

Asperger Syndrome and perceived offending conduct: a qualitative study

BEARDON, Luke <a href="http://orcid.org/0000-0002-7487-3723">http://orcid.org/0000-0002-7487-3723</a>

Available from the Sheffield Hallam University Research Archive (SHURA) at:

http://shura.shu.ac.uk/7155/

## A Sheffield Hallam University thesis

This thesis is protected by copyright which belongs to the author.

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author.

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given.

Please visit http://shura.shu.ac.uk/7155/ and http://shura.shu.ac.uk/information.html for further details about copyright and re-use permissions.

Learning and IT Services
Adaetts Centre City Campus
Sheffield S1 1WB

101 900 759 1

## REFERENCE

ProQuest Number: 10694214

#### All rights reserved

#### INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



#### ProQuest 10694214

Published by ProQuest LLC (2017). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code

Microform Edition © ProQuest LLC.

ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 – 1346

# Asperger Syndrome and Perceived Offending Conduct: a Qualitative Study

Luke Beardon

A dissertation submitted in partial fulfilment of the requirements of Sheffield Hallam University for the Doctorate of Education

May 2008



As a qualitative study using participant narrative as data this work includes both naturalist and constructivist traditions in analysis. The study examines interviews of fourteen individuals with a diagnosis of Asperger syndrome (AS) all of whom had been arrested. Interviews were conducted attempting to elicit the perception of the participants regarding the influencing factors around their behaviour that led to arrest. Each narrative was then assessed and data reconfigured using a thematic conceptual matrix; these were then analysed further for patterns and themes.

The study aimed to investigate whether the nature of each individual's AS had an influencing factor on the behaviour leading to arrest and, if so, how. Once data had been analysed the study examined the legal issues involved, in particular the *actus reus, mens rea*, liability, recklessness and risk. The notions of automatism and insanity are examined in light of the data. The possibility of post traumatic stress disorder as a contributory factor to unlawful conduct is presented.

The study examines the possible AS specific and AS inferred elements that appear to have influenced behaviour in the case studies; recommendations for the Criminal Justice System (CJS) are expounded and the framework for a database presented.

The evidence from the study suggests that the legal framework may be discriminatory against people with AS in certain circumstances. Additionally, a lack of educational support in traditionally non curriculum subjects may increase the likelihood of individuals with AS behaving unlawfully. The study calls for increased support for individuals with AS and suggests that the provision of appropriate services will decrease both unlawful acts in the first instance, and recidivism in the second.

### Dedication

To all those individuals with AS who shared their experiences with me for this study.

To all those individuals with AS who continue to share their lives with me and make mine that much richer.

## Acknowledgements

Much appreciation to:

My supervisors, Iain Garner and Paul Senior – for believing I really could do it and assisting me in doing so;

Sheffield Hallam University for supporting me;

Tom Figures for the invaluable IT support;

Christine Telford for your time and expertise in AS;

and, most of all: my family. Without you I am nothing.

## Contents

Chapter One: Introduction		1
Background to study		2
Significance of study		2
Issues during the study		3
General overview		, 5
Chapter Two: Literature Review	•	7
Introduction		8
Terminology		8
Prevalence rates of offending		9
Factors relating to offending		11
Actus reus and mens rea		20
Liability		21
The need for research		22
Chapter Three: Methodology		25
Introduction		26
Qualitative research		26
Interview as method		28
Role of interviewer		29
Data analysis (i)		33
Conceptual framework		34
Research question		35
Initial analysis		35
Perceptual experiences		36
Participants		36
Data analysis (ii)		38
Data display model		38

	Similarities and differences with grounded theory	40
	Chapter Four: Case Studies	43
	Introduction	44
	Process of analysis	44
I	Case study one background	46
	Case study one matrix	46
	Breakdown for analysis	49
	Discussion of data, case study one	50
	Case study two background	55
	Case study two matrix	55
	Breakdown for analysis	58
	Discussion of data, case study two	59
	Case study three background	64
	Case study three matrix	64
	Breakdown for analysis	67
	Discussion of data, case study three	68
	Case study four background	72
	Case study four matrix	72
	Breakdown for analysis	75
	Discussion of data, case study four	76
	Case study five background	82
	Case study five matrix	82
	Breakdown for analysis	86
	Discussion of data, case study five	86
	Case study six background	92
	Case study six matrix	92
	Breakdown for analysis	94

	Discussion of data, case study six	94
	Case study seven background	97
	Case study seven matrix	97
-	Breakdown for analysis	99
	Discussion of data, case study seven	99
	Case study eight background	103
	Case study eight matrix	103
	Breakdown for analysis	105
	Discussion of data, case study eight	105
	Case study nine background	109
	Case study nine matrix	109
	Breakdown for analysis	112
	Discussion of data, case study nine	113
	Case study ten background	117
	Case study ten matrix	117
	Breakdown for analysis	120
	Discussion of data, case study ten	121
	Case study eleven background	124
	Case study eleven matrix one	124
	Breakdown for analysis	126
	Discussion of data, case study eleven - 1	126
	Case study eleven matrix two	130
	Breakdown for analysis	132
	Discussion of data, case study eleven - 2	132
	Case study twelve background	136
	Case study twelve matrix	136
	Breakdown for analysis	138

Discussion of data, case study twelve	138
Case study thirteen background	143
Case study thirteen matrix	143
Breakdown for analysis	145
Discussion of data, case study thirteen	145
Case study fourteen background	149
Case study fourteen matrix	149
Breakdown for analysis	150
Discussion of data, case study fourteen	150
Chapter Five: Triangulation of Data	154
Methodological corroboration	155
Checking the data	155
Comparison of data	156
Discussion of comparison	161
Chapter Six: General Discussion	165
Differing neurology and responsibility	166
Actus reus / mens rea	167
Theft	168
Automatism	168
Intention	170
Recklessness	172
Argument	172
Insanity	177
Counter argument	178
Recommendations	179
Chapter Seven: Developing a Database	185
Developing a database	186

Process for using the database	187
Limitations of and recommendations for the database	188
Database exempla	189
Pragmatics of development	194
Outcomes of database	195
Possible support systems	197
Chapter Eight: Conclusion	199
Introduction	200
Homogeneity and heterogeneity	200
Research question and literature review	201
Data and validity	202
Discussion synopsis	203
Final comments	204
References	206

#### **Background to Study**

I have been working in the field of Asperger Syndrome (AS) for several years and have been in contact with many individuals who have been deemed 'criminal' in their behaviour. Some of these individuals I have worked with closely and it appeared to me that their behaviour could be clearly explained in light of the way in which their AS affected them at the time. This for me was a perennial issue over the years and one which I could not help feeling somewhat disturbed by. Much of my training in the field of autism and AS and some of the literature I had read (e.g. Attwood, 1997; Frith, 2003) argued that individuals with AS were rule bound; this contradicted what I was experiencing in my work situation, where it appeared that individuals were breaking the law. My limited understanding of the literature indicated that criminal behaviour was not usually the case. However, it seemed to me that many of the well known characteristics of AS were major contributory factors in the law breaking behaviour of individuals I was encountering. If this was, indeed, the case, then the question that disturbed me was: how are individuals protected by the law if they are simply behaving as an individual with AS, rather than with any criminal or malicious intent? This initial question was the beginning of my embarkation into the Doctorate of Education and the following study has been based around that problematic concept.

#### Significance of Study

Although there have been some studies that are linked with AS and criminal behaviour (e.g. Mawson et al, 1985; Scragg and Shah, 1984; Murphy, 2002; Mayes, 2003; Woodbury-Smith et al, 2006) there is yet to be a study addressing individual case studies from within the community to assess the nature of the supposed offending conduct from the individual perspective, combined with an analysis of the behaviour from a legal framework. This study aims to analyse the narratives following interviews from individuals who have been arrested and who have a diagnosis of AS. Following analysis of each individual study, the aim of which is to establish whether an individual's AS has any influence on the specific behaviour (that led to arrest), a brief discourse is presented raising pertinent issues for the individual. In chapter six a wider discussion is presented addressing the complex

issues of attempting to take the results from the individual data analyses and ascertain any potential issues within the legal framework. It is at this stage that the study significantly differs from previous works, and it is crucial to the potential impact on the community – both the population of people with AS and the Criminal Justice System (CJS). Recommendations, should they develop from concept to reality, could have a major impact on the way in which individuals with AS are understood post arrest; subsequently, should it be deemed appropriate in any individual case, the CJS could choose to require an individual to access support services pertinent to their needs, rather than prosecute with the intention of imposing a custodial sentence. Not only might this be more appropriate in an ethical sense, but it could also prove beneficial to the standard of quality of life for the individual with AS and the wider community, as well as a potential reduction of costly prison placements. Additionally, recidivism issues that are potentially high cost could be addressed. The potential impact of the study could affect individuals with AS (and thus, indirectly, families, friends and carers), the CJS, prison populations and the wider society. Not only could ethical issues be addressed but a very real positive impact on society be achieved. While apparently somewhat grandiose in this claim, the Doctoral programme calls for an impact on professional practice and the community - and should this thesis be the catalyst for additional research and change in the support of people with AS then there is little reason why the claim can not become a reality.

#### **Issues During the Study**

The study appeared to be problematic in several ways. Methodologically the qualitative data did not lend itself to a 'neat' research paradigm within which to analyse content. While the study clearly produced narrative data, it was unclear to me whether I was endeavouring to follow a constructivist or a naturalist tradition (Elliot, 2005) in my analysis; ultimately I was drawn to the notion that there need not be a firmly upheld and singular approach to my analysis, and that I was content, as well as transparent in my epistemological position, in embracing the nature of both traditions to fulfil the potential of the research. I developed my own understanding that the nature of being is, indeed, complex; and that in undertaking a highly qualitative study I would have to be flexible in my epistemological position, so long

as I was clear at each stage of my analysis exactly what I was aiming to achieve, and how I was aiming to achieve it. Once I had accepted a combination of a constructivist perspective and a naturalist perspective the study became vastly clearer to me; in a period of near epiphany I recognised that what I had seen as problematic was actually part of the conceptual framework upon which I was basing the research. At a constructivist level I was recognising that I needed to establish what behaviour had occurred; at a naturalist level I was interested in the perception of the individual and the process that had led to the individual behaving in a particular manner. This juxtaposition of methodological traditions actually reflected accurately what I was attempting to achieve.

Secondly, the interviews that were undertaken were not directly comparable with one another, as the interviewees each had their own needs as individuals with AS, particularly in the communicative methods that were employed. For example, some individuals responded exceptionally well to a single, clear question – in some cases this was almost enough to elicit all the required narrative. Other individuals required several questions to elicit appropriate responses (appropriate in this sense meaning pertaining to the research question I was investigating, rather than in any judgemental manner). The duration of the interviews differed hugely, as did the responses of individuals. While this was problematic in that I was not able directly to compare interview material, it was less problematic when one of the core concepts of the study – that each individual is unique in their own right and the individuals with AS should not be homogenised – was taken into account. Indeed, the individual richness and singularity of perspective was part of what made the study both enjoyable to undertake as well as giving credence to the results.

As an almost direct continuation of the second issue the third stems from my own argument that individuals should not be homogenised. As a heterogeneous group how could I promote the use of global recommendations – or even the use of the proposed database which would be used to assist the CJS in their decision making process around how to 'treat' individual cases? Simply, I could not. I could, however, provide recommendations not with the aim of categorising individuals with clear cut outcomes, but with the aim of increasing awareness around possible influencing factors for individuals' behaviour; this, in itself, could hugely influence decision

making within the justice system and promote anti-discriminatory practice against people with AS.

The fourth concern that arose early on in the study was that the limitations of the Doctorate were to prove frustrating and possibly detrimental to progress within the field of AS. The main limitations were not being able to fully explore some critical issues that were encountered during analyses of narratives. In particular the concept of Post Traumatic Stress Disorder (PTSD) being a causal factor for behaviour leading to arrest is raised in the study, but certainly not explored in the depth that is clearly required. Additionally the database that is a key recommendation and is introduced in chapter seven is in such an embryonic stage that it is far from being of any practical use. I am fortunate in that my position within the University is such that I can promote and possibly lead further research in this area; publications drawn from this research should also generate interest within both the research community and the professional communities including Health, Social Services, Education and the CJS. Those interested in AS including individuals themselves and their families will also benefit from publications. I fully intend to publish papers related to this study, indeed have included the publications of papers in the recommendations in chapter six.

