4
5	45 (40.5)	28 (25.2)	26 (23.4)	11 (9.9)	1 (.9)	0	1	4
6	12 (10.8)	28 (25.2)	53 (47.7)	17 (15.3)	1 (.9)	2	2	4
7	36 (32.4)	41 (36.9)	30 (27)	3 (2.7)	1 (.9)	1	1	4
8	13 (11.7)	21 (18.9)	45 (40.5)	31 (27.9)	1 (.9)	2	2	4
Non-autistic								
9	2 (1.8)	12 (10.8)	36 (32.4)	53 (47.7)	8 (7.2)	3	3	4
10	6 (5.4)	13 (11.7)	36 (32.4)	50 (45)	6 (5.4)	3	3	4
11	3 (2.7)	18 (16.2)	40 (36)	38 (34.2)	12 (10.8)	2	2	4
12	23 (20.7)	42 (37.8)	26 (23.4)	18 (16.2)	2 (1.8)	1	1	4
13	11 (9.9)	22 (19.8)	33 (29.7)	39 (35.1)	6 (5.4)	3	2	4
14	9 (8.1)	13 (11.7)	34 (30.6)	46 (41.4)	9 (8.1)	3	2	4
15	11 (9.9)	17 (15.3)	49 (44.1)	29 (26.1)	5 (4.5)	2	2	4
16	18 (16.2)	24 (21.6)	40 (36)	27 (24.3)	2 (1.8)	2	2	4

Table 48. Frequencies (Percentages), Mode, Median, and Range for 'Like' by Offender Group

			N (%)					
Offender	0	1	2	3	4	Mode	Mdn	Range
Autistic								
1	2 (1.8)	10 (9)	25 (22.5)	33 (29.7)	41 (36.9)	4	3	4
2	1 (.9)	2 (1.8)	22 (19.8)	25 (22.5)	61 (55)	4	4	4
3	6 (5.4)	19 (17.1)	14 (12.6)	46 (41.4)	26 (23.4)	3	3	4
4	1 (.9)	9 (8.1)	30 (27)	27 (24.3)	44 (39.6)	4	3	4
5	8 (7.2)	32 (28.8)	19 (17.1)	24 (21.6)	28 (25.2)	1	2	4
6	1 (.9)	11 (9.9)	17 (15.3)	30 (27)	52 (46.8)	4	3	4
7	3 (2.7)	9 (8.1)	18 (16.2)	32 (28.8)	49 (44.1)	4	3	4
8	2 (1.8)	1 (.9)	14 (12.6)	35 (31.5)	59 (53.2)	4	4	4
Non-autistic								
9	0 (0)	1 (.9)	13 (11.7)	37 (33.3)	60 (54.1)	4	4	3
10	0 (0)	5 (4.5)	16 (14.4)	41 (36.9)	49 (44.1)	4	3	3
11	1 (.9)	3 (2.7)	13 (11.7)	36 (32.4)	58 (52.3)	4	4	4
12	2 (1.8)	16 (14.4)	22 (19.8)	33 (29.7)	38 (34.2)	4	3	4
13	0 (0)	10 (9)	17(15.3)	34 (30.6)	50 (45)	4	3	3
14	0 (0)	4 (3.6)	13 (11.7)	44 (39.6)	50 (45)	4	3	3
15	1 (.9)	3 (2.7)	29 (26.1)	34 (30.6)	44 (39.6)	4	3	4
16	9 (8.1)	14 (12.6)	16 (14.4)	31 (27.9)	41 (36.9)	4	3	4

Table 49. Frequencies (Percentages), Mode, Median, and Range for 'Aggressive' by OffenderGroup