#### **General Overview**

This study is a qualitative inquiry using narrative data to assess if AS has any impact on the perceived criminal behaviours of individuals who have been arrested; it uses both a constructivist and naturalist approach in analysing the data, and uses a thematic conceptual matrix (Miles and Huberman, 1994) to organise data into manageable form. Data are verified both by individuals involved in the study and by an independent peer. Recommendations are based on the outcomes of the analytical process and are articulated in the hope that further work will allow the progression from written recommendation to pragmatic reality. The contribution to the academic field lies in the originality of combining the community based case studies with legal arguments; the contribution to the population of people with AS lies in the recommendations which, if followed, could have a huge and beneficial impact. Ultimately, the study claims that it is possible, if not likely, that the current legal

framework discriminates against people with AS who have broken the law and that for this reason further investigation and change is essential.

This chapter has provided the background to the study and positioned the research in an academic and professional context. It has acknowledged some of the main issues that arose during the study. The next chapter reviews the literature available covering individuals with autism or AS who have broken the law, as well as addressing key legal issues pertinent to the study.

#### Introduction

In this chapter I will review the literature relevant to understanding the research that has taken place around individuals with autism or AS, the criminal justice system, and the concepts surrounding liability. The literature review covers studies that explore concepts relating to autism AS and offending conduct. The majority of the review focuses on these concepts, though there is a brief review of culpability in order to set the scene for the thesis. The review covers five main areas: prevalence; possible environmental factors influencing behaviour; potential inherent reasons for individuals with autism or AS to commit crime; possible reasons more specifically relating to the diagnosis itself; and liability. The review demonstrates that while there have been some useful studies, there is a lack of community based studies addressing reasons why individuals commit crime, and that there is a need for such a study to take place as a matter of urgency.

#### **Terminology**

The literature cites information on populations both with a diagnostic label of autism and those with Asperger syndrome. There is much debate on the difference between autism and AS (e.g. Szatmari et al, 1995) but there is no general consensus amongst professionals and academics over what, if any, the distinguishing features are. One of the agreed characteristics of AS amongst those in the field is that those with a diagnosis of AS generally have average or above average intellectually ability (e.g. Howlin, 1997; Attwood, 2006); however, there is nothing in the literature that suggests autism itself is an intellectual impairment – although it is often associated with learning disabilities. This association is not evidence in itself that a person with autism will also have a learning disability, which leads me to the conclusion that intellectual levels can not be a sole distinguishing factor between autism and AS. It would appear that the similarities between those with a diagnosis of autism and those with a diagnosis of AS outweigh any significant difference; thus, ultimately I have chosen to use both terms reflecting the papers I am citing, but will use AS to refer to the study itself, as all those who took part were diagnosed with AS. In a similar vein I do not subscribe to the perspective that autism is a disorder (Beardon,

2007) but have used the term autistic spectrum disorder if referring to a paper that uses that term.

#### **Prevalence Rates of Offending**

In 1992 the Department of Health concluded that a 'greater understanding of the prevalence and pattern of offending and other law-breaking among people with autistic spectrum disorders (ASDs) was needed to inform the development of appropriate services to meet the needs of this group' (in Woodbury-Smith et al, 2006:109). Mayes (2003) notes: 'It is vitally important for persons with autism, their family members, and their treating professionals to understand criminal justice concepts and how these relate to the needs of persons with autism' (p. 92). However, there is still a paucity of evidence based research into how individuals can be better served from point of contact with the penal system, through to culmination, be it sentencing or some form of rehabilitation (Murphy, 2002; Woodbury-Smith et al. 2006). In 1991 Ghaziuddin et al attempted to discern patterns of offending in a community sample, followed by a similar study by Woodbury-Smith et al in 2006. Both studies were to establish patterns of law-breaking, or types of law-breaking within a defined population. However, as Woodbury-Smith et al rightly note, reliance on published data cannot be determined to be an accurate reflection on offending behaviour. Data are recorded to demonstrate statistical figures, for example number of arrests, numbers of individuals prosecuted and so on. They do not allow the researcher to have a good understanding of the actual prevalence of individuals with autism or AS who come into contact with the penal system, nor any patterns to their offending conduct. Indeed, it is highly likely that there are people with AS who remain undiagnosed (Beardon and Edmonds, 2007) which suggests that it is possible that there will be individuals who have entered the penal system with undiagnosed and unrecognised AS.

Non community based studies, for example Scragg and Shah (1994) attempted to ascertain prevalence rates of criminal actions through the study of specific populations. They examined prevalence rates (in this case of Asperger syndrome) in

Broadmoor Hospital, and demonstrated a 2.3% rate (compared to 0.7% in the general population). Hare and colleagues (1996) studied the populations of three special hospitals in London; their results were that of those with a definite diagnosis of autism showed a prevalence of 2.4% (the highest possibility, including those suspected as having autism rises to 5.3%). Of the 31 cases with a definite diagnosis 8 had committed a homicide. However, the studies cannot be taken as an accurate representation of the population as a whole; the fact that such individuals were detained in the special hospitals in the first instance suggest that they are not representative of the norm (i.e. it could be argued that individuals who are detained in special hospitals are already untypical of their population). Conclusions of higher prevalence rates of autism found in high secure hospitals (compared to typical populations) suggesting higher levels of illegal behaviour, for example, are not necessarily accurate. It may be an indication of the use of Mental Health acts which led to detaining individuals in such settings as opposed to traditional sentencing; additionally, there are no patterns that can be established as the samples are, by definition of being detained in high secure settings, usually of individuals who have committed serious offending, usually with a violent trend. In such studies there is no representation of less major offences. Barry-Walsh and Mullens (2004) suggest that the majority of offending conduct is at the minor end of the offending spectrum, but that more serious offending conduct, such as homicide, can occur. If this is accurate then there are clear disparities between studies in terms of prevalence suggestions for individuals with autism who offend.

Woodbury-Smith et al (2006) undertook a study interviewing a large sample of individuals who met the diagnostic criteria for an ASD (according to ICD-10), and who did not have any additional learning disability. Of the 102 identified individuals, eventually 25 were included in the study. They were presented with a self-reported offending questionnaire and were compared to a control sample of volunteer participants. The results demonstrated that the sample of individuals with an ASD who actually had convictions was very small, and very few individuals who had not been convicted had been involved in other illegal behaviour. The study also highlighted some differences between the populations studied: those with a diagnosis were more likely to report behaviour resulting in criminal damage and

violent behaviour compared to the control group. They were also less likely to have taken illegal drugs. The results were in direct contrast with the studies from high secure settings (Scragg and Shah, 1994; Hare et al, 1999). The authors note that the small size of their sample group meant that constraints were necessarily placed on conclusions.

Mayes (2003) notes that individuals with disabilities, including autism, are likely to be involved 'in one role or another' at much higher rates [than the neurotypical (NT) population] with the criminal justice system (p. 92). Debbault (2005) claims that the statistics for teenagers and adults who have contact with law enforcement is seven times that of the general population. Neither are specific in terms of whether the contact is as a result of being perpetrators of crime or victims of crime, though both studies urge further research into how criminal justice systems can better serve individuals with autism and other disabilities.

The above synopsis of publications serves merely to demonstrate the lack of conclusive research around individuals with autism or AS who may offend. The prevalence in certain settings, for example secure hospitals may be significantly higher than in the general population, while community based studies are in contrast to these figures. What is clear in the prevalence studies, as noted by Woodbury-Smith et al (2006), is the lack of investigation into the individual perception around why contact with the penal system occurred in the first place.

#### **Factors Relating to Offending**

Some researchers have attempted to link environmental factors to behaviours that the individual with autism displays. For example, Mukaddes and Topcu (2006) note that the individual in their study had a bad relationship with her neighbour, and subsequently set fire to her balcony. She was regularly beaten by the neighbour; it is unclear in the report how much of an influence the authors believe the environmental factors had on her behaviour, but it does seem clear that they believe that

circumstances warrant attention. Similarly, the authors cite some specific environmental factors worthy, in their view, of investigation, including epilepsy, abuse, neglect, lack of support and supervision. They also theorise that the child's aggression towards her sibling could have been meant as aggression towards her mother but was displaced. They further theorise that her aggressive acts were female based – this inference is simply because her acts were towards the (female) neighbour, her mother (who also abused her), and her sister. This seems a tenuous link at best, particularly with no evidence base apart from the fact that those involved were female. Since the two adults involved both abused the child it could be argued that this potential contributing factor is of more worth than the gender of the parties involved. Moreover, the authors themselves also compare their study with the Hare et al (1996) findings where the authors suggest that aggressive behaviour could be as a direct result of abuse of one kind or another, or the need for revenge. Later in the paper the authors then hypothesize that a lack of a treatment program alongside poor supervision could have been a contributing factor for behaviour. They suggest that a structured environment with supervision and a treatment program reduces the risk of aggression, though it is unclear where this claim stems from. It is not clear whether the authors feel that these are contributing factors in a generic sense for the population as a whole, or whether they cite these as a direct result of their in depth case study. Either way, the lack of clearer causal links between the environment and the behaviour is frustrating; while the environment may be a key determining factor in the behaviour of people with autism it is not possible to establish this from an individual case study. Confusingly, they cite Hare et al (1996) in suggesting that the behaviour could also be seen as a means to an end, specifically to obtain better care. What is clear in the case study report is that there are a number of potentially influential factors that may determine behaviour. What is far less clear is both how to determine what these factors are, and how much of an influence any of them are.

Howlin and Clements (1995) note that victims of abuse (e.g. neglect or sexual abuse) can suffer longer term consequences; as many as 50% could meet the criteria for post traumatic stress disorder (Famularo et al, 1992). They also suggest that individuals with autism are also more likely to be vulnerable to abuse, and less likely than their neurotypical counterparts to disclose abuse if it were occurring. In

their study assessing the functioning of abused children from a special school one specific area focused on the children's behaviour 'associated with stressful experiences'. Behaviours associated with stress included 'aggression to self and others and other destructive behaviours' (p.342). They hypothesized that noticeable changes would occur in this type behaviour if the children were reacting to stress. In their results the authors did, indeed, demonstrate that their hypothesis was supported –amongst other behavioural changes there were 'increases in rates of aggressive and self-injurious behaviours and temper tantrums' (p. 345). They note that there were consistencies in the types of behavioural changes across the study as well as the increases. Howlin and Clements (1995), alongside Mudakkes and Topcu (2006), have made some inroads into possible environmental factors influencing behaviour. Once again, there is a paucity of strong arguments for or against citing environmental factors as a key cause to offending conduct compared to, for example, peer pressure or neurological states.

Anckarsater (2006) cites Soderstom et al (2002) and Constantino and Todd (2003) suggesting that individuals with autism have an 'extreme dysfunction' (p260) in abilities that play an important role in personality development. Anckarsater (2006:259) suggests that 'getting to know people, responding to their behaviour and developing insight into self and others by means of mutual reflection are essential processes in human life'. In this suggestion the authors are hinting that individuals with autism may have inherent reasons as a result of their development influencing their behaviour as a group. The argument for individuals with autism being more likely to commit a crime, however, is met by other researchers claiming that the converse could also be true - that, as a direct result of autism and characteristics such as abiding by rules, individuals are actually less likely to commit crime. It may not be possible to view the population as an homogenous group - indeed, it would be wise not to. A compilation of the literature suggests that it could be possible to suggest that while certain individuals may be more likely to offend, for reasons explored later, there are as many arguments against offending conduct as there are for. However, while there are people with autism who do commit crime, irrespective of the statistical data, there is a responsibility to ensure that individuals are judged in

light of a meaningful understanding of their neurological influences, as opposed to a perceptual judgement that may bear little relation to the individual's reality.

In a similar vein to the arguments that as a population individuals are more or less likely to offend, there have been some studies into specific types of behaviour that may lead to offending. As far back as 1985 (Mawson et al) researchers have highlighted the possibility of a link between autism and violent conduct. They encourage investigation between the relationships, further reiterated in 1988 by Baron-Cohen. Both studies demonstrated foci on individuals who have displayed behaviour that is described as violent or aggressive. Asperger himself (1944, cited in Frith, 1991) noted one individual who became aggressive and would attack other children. Mukaddes and Topcu (2006) continue this trend, presenting a case study account of a young girl (aged ten) with autism who killed her six month old sibling by throwing her out of the window. They suggest that autism is frequently associated with certain behaviours, and they cite aggressive behaviour as one of them. Literature surrounding autism, AS, and behaviour provides very different statistics on the actual prevalence of aggressive behaviour, although there are several accounts of individual studies (e.g. Everall and LeCouteur, 1990). Wing (1981) cites 4 out of her 34 individuals as demonstrating anti social behaviour; aggressive behaviour is cited as between 2.7% (Ghaziuddin et al, 1991) and 20% (Kohn et al, 1998). Clearly an agreed clear statistic is yet to be agreed upon by the wider research community; what is apparent is that having autism or AS does not preclude such behaviour.