			N (%)					
Offender	0	1	2	3	4	Mode	Mdn	Range
Autistic								
1	7 (6.3)	22 (19.8)	30 (27)	46 (41.4)	6 (5.4)	3	2	4
2	7 (6.3)	19 (17.1)	22 (19.8)	52 (46.8)	11 (9.9)	3	3	4
3	5 (4.5)	19 (17.1)	26 (23.4)	48 (43.2)	13 (11.7)	3	3	4
4	8 (7.2)	6 (5.4)	28 (25.2)	50 (45)	19 (17.1)	3	3	4
5	6 (5.4)	19 (17.1)	22 (19.8)	40 (36)	24 (21.6)	3	3	4
6	8 (7.2)	12 (10.8)	25 (22.5)	53 (47.7)	13 (11.7)	3	3	4
7	10 (9)	15 (13.5)	23 (20.7)	45 (40.5)	18 (16.2)	3	3	4
8	2 (1.8)	8 (7.2)	20 (18)	46 (41.4)	35 (31.5)	3	3	4
Non-autistic								
9	0 (0)	3 (2.7)	20 (18)	54 (48.6)	34 (30.6)	3	3	3
10	5 (4.5)	11 (9.9)	22 (19.8)	47 (42.3)	26 (23.4)	3	3	4
11	1 (.9)	10 (9)	22 (19.8)	52 (46.8)	26 (23.4)	3	3	4
12	39 (35.1)	26 (23.4)	21 (18.9)	20 (18)	5 (4.5)	0	1	4
13	3 (2.7)	5 (4.5)	25 (22.5)	48 (43.2)	30 (27)	3	3	4
14	4 (3.6)	10 (9)	17 (15.3)	57 (51.4)	23 (20.7)	3	3	4
15	5 (4.5)	21 (18.9)	40 (36)	34 (30.6)	11 (9.9)	2	2	4
16	3 (2.7)	11 (9.9)	22 (19.8)	42 (37.8)	33 (29.7)	3	3	4

Table 50. Frequencies (Percentages), Mode, Median, and Range for 'Honest' by Offender Group

			N (%)					
Offender	0	1	2	3	4	Mode	Mdn	Range
Autistic								
1	21 (18.9)	21 (18.9)	43 (38.7)	20 (18)	6 (5.4)	2	2	4
2	13 (11.7)	20 (18)	52 (46.8)	18 (16.2)	8 (7.2)	2	2	4
3	18 (16.2)	18 (16.2)	29 (44.1)	22 (19.8)	4 (3.6)	2	2	4
4	54 (48.6)	26 (23.4)	25 (22.5)	5 (4.5)	1 (.9)	0	1	4
5	15 (13.5)	23 (20.7)	39 (35.1)	24 (21.6)	10 (9)	2	2	4
6	16 (14.4)	21 (18.9)	52 (46.8)	15 (13.5)	7 (6.3)	2	2	4
7	46 (41.4)	27 (24.3)	27 (24.3)	10 (9)	1 (.9)	0	1	4
8	6 (5.4)	25 (22.5)	38 (34.2)	23 (20.7)	19 (17.1)	2	2	4
Non-autistic								
9	5 (4.5)	19 (17.1)	38 (34.2)	32 (28.8)	17 (15.3)	2	2	4
10	4 (3.6)	14 (12.6)	35 (31.5)	40 (36)	18 (16.2)	3	3	4
11	2 (1.8)	19 (17.1)	33 (29.7)	38 (34.2)	19 (17.1)	3	3	4
12	17 (15.3)	27 (24.3)	33 (29.7)	28 (25.2)	6 (5.4)	2	2	4
13	7 (6.3)	19 (17.1)	38 (34.2)	29 (26.1)	18 (16.2)	2	2	4
14	2 (1.8)	15 (13.5)	38 (34.2)	34 (30.6)	22 (19.8)	2	3	4
15	7 (6.3)	20 (18)	45 (40.5)	30 (27)	9 (8.1)	2	2	4
16	15 (13.5)	25 (22.5)	35 (31.5)	27 (24.3)	9 (8.1)	2	2	4

Table 51. Frequencies (Percentages), Mode, Median, and Range for 'Intelligent' by OffenderGroup

 $\overline{\text{Note. } 0 = \text{Strongly disagree, } 1 = \text{Slightly disagree, } 2 = \text{Neither agree nor disagree, } 3 = \text{Slightly agree, } 4 = \text{Strongly agree } (n = 111).$