As well as aggressive conduct, researchers have attempted to investigate other inherent reasons why the individual with autism may offend. Barry-Walsh and Mullen (2004) suggest that it is the notion of understanding between right and wrong (legally) that may lead to offending conduct. They note that the ability to fully understand 'the potentially damaging effects of your actions on others, or their property' (p. 105) may be impaired in the individual with autism, and thus increase the likelihood of offending conduct. They then take the argument a step further, suggesting causal factors as a direct result of AS. In their case studies they suggest that all of the five individuals presented believed that they were justified in their

actions, and boldly write 'in all five cases, the offending was the product of Asperger's syndrome' (p. 105). They argue that since social understanding is limited individuals may not have the capability to understand the morality of their own behaviours. In a similar vein, Baron-Cohen (1988) uses the symptoms of Asperger syndrome to explain the behaviour of one individual with AS who behaved in a violent manner. Barry-Walsh and Mullen's examination of the five case studies of individuals with AS all of whom have a history of offending and culminate in the suggestion that for each case the nature of the offence is understandable in the context of the individuals' AS. In the first instance they suggest that the individual's obsessive interest lay at the root of the offence. Specifically, they note the individual's fascination with watching the flickering of flames which they infer is the reason for committing arson. In the second case where an individual had been charged with stalking, the authors note that 'the stalking was related to his obsessionality and development of rigid routine' (p. 100). Their third case is less clear, but there is an implicit suggestion that the offence, arson, occurred as a direct result of the individual's AS in that burning down a radio transmitter (that interfered with him tuning into a radio station that 'fascinated' him) was seen as a logical solution to an immediate problem. The fourth example cited involved an individual who assaulted his father because of interference from him around him setting fires, a preoccupation that he was interested in and felt that he was entitled to do. The last example suggests that an obsessive interest (in sex) led to offending conduct. The authors express a very clear message in their discussion – that 'in each of the cases the offending was understandable in terms of the patient's Asperger syndrome' (p. 103). How the authors have reached this conclusion is less clear. Certainly each individual case study appears to be well formulated and the rationale behind the behaviour seems compelling; however, there is little evidence base for the arguments, and while they seem wholly appropriate as hypotheses, it is less appropriate for them to be taken as fact. There needs to be further investigations examining individual case studies to ascertain the likelihood of specific factors pertaining to the nature of autism or AS influencing behaviour that leads to offending conduct.

Woodbury-Smith et al (2006) note that in their sample of individuals the motivation of the behaviour was not fully explored. They do note, however, that victimization was cited by several participants as the cause of their offending conduct. Wing (1997) suggests that violent behaviour towards others may be as a result of resentment, while Tantam (1999) argues that lack of feelings of control may lead to acts that deliberately intend to shock or cause disruption in order to gain some limited control over a situation. Howlin (1997) urges the use of community based studies to better understand the motivation or reasons for individuals with AS who commit offences. She theorizes and provides case study examples of individuals who have committed a crime, seemingly for reasons directly related to their AS or autism. Included in her characteristics are: lack of understanding of behaviour of others, obsessional behaviour, poor social understanding, misuse by others, and a rigid interpretation of rules. It could be argued that there is a clear distinction between the characteristics as a direct result of autism or AS (i.e. related directly to the diagnostic criteria) and environmental factors (in Howlin's example, misuse by others). However, if there is a clear link between the individual's neurological condition and the environmental factors it could also be argued that both are good areas for investigation. Howlin notes that the earlier the intervention for an individual, the potential better chances that individual has in terms of not offending at a later stage.

Hayes (2003) suggests that the characteristics common to those with autism may lead the individuals to either be victims of, or perpetrators of, crime. He also suggests that the reasons for this are multiple, and 'potentially overlapping and interacting' (p. 95). He broadly notes that impaired social understanding alongside communication may lead to criminal behaviour; executive functioning problems around lack of understanding of consequences may increase chances of criminal action; and that aggressive acts may follow an interruption of a routine. Debbault (2005) cites a number of characteristics associated with autism that may lead to law-breaking. He also suggests that although offending conduct may have occurred, a punitive response may well not be the appropriate course of action:

Youth with ASD often get into trouble without even realizing that they have committed an offence. Offences such as making threatening statements; personal, telephone, or internet stalking; inappropriate sexual advances; accomplice crimes with false friends; and making physical outbursts at school, would certainly strike most of society as offences which demand some sort of punishment. This assumption, though valid at face value, does not take into account the particular issues that challenge the ASD individual. (2005:26).

He goes on to suggest that sensory issues, social and communication problems, and resistance to changes in routines are all factors that may lead an individual unwittingly into offending conduct. Debbault urges the development of knowledge amongst criminal justice professionals. Without a basic briefing, he argues, those within the criminal justice system will struggle to:

differentiate between the stereotypical behaviours of autism and the typical conduct of an offender. The CJS pro will either get up to speed about autism or run the risk of mistaking autism spectrum disorders as evidence of guilt in the suspicious, yet innocent person with this condition, expending in the process both precious time and resources and fair justice for the youth with ASD and society. (2005: 27).

At this stage it is important to note what the characteristics of AS are deemed to be. The characteristics that I used for the matrices included AS specific. These were taken directly from commonly used sets of diagnostic criteria and the main psychological theories of autism. The key sets of diagnostic criteria included DSM-IV-R (2000) and ICD-10 (2007). Both sets of diagnostic criteria include three main areas to be considered for diagnostic purposes, which include social understanding and interaction, verbal and non verbal communication, and the psychological theories of AS. The main psychological theories identified were theory of mind (Baron-Cohen, 1995), central coherence (Happe, 1997) and executive functioning (Ozonoff et al. 1991).

DSM-IV-R (2000) requires an individual to have a qualitative impairment in social interaction, including two out of four characteristics which cover: poor ability in using non-verbal behaviour (examples include eye contact, facial expression, body posture); lack of development of peer relationships; lack of seeking to share socially; and lack of social or emotional reciprocity. At least one area of restricted behaviour or interest must be fulfilled out of: an interest which is unusual in its intensity or focus; adherence to routine; repetitive motor movements; and preoccupation with parts of objects. The individual must also fulfil the following criteria according to DSM-IV-R: significant impairment in social functioning and no delay in language acquisition or cognition.

ICD-10 (2007) is very similar to DSM-IV-R (2000); ICD-10 notes that to fulfil the diagnostic criteria for AS one must meet the similar criteria in reciprocal social interaction as for autism (ICD-10, 2007) but without any delay in language or cognition. ICD-10 also notes that individuals are usually of average intelligence and are commonly markedly clumsy.

The theory of mind argument suggests that individuals with AS lack the ability to recognise and understand thoughts, feelings, and intentions in other people - as Baron-Cohen (1995) notes this could be termed a form of 'mind-blindness'. Not having an effective theory of mind would decrease an individual's ability to understand the perspectives of other people and in some individuals would lead to a supposition that their own thoughts and feelings are automatically understood by others without any explanation. Theory of mind has also been linked with individuals' abilities to infer meaning from non verbal expression, a skill set that is often lacking in people with AS. Gillberg (2002) suggests that having an effective theory of mind is akin to having an intuitive empathic ability. A lack of, or incomplete, theory of mind, therefore, potentially decreases an individual's empathic understanding of other people.

Central coherence relates to an individual's ability to perceive the overall picture or gestalt in every day situations (Frith and Happe, 1994). Individuals who are noted to have weak central coherence may hone in on details without appreciating overall patterns; they may process information in a highly fragmented manner without recognising what is most relevant or important (Attwood, 2007). While being able to have a strong degree of focus for detail many individuals with AS will lack the ability to process and understand the global concepts that their NT peers may take for granted; central coherence may also affect an individual's ability to adapt specific rules to different situations - for example, a person with AS may be highly rigid in their application of a social rule without any regard to the different set of circumstances surrounding it (Attwood, 2007).

Executive functioning is the term used to cover the abilities of an individual in planning, sequencing, organising and impulse control (Ozonoff et al, 1991). Research has demonstrated that individuals with AS lack skilled executive functioning abilities (e.g. Goldberg et al, 2005, cited in Attwood, 2007). Common characteristics of individuals with poor executive functioning include lack of ability to consider alternatives in problem solving, reduced ability to learn from prior mistakes, a poor understanding of cause and effect, lack of appreciation of consequences of actions, and an adherence to routine and intense dislike of changes in expectations (Attwood, 2007).

The literature review has thus far focused on prevalence and potential causal factors related to autism, AS, and offending conduct. There is also, however, a need to examine the literature briefly surrounding liability and culpability once a crime has been committed, in order to establish possible benchmarks for the analyses of case studies to be compared against. The review is mainly around the *actus reus* and *mens rea*, with some discussion about the implied meanings and possible repercussions for the individual or individuals.

#### **Actus Reus and Mens Rea**

The actus reus in criminal law is the prohibited conduct or behaviour of the individual/s, while the mens rea is the mental element - 'the intention, knowledge, or recklessness of the defendant in relation to the prescribed conduct' (Ashworth, 2003: 96). More recently these concepts are referred to as the conduct element and the fault element. Lynch (1982) described the distinction between the two as the cornerstone of the discussion of criminal liability. However, Ashworth notes that the distinction between the two concepts is nothing more than a rough analytical database; he also notes that many defences of crime cannot be argued in terms of a lack of mens rea. Moreover, although there is a concept of 'general part of law', the magnitude of the numbers of strict offences, alongside the variations of liability mean that it could be argued that each case should be taken in context with its own unique set of principles and liability (Gardner in Duff (Ed), 1998). Robinson (1993 in Shute et al (Eds)) argues that this 'basic' distinction is not coherent and that it should be abandoned. Robinson states: 'no doubt the actus reus-mens rea distinction is a logical and natural extension of the obvious empirical difference between a person's conduct, which we can directly observe, and his intention, which we cannot (p. 187). However, Robinson then argues that the lack of unifying characteristics of either mens rea or actus reus means that the concepts are unreliable. He argues that concepts such as objectivity and subjectivity in actus reus and mens rea are flawed, i.e. that there is no common denominator to be found using such concepts; rather than relying on descriptive requirements, Robinson argues that we should focus instead on their requirements. He states:

The requirements of intention (purpose), knowledge, recklessness, and negligence may have different characteristics - subjective, objective, state of mind, legal abstractions, etc. - but they serve a single function, in the drafter's view: to assess whether the defendant is sufficiently culpable for his prohibited conduct to be held criminally liable for it (p. 189).

However, Robinson also acknowledges that apparent functional similarity in both actus reus requirements and mens rea requirements is illusory. Clearly, while there may appear to be identifiable boundaries encapsulating the actus reus - mens rea

concepts, this is unfortunately not the case. Robinson suggest that for the *actus reus* requirement four distinct doctrines (at least), each with its own set of rationales, are in evidence. He refers to these as: the act requirement; substitutes for an act: omission to perform a legal duty and possession of contraband; voluntariness requirement; and objective elements of offence definitions: conduct, circumstance, and result. Ashworth (2003) similarly allocates four working groups for the condition of criminal liability: voluntary act requirements, absence of justification, positive fault requirements, and negative fault requirements. Robinson also suggests four doctrines for *mens rea*, further highlighting the problems with addressing each case using concepts that are not clear cut.

#### Liability

Jefferson (2006) raises the issues of liability in terms of the distinction between strict liability and absolute liability. He notes that absolute liability implies guilt without any mental element at all, whereas strict liability does require some type of mental state. It is for this reason that there is an age limit under which a child cannot be convicted of a strict offence, nor of a crime of full mens rea; however, there is no universal agreement on what age this should be - for example in England and Wales the age is ten, in Scotland it is eight, and is as high as sixteen in some European countries. Critically, Jefferson introduces the notion of acting voluntarily, and suggests that this can be seen as separate from actus reus and mens rea. He notes 'if the accused is not acting voluntarily in the sense that he has no control over his bodily movements, there can be no conviction' (p. 127). The cases Jefferson cites are all regarding physical ailments or extreme situations; however, it does raise the issue of defence for individuals whose neurology is such that control is less than may be expected. As he notes, 'to have a defence the defendant must fall within one of the recognised excuses: insanity, diminished responsibility, automatism' (p. 321). Jefferson states very clearly that the law is problematic when influencing whether a person should go to hospital, prison, or be released. He also cites cases where the decision is not the correct one. Additionally, there are issues regarding the safety of the individual and the public, should that individual have little or no control over his actions. The three areas for consideration as defences for mental disorder are insanity, diminished

responsibility, and automatism. Jefferson outlines the concepts in the definition of insanity - disease of the mind, defect of reason, knowledge of the nature and quality of the act, and knowledge that the act was wrong. Diminished responsibility is specific to murder (an issue worthy of investigation, but outside the remit of this research). Automatism tends to be used as a defence to a crime (as opposed to an 'essential component of criminal conduct' (Ashworth, 2003:99)). Ashworth goes on to state: 'it [automatism] is more of a denial of authorship, a claim that the ordinary link between mind and behaviour was absent; the person could not be said to be acting as a moral agent at the time' (2003:99). Jefferson notes that the state of automatism is one for a jury to decide upon, in contrary to insanity and diminished responsibility. Essentially, 'the accused is saying that what he did cannot be ascribed to him. He was not the author of the misdeed' (Jefferson, 2003:353). What is not clear in the literature is how an individual may plead should their case not fulfil the legal characteristics needed for automatism, insanity, or diminished responsibility. It is under these circumstances that people with AS could possibly find themselves and, if so, it appears that they are not protected by the law.

#### The Need for Research

For individuals with autism, as indeed for those without, each case with its own unique elements must be taken as separate entities for full justice to be done. The complexities of criminal law, as outlined above, deem it necessary to treat cases not as a homogenous group, but as packages with their own set of characteristics, infinite in their permutations; as such, a community based study examining individual case studies, would seem an appropriate way forward at this juncture.

Hayes (2003) writes of a 'disturbing urgency' (p. 101) in the need for research to support advocates, policy-makers, and practitioners. He suggests that 'such research may provide additional guidance regarding effective intervention for youths and adults with autism who are at risk of committing...a crime' (p. 101). He goes on to note that it is essential to identify characteristics of individuals, or individuals themselves, who may be likely to commit a crime. He urges the development of

better identification in order to appropriately intervene with supports and therapies to reduce the likelihood of individuals engaging in offending conduct.

#### Woodbury-Smith et al:

Local services, many of whom now rely on independent hospitals or social care, often far from the district of origin of the person, need to develop skills and confidence in working, often over long periods of time, with these men and women. Part of this task will involve liaison with the police service so that alleged offences are investigated independently even if that does not necessarily lead to further involvement with the criminal justice system. (2006: 117).

Unfortunately there is little research to assist in the development of the skills needed to help support this vulnerable group. As has been highlighted, most research studies focus on types of criminal behaviour and/or prevalence. There is a paucity of community based studies that actually develop knowledge around the needs of individuals who come into contact with the criminal justice system, and the needs of the criminal justice system itself.

There is clearly much in the way of research that has yet to be undertaken. There are individual case studies that investigate specific factors relating to behaviour, with differing degrees of reliability; there are prevalence studies, again with inconclusive results; there are studies attempting to identify whether autism or AS leads to a greater chance of specific types of offending conduct. What appears to be missing are studies investigating the individual perspective in a narrative form, allowing the person themselves to elucidate their experience and perspective on their own offending conduct. What I have set out to achieve is a community based study giving individuals with AS the opportunity to narrate their own experiences with their own perceptions of self and behaviour; in this way I hope to discern whether there are patterns relating to AS irrespective of the behaviour; whether a database can be developed to assist in the relationship between the individual with AS and the

criminal justice system; and whether theoretically intervention and/or support at a younger age can reduce possible encounters with the penal system at a later date. Thus far, such a study has not been undertaken, though many of the studies investigating criminal behaviour recommend exactly that.

This chapter has explored the literature pertaining to autism, AS, and offending conduct. It has addressed issues such as prevalence rates within the autism population of offending and some of the key legal frameworks upon which prosecution can take place. The *mens rea* and *actus reus* have been introduced as well as the concept that individuals with AS may not be protected by the law.

#### Introduction

In this chapter I outline my ontological and epistemological position in relation to my research. I reflect on methodology and the rationale behind choosing a specific methodological route. I explore in depth qualitative interviews from both a naturalist and constructivist perspective, and argue that the use of both approaches is a valid one for my research. I examine the use of narrative as data and the use of thematic conceptual matrix in data analysis.

#### **Qualitative Research**

'Qualitative data are sexy' - thus argue Miles and Huberman (1994:1). They go on to suggest that the sexiness stems from having 'well grounded, rich descriptions and explanations of processes in identifiable local contexts (1994:1). Additionally, qualitative data can lead to 'serendipitous findings' and will 'help researchers to get beyond initial conceptions and to generate or revise conceptual frameworks' (1994:1). Miles and Huberman continue to suggest that there are several different ways of conducting qualitative research (for example, ethnography, interview, observation); Tesch (1990) organises qualitative research methods into three distinct areas, ordering them within the context of three questions: what are the characteristics of language? Can we discover regularities in human experience? Can we comprehend meaning of text or action? In the naturalist tradition of qualitative research there are key defining factors, including: the research is based on real life situations, data is often sought from participants using their own perspectives, a main purpose is to seek to understand life situations, and that most analysis is around words (Wolcott, 1992, cited in Le-Compte et al). As Gilgun notes 'such approaches [qualitative] are particularly useful for understanding meanings that human beings attribute to events in their lives and...can aid in understanding intersections of cultural themes and practices and individual lives' (2005:40). In order to explore the methods within the tradition of qualitative research that I have chosen I have used Flick's (1998) framework to evaluate the potential efficacies of my selected approach.

Flick identified seven points that should be considered when engaging in qualitative research:

- 1. Qualitative research should raise the question of its ability or potential ability to do justice to the complexities of the chosen object of study
- 2. There is an emphasis within the research on explaining the perspectives of the participants within a given social situation; this should demonstrate diversity (where appropriate) as well as themes/patterns
- 3. The researcher's role as investigator is a crucial one
- 4. Research questions will be informed by a variety of theoretical and methodological approaches
- 5. In depth analysis of a single (or small number of) case study/studies should be undertaken in the early stages of research prior to continued investigation.
- 6. Research is based on the premise that reality is not objective nor given rather there is a social construct and individual perspective is valid
- 7. Text is most often the material upon which interpretation is based.

Relating to Flick's first point in her framework AS is described as complex by (DSM-IV-TR, 2000). However, I argue that complexities for the individual and involving the individual (with AS) arise not as a result of the AS, but by the lack of similarity in neurological processing between the population of those with AS and the population of those without (i.e. the neurotypical (NT) population). Complexities arise not only from their differing neurological processes (Wing, 1996), but by the myriad of social assumptions that the 'average NT' will make, based on such things as physical appearance, expressive verbal ability, strengths in some skill areas, weaknesses in others. Perceptions change dependent on the NTs understanding both of AS as a neurological state, and their understanding of the specific way in which AS affects that individual, at that time. Qualitative research, based on interviews and in depth case study of specific individuals should help reduce the complexities by removal of assumptions, and thus working towards doing justice to the subject area and individuals within it. I will interview individuals to develop case studies for analysis.

#### Interview as Method

Flick's second point relates to the weighting given to participants' perspectives. I am using qualitative in depth interviews to produce narrative as my data. Within the qualitative research paradigm many researchers (e.g. Gubrium and Holstein, 1997; Seale, 1998; Harris, 2003) have explored the difference between two approaches to narrative data analysis, the naturalist or realist, and the constructivist or ethnomethodological. The former approach considers the interview as a resource, the latter is concerned with the interview as a topic of enquiry in itself.

#### Elliott notes:

...allowing respondents to provide narrative accounts of their lives and experiences can help redress some of the power differentials inherent in the research enterprise and can also provide good evidence about the everyday lives of research subjects and the meanings they attach to their experiences (2005:17).

However, the critical discussion for me is the *how* aspect of 'good evidence' being determined – i.e. how do I use the data – the narrative – in an epistemological manner that can be subjected to scrutiny and still remain rigorous. To choose simply between a naturalist or realist tradition compared to a constructivist would be to simplify the problem leading to unsatisfactory conclusions. The naturalist view that the social world is an external reality is not one that I subscribe to; I would certainly be more comfortable with the constructivist notion that the social world is constructed, and therefore the nature of the narrative is as important as the content. However, I am also very much interested in the actual experiences that people (with AS) have had, a tendency towards a naturalist perspective.

Seale (1998) allows the researcher to deem narrative both as a topic and a resource. I am interested both in the content of the accounts – i.e. what happened (from the individual perspective) and I am interested in how this content is revealed – in order that I can ascertain any links with AS related influences. Indeed, it is the juxtaposition

between the two that is the basis for the research – the notion that the 'what' may be perceived very differently dependent on perspective; the research aims to highlight the perspective of the individual with AS through the narrative and then analyse the narrative to develop a database for the NT professional. This database will assist the professional in the future (who may not have a good understanding of AS) to be more aware of the differences in perspectives between the NT and the individual with AS. I am openly embracing both the naturalist and constructivist approaches, therefore, as my epistemological stance; not only will I address that naturalist led 'what' happened, but will also conduct the constructivist exploration into the production of the social world of the person with autism. In this sense I am able to fulfil Flick's second point in her framework for qualitative research.

#### Role of Interviewer

Point three notes that the role of researcher is critical to the study. As interviewer I must be considerate of the relationship between myself and the participant. Harris (2003) notes that the constructivist interviewer needs to be sensitive to the interpretative procedures following interview; I need to be aware prior to the data analysis stage of the role of myself as interviewer and possible influences I may have on the narrative itself. Mishler (1999) advocates that the role of researcher be taken seriously while at the same time allowing narratives following in depth interviews to be used as data for analysis. Holstein and Gubrium (1995) also suggest that the interaction between those interviewed and the interviewer is of central importance. They argue that the interviewer should actively encourage narrative position and orientations to allow for more meaningful data, in comparison with a more traditional view that interviewees are 'epistemologically passive' (Elliott, 2005:22). Breakwell et al (2000) suggests that the richness of data from an in depth unstructured interview correlates with the appreciation that the researcher has of the topic. In my case this is advantageous in that I have a good understanding and appreciation of the topic, but could prove problematic during interview in terms of manipulating responses. Individuals with AS lack a theory of mind (Baron Cohen, 1997) which can increase their vulnerability to leading suggestions. Additionally, many individuals prefer answers to questions to be clear and unambiguous

(Attwood, 2007); furthermore, some individuals will lack a good understanding of themselves in terms of how their AS affects them (Gerland, 1997). Thus, asking very specific questions requiring unambiguous answers, while possibly benefiting the individual with AS because of the way in which information is processed, in terms of attempting to draw out narrative that is representative of the individuals' perspectives structured questions reduces the richness of the data, rather than increases it. In order to elicit maximum information I need to be conscious of the following during interview:

- Propensity to say 'too much'
- Propensity to say 'too little'
- Literal interpretation of language
- Lack of theory of mind
- Executive functioning

Many individuals will either, on answering a question, reply with 'too much' or 'too little' information (Attwood, 2006). Essentially this is relative to what may be expected by a neurotypical peer. In reality, individuals will either attempt to provide as much information as they deem appropriate in response to the question; this then may seem either inadequate or, alternatively, to include far too much information. In fact, for the purpose of this research, the richness of the data correlates to how close the narrative is to the perspective of the individual, so in a sense there is no limit to an individual's answer. However, it is problematic if answers are abrupt and minimal; it is in instances such as these that I must ensure that questions are not leading. I am working towards an holistic approach as defined by Lieblich et al (1998); thus I must ensure that the narrative does not become compartmentalized as a result of my questioning. In order to reduce the likelihood of this I deliberately ask participants to think in a temporal framework from the moment the first influencing factor on their behaviour (from their perspective) came into being; if this proves problematic I ask instead for the individual to recount events of the day leading to the behaviour. In both instances, I will take note of areas that require further explanation, which I return to once the participant has finished their original narration. Critically, I use my knowledge and understanding of AS to question further on a point that may be raised if I feel it potentially is an 'AS influencing factor' to the corresponding behaviour. For example, during a narrative an individual may say 'I was feeling stressed because I didn't know why she said that' I would return to this to ask why it was that this caused so much anxiety.

Interpreting language in a literal sense is a common characteristic of people with AS (Wing, 1996), so questions asked needed to be expressed in such a way that misinterpretation is minimised. For example, 'tell me everything that happened on 25<sup>th</sup> October' may elicit huge amounts of data not relevant to the enquiry, compared to 'tell me everything that happened on 25<sup>th</sup> October that affected how you felt during that period'. Although still open ended, the questions asked must have clear parameters in order that the participant is not overwhelmed.