			N (%)					
Offender	0	1	2	3	4	Mode	Mdn	Range
Autistic								
1	36 (32.4)	43 (38.7)	29 (26.1)	3 (2.7)	0 (0)	1	1	3
2	24 (21.6)	29 (26.1)	50 (45)	8 (7.2)	0 (0)	2	2	3
3	27 (24.3)	51 (45.9)	28 (25.2)	4 (3.6)	1 (.9)	1	1	4
4	33 (29.7)	41 (36.9)	35 (31.5)	2 (1.8)	0 (0)	1	1	3
5	45 (40.5)	32 (28.8)	30 (27)	4 (3.6)	0 (0)	0	1	3
6	22 (19.8)	28 (25.2)	48 (43.2)	13 (11.7)	0 (0)	2	2	3
7	48 (43.2)	34 (30.6)	27 (24.3)	2 (1.8)	0 (0)	0	1	3
8	39 (35.1)	36 (32.4)	33 (29.7)	3 (2.7)	0 (0)	0	1	3
Non-autistic								
9	8 (7.2)	20 (18)	51 (45.9)	29 (26.1)	3 (2.7)	2	2	4
10	12 (10.8)	22 (19.8)	55 (49.5)	18 (16.2)	4 (3.6)	2	2	4
11	13 (11.7)	24 (21.6)	51 (45.9)	21 (18.9)	2 (1.8)	2	2	4
12	23 (20.7)	18 (16.2)	40 (36)	28 (25.2)	2 (1.8)	2	2	4
13	43 (38.7)	32 (28.8)	33 (29.7)	3 (2.7)	0 (0)	0	1	3
14	18 (16.2)	29 (26.1)	53 (47.7)	11 (9.9)	0 (0)	2	2	3
15	11 (9.9)	23 (20.7)	53 (47.7)	23 (20.7)	1 (.9)	2	2	4
16	32 (28.8)	42 (37.8)	32 (28.8)	5 (4.5)	0 (0)	1	2	3

Table 52. Frequencies (Percentages), Mode, Median, and Range for 'Intelligent' by OffenderGroup

			N (%)					
Offender	0	1	2	3	4	Mode	Mdn	Range
Autistic								
1	16 (14.4)	37 (33.3)	26 (23.4)	25 (22.5)	7 (6.3)	1	2	4
2	5 (4.5)	24 (21.6)	31 (27.9)	41 (36.6)	10 (9)	3	2	4
3	45 (40.5)	20 (18)	23 (20.7)	18 (16.2)	5 (4.5)	0	1	4
4	17 (15.3)	36 (32.4)	33 (29.7)	14 (12.6)	11 (9.9)	1	2	4
5	52 (46.8)	25 (22.5)	17 (15.3)	12 (10.8)	5 (4.5)	0	1	4
6	13 (11.7)	19 (17.1)	46 (41.4)	24 (21.6)	9 (8.1)	2	2	4
7	55 (49.5)	36 (32.4)	15 (13.5)	3 (2.7)	2 (1.8)	0	1	4
8	3 (2.7)	7 (6.3)	26 (23.4)	44 (39.6)	31 (27.9)	3	3	4
Non-autistic								
9	5 (4.5)	4 (3.6)	16 (14.4)	35 (31.5)	51 (45.9)	4	3	4
10	6 (5.4)	13 (11.7)	28 (25.2)	34 (30.6)	30 (27)	3	3	4
11	1 (.9)	6 (5.4)	22 (19.8)	39 (35.1)	43 (38.7)	4	3	4
12	26 (23.4)	29 (26.1)	38 (34.2)	14 (12.6)	4 (3.6)	2	1	4
13	3 (2.7)	10 (9)	28 (25.2)	34 (30.6)	33 (29.7)	3	3	4
14	12 (10.8)	8 (7.2)	24 (21.6)	41 (36.9)	26 (23.4)	3	3	4
15	5 (4.5)	16 (14.4)	48 (43.2)	28 (25.2)	14 (12.6)	2	2	4
16	22 (19.8)	24 (21.6)	19 (17.1)	27 (24.3)	19 (17.1)	3	2	4

Table 53. Frequencies (Percentages), Mode, Median, and Range for Rehabilitation (SingleMeasure) by Offender Group

Note. 0 =Completely disagree, 1 = Slightly disagree, 2 = Neither agree nor disagree, 3 = Slightly agree, 4 = Completely agree. Reverse scored. (n = 111)

			/2 /)					
				_				
Offender	0	1	2	3	4	Mode	Mdn	Range
Autistic								
1	64 (57.7)	30 (27)	12 (10.8)	5 (4.5)	0 (0)	0	0	3
2	66 (59.5)	24 (21.6)	18 (16.2)	3 (2.7)	0 (0)	0	0	3
3	75 (67.6)	19 (17.1)	13 (11.7)	2 (1.8)	2 (1.8)	0	0	4
4	66 (59.5)	23 (20.7)	14 (12.6)	6 (5.4)	2 (1.8)	0	0	4
5	72 (64.9)	23 (20.7)	7 (6.3)	5 (4.5)	4 (3.6)	0	0	4
6	60 (54.1)	31 (27.9)	11 (9.9)	8 (7.2)	1 (.9)	0	1	4
7	76 (68.5)	18 (16.2)	11 (9.9)	4 (3.6)	2 (1.8)	0	0	4
8	53 (47.7)	31 (27.9)	17 (15.3)	9 (8.1)	1 (.9)	0	1	4
Non-autistic								
9	60 (54.1)	33 (29.7)	12 (10.8)	4 (3.6)	2 (1.8)	0	0	4
10	55 (49.5)	33 (29.7)	14 (12.6)	9 (8.1)	0 (0)	0	1	3
11	58 (52.3)	36 (32.4)	10 (9)	7 (6.3)	0 (0)	0	0	3
12	63 (56.8)	28 (25.2)	15 (13.5)	4 (3.6)	1 (.9)	0	0	4
13	60 (54.1)	28 (25.2)	10 (9)	11 (9.9)	2 (1.8)	0	0	4
14	59 (53.2)	35 (31.5)	10 (9)	7 (6.3)	0 (0)	0	0	3
15	52 (46.8)	29 (26.1)	22 (19.8)	7 (6.3)	1 (.9)	0	1	4
16	65 (58.6)	24 (21.6)	9 (8.1)	9 (8.1)	4 (3.6)	0	0	4