A lack of theory of mind (Baron Cohen, 1997) may lead to participants not including information with the expectation that the interviewer already knows what the participant knows. In order to ensure that as much relevant narrative as possible is included the questions must be direct in terms of the information I am trying to gain. This proved to be just as much about individual processing as content of the narrative. For example, an individual may say 'the lights made me not able to think' – this relates to the individual's intolerance of visual stimuli that needs further questioning to gain as clear a narrative as possible.

Dysexecutive functioning (Ozonoff, 1991) can lead to a poor understanding of the relationship between cause and effect. Thus it may be that while the participant has been asked for relevant influencing factors governing their behaviour, it may be that the narrative actually lacks certain necessary information as a direct result of the individual's inability to understand causal links. In order to gain as much beneficial narrative for the enquiry, therefore, I had to allow the initial narrative to flow, and follow this with questions asked retrospectively based on what I had heard.

My role as researcher is a critical one. I have been working solely and specifically in the field of autism for approximately 15 years. In this time I have met literally hundreds of individuals with autism, and have worked closely with many of them. I have daily contact with a number of individuals to this day, and am ingrained in the field of autism.

As a result of the above I feel that I am in a position to use my experience and knowledge as a specific part of the research process, both in my interview techniques and in the data analysis. However, professional experience also raised a number of challenges. I need to be aware that my positionality could easily lead me to seek justification for preconceived ideas (conscious or otherwise). The key concerns with qualitative research relate to levels of subjectivity within the methodological process, whether information/hypotheses stemming from data analysis are generalisable, and the problems that language present (Huberman and Miles, 1994). In using interviews for data collation there is the ongoing problem of how the researcher may influence the interviewee; different conditions (for example different researchers) may elicit different responses from the interviewees. The role of the interviewer is critical in terms of allowing the interviewees to respond in ways that are as least influenced by the researchers as possible - 'the role of the interviewer is challenging in that they should be knowledgeable about the historical events that are the focus, and at the same time they must be relatively unobtrusive so that interviewees can tell the stories in their own ways (Gilgun, 2005:44). My role as interviewer, alongside my role of researcher will need continuous and proactive acknowledgement. In order to challenge my own practice I will seek verification at the two critical stages of writing up the case studies. Firstly I will analyse the narrative and develop the individual case studies via the thematic conceptual matrix. These will be written up and sent back to some of the participant for verification of accuracy. This will corroborate (or otherwise) the manner in which I have analysed the data. Secondly, I will determine the level of accuracy of the interpretation of data by comparing my analysis of a case study with that of a peer professional working in the field of AS. These two safeguarding processes are designed to ensure that my

analyses and interpretations are as accurate as possible, and that my methods are transparent and robust.

Demographic information regarding the participants was deliberately excluded as it was deemed irrelevant to the enquiry. The research questions do not relate to gender, race, age or other demographic information; rather they pertain to the perceptual experiences of the individuals. This is not to assume that demographic information would never be an important factor; however, no such reference was made in the individual interviews. Had such issues been raised then they would have been included in the individual's matrix.

## Data Analysis (i)

Once the interviews have been conducted, the second aspect needing exploration will commence – the data analysis. The narrative analysis will use a thematic conceptual matrix (Miles and Huberman, 1994) to elicit themes and patterns from which possible claims can be made. Carr (1997) suggests that 'first order narratives' are those which people use to talk about themselves and their own experiences – as such they can also be referred to as 'ontological narratives' (Somers and Gibson, 1994). Elliott (2006) helpfully suggest the benefits of using qualitative methods, noting that qualitative research:

- ♦ Treats the individual as a unique and complex case
- Recognises the biographical trajectories of the individual
- Sees the individual as an active agent
- Draws together the conceptual schema held by individuals
- Demonstrates the reflexive work undertaken in establishing identity

The key chosen methods are interview and qualitative data analysis; interviews will provide a depth and richness of data that will reflect the diverse nature of the population (Attwood, 2006), and using a specific database for qualitative data

analysis key patterns will emerge. My research methodology aimed to accurately identify individual characteristics (either AS specific or AS inferred) following interview. In order to do so I felt it necessary to be as 'close' to the individual's perceptual experience as possible. In order to do so the data I used was as 'close' to the individual interviews that I had undertaken - either by viewing the video or listening to the audio. Whilst I could have chosen to transcribe the data I felt that this opened up the potential to lose some of the richness of the 'raw' data that I had access to via the recordings.

## Conceptual Framework

Gilgun (2005) suggests that a deductive approach to qualitative research starts with a conceptual framework; this enables the researcher to identify process and meaning to their text, and following further research either transform or corroborate the concept. The initial conceptualization can range from a parsimonious theory through to a set of loosely developed set of ideas; it can be based on abstract notions stemming from previous research allowing researchers to develop hypotheses (these to then be tested qualitatively); additionally the concept can derive from a combination of theory, professional and/or personal experience. Epistemologically this fits in well with the background to the research proposal; the researcher's own interest and experience in the field of AS, in combination with professional experience of several case studies. The pursuit of knowledge via a loose set of concepts (although themselves are based on recognised research hypotheses) through to close examination of those concepts by examining qualitative data is one embraced by the researcher for this study. From a phenomenological position the researcher aims to understand the individual perspective using a combination of data analysis of specific individual interviews, alongside current psychological theories of autism. Gilgun (2005) claims that using interpretative phenomenology the researcher focuses on the lived experience and understanding of the individual, and that the ontology of the individual takes precedence over epistemology and validity; while the ontological position of the researcher is crucial (for example the concept that the ontology of the individual with autism can be inherently different to that of the NT) the epistemological questions relating to

methodology are just as important for the reliability and validity of the research. My perspective, as supported by, for example, Hodge (2007) is that valid knowledge can be derived from the recorded experiences of others.

#### **Research Question**

My research question (Flick's fourth point) has been based on the main psychological theories of AS in combination with personal experience with individuals on the spectrum. This combination of literature based theory (with a high evidence base) alongside case study accounts led to research questions that are in line with qualitative study. Essentially the diagnostic criteria of AS were used alongside the main theories — Theory of Mind, executive functioning, and central coherence. This combination provided the support to the notion that individuals with AS process information differently and that reasons for behaviour of those with AS might be qualitatively different to the NT population. The research question following directly from this concept was: are there aspects of AS that can influence an individual's behaviour that is, in turn, deemed to be criminal?

## **Initial Analysis**

Flick's next point involves the use of case study analyses early on in the project. Each case study narrative was analysed sequentially, which meant that analyses were being undertaken from a very early stage in the process. This helped inform subsequent case studies, specifically in the identification of key characteristics.

Not only was the early analysis helpful to me in identifying key AS characteristics that were identified during the narratives, the analyses also allowed me to embark on the corroboration of the validity of data (see chapter five). This ensured that I was comfortable with the continuation of the analytical process without any adaptation.

## **Perceptual Experiences**

Perceptual experience alongside theories of autism lie at the crux of the research. The study aims to investigate case studies not solely through a neurotypical perspective but through ascertaining the perspective of the individual with autism, including the social structures and environmental issues that surround the case (Flick's sixth point). 'Reality' will not be taken as a given – in this sense I am arguing ontologically that there is no 'absolute truth' – but that different perspectives will highlight different 'realities'. Each case study will demonstrate the differences between 'occurrence' – a term I am using to explain the mechanics of an event – and the perceptual reality of an individual in relation to autism. Neither of these will be established until a thorough investigation into the case has been completed and cross referenced in other areas (the individual participants themselves).

The 'mechanics of an event' will be the factual aspects of the case study – for example, an individual took food from a shop without paying for it. This is in contrast with the perceptual reality which will be investigated via interview. The process will be as follows:

- ♦ Individual interview
- Data analysis using thematic conceptual matrix
- Identification of AS specific elements, AS inferred characteristics, and environmental factors
- Case study write up
- Affirmation from individuals regarding accuracy of write up
- Corroboration in data analysis from individual peer

The second 'stage' is the development of a database to identify AS related influences that can be used in subsequent analyses. As more case studies are analysed, so the database will develop. Once all case studies have been analysed the database will be finalised.

Gilgun (2005) breaks down interrelated concepts better to understand the process of developing theory. She suggests that hypotheses are the statements of relationships between concepts; that concepts, as components of hypotheses, are part of theory and models; and that theories are those which have been tested (in this case qualitatively) but can always be tested further. This study aims to test the conceptual notion that, at the very least, the perspective (stemming from individual perception) of the individual with autism may be vastly different to that of the NT; taken further, it will test whether the NT assumption following recorded events – taken from the NT perspective – is also, indeed, vastly different when addressing the same event from the perspective of the person with AS. Ontologically, the study stems from the premise that the individual perspective is valid – that 'reality' is not confined to one dimension, but is multi-variable and, thus, not objective nor given. Gilgun goes on to suggest that the main outcomes of qualitative research include development of theory (concepts, hypotheses and models), descriptive accounts of experience, and text which can be analysed. Gilgun also uses the notion of text rather loosely indeed preferring to interrelate the term with 'data'. As Gilgun notes, 'methods of data collection in qualitative research are texts of interviews, observations, and document analysis. Videotapes, audiotapes, and cameras can provide some of the documents that comprise the texts that are analyzed as well as archived narrative material such as oral histories (2005:40-41). Data, in this study, will be recorded material, video and audio that will be analysed using a thematic conceptual matrix (Miles and Huberman, 1994). This fulfils the final point in Flick's framework, demonstrating the clear embedding of this study in the qualitative research tradition.

## **Participants**

Participants were individuals who had a diagnosis of AS. I did not advertise as such for participants, but 'recruited' by word of mouth alone. The first participant included was an individual known to me through work who asked me if I wanted to interview him. The second was the son of an individual known to me through work who asked if it would be possible to involve her son. Following an early analysis of these individuals I was able to include references to the research at conferences I was invited to. As I speak at a number of conferences I am in the 'public arena' regularly

- at some of those conferences I was asked to outline research I was currently engaged in; as a result participants contacted me to ask whether they could take part in the study. Other participants contacted me having heard about the research from other people with AS as part of an online community, and I was also contacted by staff at a secure hospital who felt that some of the individuals in their care would wish to take part. Ultimately I had more individuals than I 'needed' for this paper, and have kept details for future studies.

## Data Analysis (ii)

Elliott (2005) suggests that it is beneficial when analysing narrative to apply a typology to help clarify epistemological differences between differing approaches. Elliott describes two distinct frameworks for doing so. Mishler (1995) uses a framework based on the three uses of language leading to the content of the narrative, the structure of the narrative, and the performance of the narrative. Lieblich et al (1998) suggest that differing methodological approaches can be described in two dimensions: firstly those that are interested in the content rather than the form, and secondly those who consider an holistic approach as opposed to a categorical. Using Mishler's framework I am interested both in the content and the structure of the narrative, with an emphasis on the constructivist approach of the latter. Similarly, using Lieblich's framework both the content and the form are of interest. However, what is clear is that an holistic approach is necessary to establish patterns and themes, rather than a categorical approach.

## **Data Display Model**

Using the overarching umbrella of a data display model there are a number of advantages leading to validity of findings:

1) There will be a transparency to the process of data analysis alongside a clear, monitored application of rigour.

2) There will be a strong emphasis on the role of theory – in this case the theories of autism. A strong literature presence will be used to support the more subjective findings via analyses of the case studies. This combination should provide a compelling argument for validity of findings.

3) The method urges the researcher to go beyond description and enter the realm of explanation. As above, the transparency of the data analyses, alongside the strength of the theories established in the literature will assist in the development of commentary and explanation.

Although a relatively small number of case studies will be used (compared to quantitative research) due to the field of research and the potential problems accessing numbers within the population, it is to be expected that all case studies will be included in the project. All material will be rigorously recorded and filed for data analysis purposes.

The three processes of data analysis include:

- 1) Data reduction
- 2) Data display
- 3) Conclusion drawing

Data is reduced firstly in the design stage. This includes the choosing of the conceptual framework, specific cases and instruments, and research questions established. At the analysis stage reduction takes place in the coding of the data,

and the themes/patterns identified. Any clustering is established at this point. The data display will be in the form of matrices. Conclusions will be drawn from individual analyses of the case studies primarily; a general discussion will also be undertaken addressing wider issues. In this way the individuality of the population will be acknowledged while in parallel addressing legal issues that may impact on the wider population (of people with AS).

The validity of the data is dependent on:

- Ensuring that the data analysis and conclusion drawing is clearly reflecting data
- All documentation is accessible
- That conclusions can potentially be transferable, that speculation can occur in other, similar (but non identical) conditions
- The strength of the data is in its ability to contribute to the development of further theory
- ♦ Triangulation data that is supported by more than one method or source

In order to ensure that data are as valid as possible the stages of analysis will be 'tested' – firstly by participants themselves who will have the opportunity to feedback on the accuracy of the process; secondly an impartial 'expert' will follow the process of data identification and the results compared with my own analysis.

## Similarities and Differences with Grounded Theory

'Grounded theories typically emerge as analyses of how a problem is resolved or processed by participants in a particular problem area' (Brewer and Miller (Eds), 2003:133).

Grounded theory is widely cited by qualitative researchers as their choice of research method (Brewer and Miller (Eds), 2003; Payne and Payne, 2004), but often the claim is inaccurate. Originally developed and introduced as a research method

by Glaser and Strauss (1967) the method should follow a rigorous set of procedures moving from an inductive perspective initially through to a deductive framework. The inductive stage introduces data which the researcher explores; the process develops possible meanings from the data that could be used for further testing in the deductive stage. In essence grounded theory follows a set of procedures to firstly develop theoretical meanings and concepts from data and tests those theories until such a point whereby new data no longer add to core concepts developed.

Open sampling is the first stage of the method combined with open coding; the researcher begins to identify codes to note the patterns in the emerging data, both similarities and differences. As the data is further analysed so additional codes can be added. Eventually categories of codes will be identified - this second stage is termed axial coding. It is at this stage that the researcher moves on from open sampling to relational and variational sampling; the researcher will seek out cases that demonstrate the core category as well as any sub-categories identified (those most closely related to the core category) and their relationship with the core category. This process deliberately sets out to demonstrate the similarities and differences in key concepts developed from the initial process of open coding. It is at this stage that the reasoning moves from inductive to deductive; initial ideas developed by inductive methods are revisited and tested to either validate or negate them. The ultimate stage of the method is to use discriminate sampling to refine the core concept - selective coding. This final coding should be theoretically sound with all variations explored and accounted for. It is at this stage that the concept of theoretical saturation is introduced - the point at which further data no longer adds to the theoretical framework for the core concept or associated sub-categories (Morse et al (Eds), 2001; Miles and Huberman, 2002; Brewer and Miller (Eds), 2003; Payne and Payne, 2004).

At the outset it may appear that methodologically my research followed the principles of grounded theory, and there are, indeed, some notable similarities. However, there are not enough features of grounded theory to warrant the research to be termed as being encompassed by the umbrella of a grounded research tradition.

The similarities between grounded theory and my study are conceptual rather than pragmatic. The concept embraced by grounded theory that core categories can be developed from a set of data following analysis is one very much subscribed to in the study. However, it is by means of conceptual matrices that the categories were derived rather than by open coding. This inductive reasoning is rife in the study and is embraced within grounded theory. Again, this similarity is stark - but as the study does not then move forward to the same extent as grounded theory to deductive analyses the study can not be said to follow the tradition. The critical stages of grounded theory are not adhered to in the study; there are some similarities between open sampling and the recruited participants for the study, but there is no specific coding stage in a grounded theory sense. The generation through inductive reasoning of core concepts are similar but there is no testing of the validity of the concepts in the study. Data are analysed for patterns and groups in both the study and the theory in a conceptual sense, but differently in the pragmatics.

Overall, grounded theory could be said to be conceptually similar to the study but dissimilar methodologically. The parallels are clear to be seen, but it is also clear that the narrative analyses using the conceptual matrices within both a constructivist and naturalist tradition are not close enough in their processes to be deemed grounded theory.

This chapter has explored the methodological issues related to qualitative research and data analysis. It has embraced the notion that analysis of qualitative data will use concepts from both a naturalist and constructivist tradition. Grounded theory has been recognised to have similarities to the overall study, but I have concluded that while similarities occur the study can not be deemed to be a pure grounded theory piece of research. The following chapter provides the case study data and preliminary discourse of analyses that form the main crux of this work.

#### Introduction

This chapter sets out the matrices developed following analysis of each interview. The matrices are then organised into a grid breaking down each matrix in order to facilitate further analysis. Following the breakdown an initial analysis takes place; I have done this on an individual basis, with a more general discussion and analysis across all interview data detailed in Chapter six. I have not at this stage made any assertions regarding the possible legal connotations of the analyses, preferring to address these issues in Chapter six.

## **Process of Analysis**

Each interview was viewed for analysis ten times with a minimum break of a week between viewings; each aspect of the matrix had to be verified a minimum of six times; i.e. each specific heading I deemed appropriate for the study on viewing the interview had to be included at least six times within the ten matrices for each interview. Each viewing was done without any previous notes to hand to ensure as minimum influence as possible. Prior to identifying specifics for the matrix I identified three broad categories as potentially the most useful for the study:

- AS specific characteristics or behaviours that relate directly to the diagnostic criteria for AS; all elements in this category can be found in sets of diagnostic criteria for AS – for example, social understanding, communication, Theory of Mind;
- ♦ AS inferred characteristics or behaviours that appear to be as a result of AS but not directly related to the diagnostic criteria; these are characteristics that are commonly seen in people with AS but are not part of the criteria for example, anxiety, high levels of stress, difficulty in making choices;
- Environmental factors that appear to influence behaviour that may have an impact on the way in which the case study is reviewed but which do not fulfil criteria for either AS specific or AS inferred.

As well as analysing the interviews for the above elements all interviews were viewed an additional time with just one heading in mind:

## • Non AS specific.

This was to identify any characteristics or behaviours that could be considered outside of those demonstrated by individuals with AS. In essence this was to ensure that I was not overly partisan in my approach and was being as transparent as possible in achieving my results.

Some specifics are included more than once within the matrices; this is when an individual has repeated themselves at different times in the interview and, again, it has been noted at least six times within the set of ten viewings.

All of the examples given in the matrices are either direct quotations taken from the interviews or paraphrases of them.

## Case Study One Background

E is a young lady who developed an interest in three of her tutors at college. She wanted to befriend them and so started writing to them to ask for friendship. Despite being told that this was not possible she continued to write (every day over a period of several months) and eventually became threatening in her writing. The police were involved, cautioning E until she was eventually arrested.

## **Case Study One Matrix**

## **AS Specific**

- 1. E did not realise that what she wanted was not allowed
- 2. E tried to persuade tutors to say yes to being friends in a highly rigid fashion with no thought of their perspective
- 3. Repetitive behaviour letter writing every day
- 4. Continued writing daily as she had not got a reply
- 5. E's interpretation of friends: 'people who show an interest in me'
- 6. E's criteria for writing to tutors is as a result of her criteria for a friend
- 7. Friends are people who show an interest in her and encourage her in what she is doing
- 8. Would not do it again, not because of tutors' feelings but because E is scared of police
- 9. Did not think about what others might think or feel

	T
	10.Once she has something in her head she cannot stop it; does not matter whether anyone else likes it or not
	11.Thought she would get away with it
	12.Wrote letters to make them listen, never thought they would feel badly towards her threatening behaviour
	13.E wanted to talk to the individual involved but felt that she could not; too difficult to talk
	14. Refusal to give up the 'task' once she had started
AS Inferred	15. Writing to the tutors that she was most familiar with
	16.E felt that the fault was with the tutors which is why she started to become threatening to get them to agree to her way of thinking
	17.E felt that the harder she tried the more likely she was to succeed
	18. Explicitly states that she 'can't help it' (in relation to her behaviour) – 'everyone else thinks it's wrong and they don't get it'
	19.E is explicit in that she could not help writing the letters and had no alternative; never an option to stop trying to make friends

	20. Compelled to write; once it was in her head she had to;
	would have been very upset and angry if she had been
	made to stop
	21. Stopping was never an option
	OO Deesen for not delice it associate to be seen a fine
	22. Reason for not doing it again is because E is scared of
	being in the police cell
Environmental	23. She became very upset feeling that she was being rejected
	when she wanted friendship
	24. E wants friends
	0
,	25.E is motivated by potential friendship
1	
Non AS Specific	26.E states that writing letters to her tutors became too much
,	for them
5	
	27. Tutors did not respond because they felt bad and angry

## **Breakdown for Analysis**

# AS Specific

Social Rules	1,5
Rigidity of Thought	2,10
Theory of Mind	2,5,8,9,10,12
Repetitive Behaviour	3
Literality	4,5,6,7
Executive Functioning	11,14
Central Coherence	11 .
Communication	13

## AS Inferred

Logic / makes sense to the individual	15,16,17,22
Lack of Choice	18,19
Compulsion	20,21

## Environmental

٧	Vanting Friends	23,24,25

# Non AS Specific

Good Theory of Mind	26,27
i	

## Discussion of data, case study one

## **Theory of Mind**

E tried to persuade tutors to say yes to being friends in a highly rigid fashion with no thought of their perspective

E notes herself that she desperately wanted friends, that the tutors fulfilled her understanding of what a friend might be, and that this was criteria enough for her to pursue the 'friendship'. At no point does E make any reference to reciprocity in terms of friends. She demonstrates here a distinct lack of Theory of Mind, not appreciating that friendship usually requires a need from both parties to desire friendship in order for a relationship to develop.

E's interpretation of friends: 'people who show an interest in me'

E has a poor understanding of what a friend might be; there is no explicit understanding of the two-way process in relationship building, and, importantly relating to Theory of Mind, no appreciation of how another individual might behave towards her if introducing the concept of friendship other that simply 'showing an interest' – as her tutors fulfilled this criteria they were judged to be candidates for friendship with no other consideration taking place.

Would not do it again, not because of tutors' feelings but because E is scared of police

E to this day does not cite any Theory of Mind related rationale for not behaving in such a way again; rather, she uses her own rationale – that of being demotivated in case she has to have contact with the police, something she is genuinely scared of. Her motivation stems from things effecting her directly, rather than anything effecting other people.

Did not think about what others might think or feel

Here E explicitly notes that she did not think about other people's thoughts or feelings, a clear indication of her lack of Theory of Mind.

Once she has something in her head she cannot stop it; does not matter whether anyone else likes it or not

E notes here that she cannot alter her behaviour simply based on what someone else might think. Her lack of Theory of Mind reduces the need for her to adapt or change her behaviour and demonstrates why she did not stop writing letters to her tutors.

Wrote letters to make them listen, never thought they would feel badly towards her threatening behaviour

E demonstrates here that it did not occur to her that her letters would cause any distress to the recipients, despite acknowledging that they were threatening in content, she does say that the reason why she sent so many and became threatening was simply to force a reply, and this was paramount in her reasoning.

## Logic / makes sense to individual

Writing to the tutors that she was most familiar with

E states that she wrote to the tutors she was most familiar with. This makes perfect sense to E as they are the ones who fulfil the criteria for friendship and who are most 'available' to her. The fact that they were her tutors and, thus, not appropriate individuals for friendships did not occur to her.

E felt that the fault was with the tutors which is why she started to become threatening to get them to agree to her way of thinking

It seems to make sense to E that there was no 'fault' on her part; she was simply behaving in a logical fashion to meet a demand. Thus any blame was placed on the tutors for not replying, the logic being that if they had replied in the first instance then she would not had to have become threatening.

E felt that the harder she tried the more likely she was to succeed

Again, demonstrating a highly logical (though one dimensional) reasoning E felt that a simple equation correlating volume of letter writing with success in gaining a reply was reasonable and appropriate under the circumstances.

## Literality

Continued writing daily as she had not got a reply

E has a literal response to writing on a daily basis; she has not got a reply to she must literally write another letter.

E's interpretation of friends: 'people who show an interest in me'

E is highly literal in her interpretation of what a friend is. She has criteria for a friend and interprets this in a literal sense; her tutors show an interest in her and encourage her – rather than understanding the wider picture, E interprets this literally, recognises that they fulfil her 'friend' criteria, so chooses them to write to.

E's criteria for writing to tutors is as a result of her criteria for a friend

E seems to think in a highly literal sense; if she wants friends, and her tutors (in her interpretation) are her friends, then she will write to them. She finds verbal communication difficult so writing is a logical solution.

Friends are people who show an interest in her and encourage her in what she is doing

As above, this is a good example of how E's literality is demonstrated; for reasons unknown E's definition of a friend includes showing an interest in her and encouraging her in what she is doing. In a literal sense, then, anyone who meets these criteria is eligible for friendship.