Table 54. Frequencies (Percentages), Mode, Median, and Range for Moral Culpability (SingleMeasure) by Offender Group

			N (%)					
Offender	0	1	2	3	4	Mode	Mdn	Range
Autistic								
1	9 (8.1)	29 (26.1)	37 (33.3)	25 (22.5)	11 (9.9)	2	2	4
2	8 (7.2)	26 (23.4)	53 (47.7)	16 (14.4)	8 (7.2)	2	2	4
3	6 (5.4)	20 (18)	52 (46.8)	20 (18)	13 (11.7)	2	2	4
4	13 (11.7)	29 (26.1)	37 (33.3)	23 (20.7)	9 (8.1)	2	2	4
5	9 (8.1)	23 (20.7)	37 (33.3)	21 (18.9)	21 (18.9)	2	2	4
6	8 (7.2)	46 (41.4)	31 (27.9)	21 (18.9)	5 (4.5)	1	2	4
7	8 (7.2)	21 (18.9)	40 (36)	29 (26.1)	13 (11.7)	2	2	4
8	16 (14.4)	28 (25.2)	44 (39.6)	17 (15.3)	6 (5.4)	2	2	4
Non-autistic								
9	12 (10.8)	32 (28.8)	47 (42.3)	13 (11.7)	7 (6.3)	2	2	4
10	11 (9.9)	35 (31.5)	43 (38.7)	15 (13.5)	7 (6.3)	2	2	4
11	11 (9.9)	35 (31.5)	44 (39.6)	15 (13.5)	6 (5.4)	2	2	4
12	7 (6.3)	28 (25.2)	39 (35.1)	26 (23.4)	11 (9.9)	2	2	4
13	20 (18)	23 (20.7)	44 (39.6)	16 (14.4)	8 (7.2)	2	2	4
14	12 (10.8)	29 (26.1)	45 (40.5)	14 (12.6)	11 (9.9)	2	2	4
15	8 (7.2)	31 (27.9)	49 (44.1)	18 (16.2)	5 (4.5)	2	2	4
16	12 (10.8)	30 (27)	35 (31.5)	14 (12.6)	18 (16.2)	2	2	4

Table 55. Frequencies (Percentages), Mode, Median, and Range for Offence Severity (SingleMeasure) by Offender Group

			N (%)						
Offender	1	2	3	4	5	6	Mode	Mdn	Range
Autistic									
1	16 (14.4)	40 (36)	31 (27.9)	15 (13.5)	7 (6.3)	2 (1.8)	2	3	5
2	14 (12.6)	53 (47.7)	20 (18)	16 (14.4)	6 (5.4)	2 (1.8)	2	2	5
3	20 (18)	42 (37.8)	25 (22.5)	12 (10.8)	6 (5.4)	6 (5.4)	2	3	5
4	31 (27.9)	37 (33.3)	20 (18)	14 (12.6)	6 (5.4)	3 (2.7)	2	2	5
5	11 (9.9)	25 (22.5)	30 (27)	21 (18.9)	11 (9.9)	13 (11.7)	3	3	5
6	15 (13.5)	55 (49.5)	25 (22.5)	9 (8.1)	5 (4.5)	2 (1.8)	2	2	5
7	15 (13.5)	31 (27.9)	27 (24.3)	15 (13.5)	15 (13.5)	8 (7.2)	2	3	5
8	34 (30.6)	46 (41.4)	16 (14.4)	10 (9)	4 (3.6)	1 (.9)	2	2	5
Non-									
autistic									
9	45 (40.5)	38 (34.2)	18 (16.2)	6 (5.4)	2 (1.8)	2 (1.8)	1	2	5
10	35 (31.5)	40 (36)	19 (17.1)	12 (10.8)	3 (2.7)	2 (1.8)	2	2	5
11	41 (36.9)	36 (32.4)	22 (19.8)	9 (8.1)	1 (.9)	2 (1.8)	1	2	5
12	19 (17.1)	38 (34.2)	24 (21.6)	15 (13.5)	11 (9.9)	4 (3.6)	2	3	5
13	42 (37.8)	36 (32.4)	19 (17.1)	9 (8.1)	4 (3.6)	1 (.9)	1	2	5
14	38 (34.2)	35 (31.5)	20 (18)	10 (9)	6 (5.4)	2 (1.8)	1	2	5
15	25 (22.5)	49 (44.1)	17 (15.3)	12 (10.8)	5 (4.5)	3 (2.7)	2	2	5
16	26 (23.4)	38 (34.2)	22 (19.8)	10 (9)	9 (8.1)	6 (5.4)	2	2	5