#### **Environmental**

She became very upset feeling that she was being rejected when she wanted friendship

E wants friends

E is motivated by potential friendship

Each of the above is an indication of the powerful motivation E has for friendship. She makes reference to friends, and the need for them, several times. Although the need for friends is not part of the criteria for AS, nor acknowledged as a common characteristic, I would argue that as a result of finding social relationships difficult a lack of friends or reliable relationships is a common problem; certainly, in this individual case, it would appear that the high motivation for friendships may have influenced E's behaviour considerably.

## **General Discussion**

There is no individual aspect of AS in this case study that demonstrates clearly why E behaved in the way she did; however, there appears to be a compelling argument to be made for the combination of AS specific, AS inferred, and environmental factors to be considered when attempting to understand E's actions. E appears to 'need' friendships and has a definition of what a friend entails. Three of her college lecturers fulfilled this definition, and so were eligible for E to try and develop a relationship with. A combination of highly logical thought, lack of Theory of Mind, poor understanding of social relationships, and literal interpretation then led to E writing increasingly threatening letters to her tutors.

Issues that this case study raises include:

- E's education of non curriculum subjects
- Other people's understanding of AS
- E's understanding of friendship and social constructs

If E had been educated successfully in non curriculum subjects, such as how to understand social relationships, what a friend is, appropriate ways of developing relationships, appropriate boundaries, and appropriate communication, then it may have reduced the potential for her behaving in such a way. Additionally, had college reacted in a different way – for example using E's preferred mode of communication (i.e. writing) – and responded in the written word directly back from tutors clearly responding to E's letters, then her reaction may not have been so threatening.

## **Case Study Two Background**

A is an individual who was involved with the police following an attack on his father. He had been out drinking and on his return home, after his father questioned him on what he had been doing, attacked his father, punching him. A's father called the police. A also had another incident on a placement in hospital when he grabbed a nurse around the throat; in the same establishment he also threw tables around the room. In the past A had hit a member of public with a pole, and during another situation grabbed someone's bag.

## **Case Study Two Matrix**

AS Specific	A did not recognise that it was any of Dad's business what     he had been doing outside of the home environment
	2. A did not think about what might happen
	3. A worried about what might happen to him – but not to his father
· .	A noted that the boat was on private property but he was allowed as his Dad had once owned a boat
	5. He never thought he would end up in hospital, but did worry about the police
AS Inferred	6. Behaving in this way (in relation to the incidents) A believes it makes him feel calmer
	7. Being upset

	8. Being angry
÷	9. The 'anger took over'
	10.'I just lost it'
	11.'Didn't know what I was doing'
,	12. Had no control
	13. Woke up feeling angry
	14.'just went mad'
	15. Not in control because A was feeling angry
	16. Angry and upset
	17. No control
,	18. Angry
Environmental	19. Drinking makes it worse
Non AS Specific	20. Did occur to him he might get into trouble
	21. 'naughty reallyshould never attack your parents'
	22.Felt 'silly' afterwards, recognised that he should not have

done it (punching Dad)
23. It was right that the police came because his Dad did not feel safe in the house with him
24. Says he should not have behaved in the way he did – but had no control

# **Breakdown for Analysis**

# AS Specific

Central Coherence	1,2	
Theory of Mind	1,3	-
Executive Functioning	2,5	
Literality	4	

## AS Inferred

To Reduce Stress	6
Anger / Upset	7,8,9,13,14,15,16,18
Lack of Control	10,11,12,14,15,17

## Environmental

Drinking Alaskal	1 10
Drinking Alcohol	18

# Non AS Specific

Executive Functioning	20
Social Rules	21,22,24
Theory of Mind	23

## Discussion of data, case study two

#### **Central Coherence**

A did not recognise that it was any of Dad's business what he had been doing outside of the home environment

It appears that A does not connect the actions he displayed in his home with what had occurred in a different time and space. He explicitly states that it was none of his Dad's business what he had been doing prior to coming home, a possible example of weak central coherence.

## A did not think about what might happen

Despite A recognising at some level (see non AS specific elements) that his behaviour was inappropriate, again he does not connect his behaviour with the 'wider picture', another example of weak central coherence.

## **Theory of Mind**

A did not recognise that it was any of Dad's business what he had been doing outside of the home environment

Although this is the same element as above it does also demonstrate a lack of Theory of Mind. A does not appreciate that as the home belonged to his Dad, and that A is his son, he has a right to know what he had been doing. Not only does A not recognise this he is resentful that his Dad is even asking him, which precipitates his anger.

A worried about what might happen to him – but not to his father

A acknowledges that he was worried about what might happen to him following the incident, but shows no concern about how his father might have felt. Despite

knowing that his father did not feel safe in the house (see non AS specific elements) he still does not think about what his father had gone through.

## **Executive Functioning**

A did not think about what might happen

A did not appreciate the consequences of what might happen to him. Despite knowing that the behaviour was somehow wrong, it did not cross his mind to consider what might happen to him.

He never thought he would end up in hospital, but did worry about the police

Although A worries about the police (after the incident) he does not recognise what else might happen as a consequence of his actions.

## Literality

A noted that the boat was on private property but he was allowed as his Dad had once owned a boat

When A described the events leading up to him hitting someone with a pole he notes that he was near where some boats were moored. On being told that he was not allowed there, as it was private property, A's reaction was to assume that he was allowed there as his father had once owned a boat. This could be seen as a highly literal interpretation of a concept; in this case as A had once been allowed to board private boats he assumes that nothing has changed, despite the fact that his father did not own the boats in question, nor indeed owned one at the time.

#### **Stress Reduction**

Behaving in this way (in relation to the incidents) A believes it makes him feel calmer

A explicitly notes that a purpose behind the behaviour is to feel calmer. Although this is only mentioned once, in relation to the number of times he relates his behaviour to feelings of high arousal (in particular anger and being upset) it is a significant pointer towards why he behaved in the ways he did.

#### Anger / Being upset

The most statistically significant set of elements is the one relating to levels of emotional arousal. While this is obviously not specific to people with AS, there is enough reference in the literature linking AS with inappropriate behaviour that this area warrants close evaluation.

A notes on a number of occasions that it was his anger, or his feelings of being upset, were the cause of his behaviour. He does provide examples of the trigger for his emotional arousal on occasion, but more often simply states his feelings as an emotional state with no identifiable precursors. If this is, indeed, the case, and A himself cannot identify the triggers to his behaviour, but rather simply recognises his feelings at the time, then it would appear that A feels his feelings are to 'blame' for his behaviour – and that those feelings stem from an unknown source.

#### **Lack of Control**

A states, and reiterates, on a number of occasions that he had no control over how he behaved during the incidents. Taken in conjunction with his emotional states at the time it would seem that high levels of emotional arousal reduce his ability to control his own actions, and these actions led to volatile and/or inappropriate behaviour.

## **Non AS Specific**

Did occur to him he might get into trouble

This statement would seem to counteract sections above, particularly concerning executive functioning and central coherence. Despite this, however, a secondary argument may conceivably be established that lends greater weight to A's notion that he lacked control. If he did, indeed, understand that he would get into trouble, but then behaved in a particular way regardless, it would suggest that A's perception of being out of control is an accurate one.

'naughty really...should never attack your parents'

This statement implies that A does have some understanding of social rules. However, it was during the interview at a time of lower arousal; additionally, it could be argued that stating a social rule is not the same as understanding it, nor abiding by it.

Felt 'silly' afterwards, recognised that he should not have done it (punching Dad)

Although A stated that he felt 'silly' after the attack on his father, and noted that he should not have done it, there was still no recognition of why this might be the case. There is no consideration of his father's feelings nor what might happen to his father as a result of the attack. This reiterates the AS specific elements relating to lack of Theory of Mind, as much as it demonstrates some limited understanding of social rules.

It was right that the police came because his Dad did not feel safe in the house with him

This could be seen as an example of Theory of Mind. It is not possible to recognise whether this is a genuine example of empathic understanding or a rote response based on something that had been said to him at the time. Either way, what this example does demonstrate, once again, is a lack of consideration of how his father might have felt during the incident – once again giving credence to A's lack of control assertions.

Says he should not have behaved in the way he did – but had no control

In a similar vein the example above, A acknowledges verbally that he should not have done it (in hindsight), but that at the time he had no control.

#### **General Discussion**

This is not a clear cut case study, not least because there is more than one incident being discussed in the interview. However, the argument that A has high emotional responses leading to a lack of control seems compelling based on the narrative. In conjunction with a lack of *working* Theory of Mind, executive functioning, and central coherence (i.e. pragmatically as opposed to theoretically) this level of anger and being upset seems to lead to a lack of control over behaviour, in turn leading to volatile and inappropriate behaviour.

Issues that this case study raises include:

- Recognition of emotional states
- Recognition of precursors to emotional states
- Anger management
- Concept of different options

If A had been given the opportunity to understand how to regulate emotional states, both in terms of recognising what influences his emotions, and how to recognise the 'warning' signs of having a particular feeling (n this case anger or being upset) then it may have influenced behaviour. The two other major considerations are whether it might have been possible to influence behaviour had A been exposed to effective anger management support, and whether A had ever been proactively taught alternative options for emotional arousal as opposed to volatile behaviour.

## **Case Study Three Background**

M declined to be explicit as regards the nature of his offence but did acknowledge that he was arrested following it. In addition to this, after the interview he inferred very strongly as to the nature of the offence and, while asking for it not to be included in the write up, did agree that I could note that it was violent behaviour towards a person or persons younger than him. In brief, M found himself alone during a day out at which point the incident occurred. He was arrested very shortly afterwards.

## **Case Study Three Matrix**

## **AS Specific**

- 1. M wanted to go home but his Dad wanted something else
- 2. Prior to the incident there was no thought of it in an emotional sense
- 3. The reason he gave for the behaviour was that his Dad did not take him home
- 4. If he had said 'let's go' then he claims it would not have happened
- 5. 'It's a triggered event'
- 6. Other people think it is bad but M sees it as an 'unfortunate event'
- 7. To avoid it happening again he should always be with other people

	,
	8. M's worry about those involved 'telling' (i.e. to the police) meant that lots of bad things would happen to M
	9. He did it because he was on his own
	10. There was nothing in his brain that thought about what others might think about him during the behaviour
	11. If someone had been there watching then he would have worried about what they thought of him
	12.It never occurred to M to think about others' reaction as there was no one else there (aside from him and those involved in the behaviour)
AS Inferred	13. As soon as it started he did not know what he was doing
	14. The incident is like 'a memory wipe'
	15.M did not know what was going on
	16.M had 'absolutely no control'
	17.He had no idea the incident was going to happen
	18. When it happened he did not know it was happening
	19.M has no way of deciding between right and wrong

Environmental	20. The incident was a 'great amount of bad luck'
	21. There was no discernible reason for the behaviour
	22. It was bad luck
Non AS Specific	23. After the incident M felt disgusted with himself
	24.He felt bad, disgusted; describes the incident as horrible and disgusting

# Breakdown for Analysis

# AS Specific

Theory of Mind	1,2,6,8,10,11,12
Rigidity of Thought	3,4,5,7,9

# **AS Inferred**

13,14,15,17,18
16

# Environmental

Bad luck	20,22

# Non AS Specific

Emotional Response	23,24

# Discussion of data, case study three

# **Theory of Mind**

M wanted to go home but his Dad wanted something else

In this example M demonstrates that his thoughts were centred around his own wishes or needs, without taking other people's wishes into account. The circumstances were that the family had agreed to have a day out together; however, by this time M had decided that he was bored and became more and more frustrated at not being able to go home, irrespective of what other people wanted.

Prior to the incident there was no thought of it in an emotional sense

Despite the incident being a major one involving violent behaviour there appears to be no thought of the others involved prior to the event. This may be an indication of lack of Theory of Mind and as such I have included it here; however, it may also be as a result of the lack of awareness M articulates regarding knowing the event was going to happen (see AS inferred).

Other people think it is bad but M sees it as an 'unfortunate event'

Here M notes explicitly that other people see the behaviour and the results of it as 'bad', but contradicts them by asserting it is more simply an 'unfortunate event'. This demonstrates a lack of M's ability to empathise with those others involved in the behaviour, rather having a focus on himself.

M's worry about those involved 'telling' (i.e. to the police) meant that lots of bad things would happen to M

M's concerns following the incident were solely regarding his own welfare. He does not articulate any concerns over the fate of others.