Table 56. Frequencies (Percentages), Mode, Median, and Range for Sentence Length (SingleMeasure) by Offender Group

Note. 1 = Under 1 year, 2 = 1 to under 3 years, 3 = 3 to under 5 years, 4 = 5 to under 7 years, 5 = 7 to under 10 years, 6 = 10 years and over. (n = 111)

N: EFA Eigenvalues and Scree Plots

Table 57. Eigenvalues of the ORE Items by Offender

	Autistic								Non-autistic							
Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	11.22	10.29	11.51	10.82	11.32	10.47	10.11	11.08	10.20	10.08	11.75	8.93	10.22	10.21	9.24	12.54
2	1.15	2.05	1.22	1.32	1.45	1.21	1.28	1.56	1.84	2.57	1.40	2.73	1.75	2.10	2.57	1.07
3	0.91	0.93	0.98	1.04	1.05	0.98	1.14	0.96	1.26	1.08	0.89	1.16	1.04	1.05	0.98	0.77
4	0.78	0.73	0.76	0.98	0.71	0.77	0.98	0.69	0.83	0.67	0.70	0.85	0.67	0.74	0.69	0.73
5	0.66	0.61	0.69	0.64	0.58	0.74	0.82	0.54	0.67	0.56	0.50	0.69	0.58	0.52	0.59	0.49
6	0.57	0.42	0.54	0.43	0.53	0.59	0.69	0.45	0.50	0.44	0.31	0.54	0.51	0.46	0.59	0.35
7	0.36	0.39	0.34	0.34	0.31	0.47	0.46	0.37	0.45	0.30	0.29	0.39	0.43	0.41	0.47	0.24
8	0.32	0.31	0.26	0.31	0.24	0.38	0.37	0.28	0.41	0.29	0.22	0.38	0.38	0.33	0.40	0.21
9	0.25	0.25	0.22	0.26	0.17	0.34	0.32	0.27	0.24	0.26	0.20	0.32	0.32	0.27	0.36	0.17
10	0.22	0.22	0.11	0.20	0.16	0.26	0.22	0.22	0.21	0.24	0.19	0.26	0.27	0.20	0.25	0.13
11	0.19	0.21	0.11	0.19	0.12	0.23	0.19	0.17	0.19	0.19	0.14	0.23	0.24	0.19	0.20	0.11
12	0.11	0.19	0.09	0.16	0.11	0.18	0.14	0.13	0.14	0.14	0.13	0.17	0.16	0.16	0.18	0.08
13	0.09	0.17	0.07	0.10	0.09	0.13	0.12	0.09	0.09	0.12	0.12	0.12	0.13	0.13	0.16	0.06
14	0.07	0.11	0.06	0.07	0.07	0.11	0.11	0.08	0.05	0.08	0.09	0.10	0.11	0.08	0.13	0.04
15	0.05	0.08	0.04	0.06	0.05	0.07	0.06	0.07	0.03	0.03	0.05	0.08	0.09	0.06	0.11	0.02
16	0.03	0.04	0.02	0.05	0.03	0.04	0.02	0.03	-0.02	-0.01	0.04	0.07	0.08	0.05	0.05	0.01
17	0.02	0.01	0.00	0.04	0.02	0.03	-0.01	0.02	-0.07	-0.03	-0.01	0.00	0.03	0.03	0.02	0.00



Figure 24. Scree Plots for Autistic Offenders (1-8)



Figure 25. Scree Plots for Autistic Offenders (1-9)