There was nothing in his brain that thought about what others might think about him during the behaviour

This is an excellent example of M articulating very astutely his lack of Theory of Mind. In his own words he notes that there is nothing in his brain that took any regard of what people might think of him during the incident.

If someone had been there watching then he would have worried about what they thought of him

This is an example of how M seems to think. He has already noted that he did not think about what others might think of him, and here he suggests that if people were physically present then he would have been worried about what they might think (interestingly at no point does he suggest that this might have made him stop).

It never occurred to M to think about others' reaction as there was no one else there (aside from him and those involved in the behaviour)

As above, this demonstrates that there seems to be a lack of 'automatic' or 'intuitive' Theory of Mind, but that if a physical presence were there it may have altered M's way of thinking.

# Rigidity of thought

The reason he gave for the behaviour was that his Dad did not take him home

If he [Dad] had said 'let's go' then he claims it would not have happened

He did it because he was on his own

M demonstrates a highly simplistic perspective and rigidity of thought with his notion that the occurrence was simply as a result of being there and not being at home. He does not take any responsibility for his behaviour, rather asserting in a very rigid manner that his presence there alongside being on his own were the key components for his behaviour.

'It's a triggered event'

To avoid it happening again he should always be with other people

In a similar vein to above, M seems to believe that the behaviour was a 'natural' follow on from the circumstance in which he found himself. The facts that he was there and on his own were enough for the behaviour to occur. Again, in a highly rigid way of thinking, M believes that a simple solution to avoid such things happening again is to always be accompanied by someone else.

### **Lack of Awareness**

As soon as it started he did not know what he was doing

The incident is like 'a memory wipe'

M did not know what was going on

He had no idea the incident was going to happen

When it happened he did not know it was happening

Each of the above examples are of M suggesting strongly that he had no way of knowing what was happening; he did not know that it was going to happen nor what was happening during the behaviour. He does also go on to note that he had no control over what he was doing either. It appears that there is little, if any, awareness or control over his own behaviour. It is not clear why M has such minimal awareness and control of his own behaviour, only that it appears to be a strong component in why the behaviour occurred.

M has no way of deciding between right and wrong

M notes himself that he does not have the ability to discern between right and wrong. This lack of awareness of what could be regarded (by most NTs) as a fairly simple ability could be one of the contributing factors for M behaving in a particular way.

### **General Discussion**

M's behaviour included a high degree of violence towards another person/persons. Despite this, he seems to have had very little or no control over the behaviour — and recognises the extremely negative aspects of it himself, though at the time no such thoughts occurred to him. It appears that M's ability to think and control himself were at least hugely impaired if not absent during the behaviour itself, and his lack of Theory of Mind may well have been a contributing factor.

Issues that this case study raises include:

- How can people with AS be supported to develop conscious thought of other people even if they lack an intuitive Theory of Mind?
- What causes the lack of control that appears to be critical in this incident?
- M notes that he is not able to distinguish between right and wrong; are conventional ways of developing this sense in NT children appropriate for the population of people with AS?

M clearly lacks a Theory of Mind; while this is not necessarily a negative aspect for a person, in this case it would seem that had a more conscious thought process taken place regarding the well being of other people, alongside with motivation to upkeep that wellbeing, then the situation may have been avoided. However, M does note on several occasions that he had no control of his own behaviour. If this is, indeed, the case, then serious questions should be asked regarding how an individual with AS can reach such a state, and if – or how – it can be avoided. In terms of M's inability to judge right and wrong behaviour, the key question is how can people with AS develop their sense of right and wrong in a society that predominantly teaches such concepts in a way conducive to the NT population – thus potentially alienating those with AS in their learning.

# **Case Study Four Background**

B is a young man who was excluded from school and arrested for attempting to attack a teacher with a knife.

# **Case Study Four Matrix**

# **AS Specific**

- 1. B did not think what would happen to him if he tried to kill his teacher
- 2. B did not think about the consequences for himself or anyone else
- 3. B assumed the teacher was talking about him in a negative way from hearing his name
- 4. B thought that the teacher was laughing about him with another pupil
- 5. B thought that the teacher was laughing about him and pointing at him
- 6. Having the teacher dead would have made B feel happy
- 7. Does not know how to behave with other people
- 8. Does not know how to act
- 9. School surroundings are stressful, particularly the playground when it is too packed

	10. Stressed out because it was coming up to Christmas
	11.Feels sorry for what he tried to do because it meant he was excluded
AS Inferred	12. Killing the teacher would have got rid of his internal voice
	13. The other teacher should have radioed down
	14.B was upset and angry
	15.B was angry at being stopped from killing the teacher
	16.He had had a run in already that day with someone else
	17. Felt he could not have behaved in any other way
	18. Had no control
	19. Not a little bit of control
	20. None at all (control)
	21.In terms of choice only had one
	22. Difficult to control behaviour when stressed
	23. Harder to think about other people when stressed
Environmental	24. Her talking and laughing made B want to kill her

25. People are always talking about him
26. Has felt upset in the past when other people have been talking about him nastily
27.People talk about him a lot
28. Other people talk about B nastily
29. Not been happy at school
30. Girls snigger at him every day
31.B feels that there is no support for him at school
32.B felt that the teacher did not respect him compared to the other pupils
33. Pupils at his old school did not respect him either
34.She [teacher] was nasty and you cannot walk away from a teacher
35. Teacher did not understand him very much
36. Indication of premeditation
37.Recognises how killing the teacher would not have solved anything
38. Felt sad afterwards once he had calmed down

# Breakdown for Analysis

# AS Specific

Central Coherence	1,2
Communication	3,4,5
Theory of Mind	6,12
Social Understanding	7,8
Sensory	9
Resistance to Change	11

# **AS Inferred**

Imaginary Voice	12
Logic / Makes sense to the individual	13
Angry / Upset	14
Compulsion	15
Stress	16,23
Lack of control	18,19,20,22
Lack of Choice	17,21

# Environmental

Being ridiculed in some way	24,25,26,27,28,30	
Bad experience at school	29,31,34	
Lack of respect	32,33	
Lack of understanding	35	

# **Non AS Specific**

Executive Functioning	36
Central Coherence	37
Theory of Mind	38

# Discussion of data, case study four

# **Being Ridiculed**

Her talking and laughing made B want to kill her

People are always talking about him

Has felt upset in the past when other people have been talking about him nastily

People talk about him a lot

Other people talk about B nastily

Girls snigger at him every day

B articulates on several occasions that he felt that he was being laughed at, or that other people (both the teacher and other pupils) were being nasty about him. This is noted on the matrix as an environmental factor, but one which is the most commonplace as an overall element. B seems to feel strongly about other people being negative towards him and it could be argued that his reaction to genuinely believing that a teacher was talking about him and laughing about him with another pupil is directly related to B's long term negative experiences with school, teaching staff, and peers.

### **Lack of Control**

Had no control

Not a little bit of control

None at all (control)

Difficult to control behaviour when stressed

B notes on several occasions that he had no control over his own behaviour. He also associates this lack of control with being in a highly aroused emotional state, in this case stress. B is highly resolute that his control was nil, that there was absolutely no control at all over his own behaviour.

# **Bad Experience at School**

Not been happy at school

B feels that there is no support for him at school

She [teacher] was nasty and you cannot walk away from a teacher

B appears to feel that school in general is an unsupportive environment and that he has never been happy there. Again, this is an environmental factor, but clearly an important one. The last point is an interesting one; B argues that the teacher was being nasty about him but he could not walk away. This may be an indication of B following the 'rules' in a rigid fashion, unfortunately then meaning that a possible option – to walk away from the situation – was denied him.

### Communication

B assumed the teacher was talking about him in a negative way from hearing his name

B thought that the teacher was laughing about him with another pupil

B thought that the teacher was laughing about him and pointing at him

These are all examples of how B may have misinterpreted both verbal and non verbal communication. It is not known exactly what the teacher has said, but it is clear that B has inferred much from minimal data. He notes himself that he did not hear what was being said, but had heard his name. It would seem that it was B's interpretation or, possibly, assumption, that then led him to believe that the teacher was being negative about him.

### Central coherence

B did not think what would happen to him if he tried to kill his teacher

B did not think about the consequences for himself or anyone else

Both of these examples highlight B's inability (in the given context) to understand the wider consequences of his own behaviour. Despite the severity of his intended behaviour, at the time B did not consider consequences either for himself or anyone else, including the teacher. His central coherence appears to have a focus solely on the immediate situation only.

# Theory of Mind

Having the teacher dead would have made B feel happy

Killing the teacher would have got rid of his internal voice

It is apparent here that B demonstrates a definite lack of Theory of Mind; the first example shows that he did not think about the teacher, rather his thoughts were about his own needs. The second example is less clear; some individual with AS (Gerland, 1997, Hall, 2000) note their internal voices or imaginary worlds. Here B mentions that it was his internal voice 'telling' him what to do; what is clear is that B does not consider the teacher in his processing.

# **Social Understanding**

Does not know how to behave with other people

Does not know how to act

B articulates clearly here his inability to know how to behave appropriately around other people. Taken in conjunction with the examples demonstrating other people ridiculing him, this could be an important aspect of why B behaved in the way he did. His inability to behave in a socially acceptable way may link directly with other pupils responding negatively towards him which, in turn, could make him vulnerable to any level of teasing.

### **Stress**

He had had a run in already that day with someone else

Harder to think about other people when stressed

B refers to stress both explicitly and implicitly here. Having already had a 'run in' that day could have exposed B to high states of stress; he then infers that he was in a high state of stress by noting that he found it difficult to think about other people. Interestingly it appears that B is suggesting that his Theory of Mind was affected by his levels of stress.

### Lack of choice

Felt he could not have behaved in any other way

In terms of choice only had one

B notes here that he felt he had no choice in terms of how he behaved. Simply, there was only one option in his mind, and that was to attempt to kill the teacher.

### Lack of respect

B felt that the teacher did not respect him compared to the other pupils

Pupils at his old school did not respect him either

B feels that pupils and teachers alike do not respect him. While this may seem somewhat innocuous in isolation, taken in conjunction with B's negative experience at school, his inability to socially conform, and his anxieties over people ridiculing him, it becomes more consequential.

### **General Discussion**

This case study is a fascinating one. From one perspective it would appear that an individual has premeditated a violent attack on a teacher with the intention of murder. However, taking all aspects into consideration it would appear that a very different perspective is equally, if not more, valid. B is a young man who has feels that school does not support him; that teachers and pupils alike ridicule him; who has AS and thus finds communication – both verbal and non verbal – problematic; who has seen and heard a teacher talking – and has interpreted this as being directly nasty to him; who has heightened stress levels which cause his ability to think of others to reduce; who claims he had no other choice but to behave in the way he did, and that he had no control whatsoever over his behaviour. Collectively, these elements lead me to believe that B's AS, in conjunction with a number of environmental factors, were the key to his behaviour. If this is the case, it could be argued that had the environmental factors differed, then the outcome would also have changed.

Issues that this case study raises include:

- B's education of non curriculum subjects
- The impact of bullying on B

B appears to have problems with interpreting verbal and non verbal communication, as well as a poor understanding of how to behave in social situations. Neither of these areas are taught directly in mainstream schools. Additionally, his lack of ability to fit in socially has, in all probability, led to him being victimized regularly and continuously throughout his school life. This may explain why, on a day when stress levels were heightened anyway, a further example of B being a victim led to such an extreme response.

# Case Study Five Background

D is a young man with a self confessed history of shoplifting culminating in him getting caught shoplifting goods from Marks and Spencer. Until that point he had not been caught or involved with the police in any way. In this particular instance D had been spending a busy day travelling around London until he found himself unexpectedly with some time to spare before meeting with a friend. He decided he needed something to eat and went to the shop to buy something, but ultimately stole a sandwich and a bottle of Champagne.

# **Case Study Five Matrix**

### AS Specific

- 1. D did not know what he was doing or what would happen next
- 2. Shop was packed
- 3. Recognised how obvious he was being but only in hindsight
- 4. His plans for the day did not get fulfilled
- 5. Did not want to queue
- 6. The lights in the shop were flickering
- 7. The fridges were buzzing
- 8. There was a lot of noise from people and babies

	9. Did not want to risk looking 'like an idiot' by not being able
	to communicate with the person on the till
	10. Did not have to suffer waiting in the queue
	11. Period of unstructured time
	12. Gallery was unexpectedly closed
Í	13. Had no idea what to do with himself
AS Inferred	14. Shoplifting is a regular thing to do
	15. New to London
	16.He was unwise to be travelling round London, it was very
	busy, wore himself out
	17. 'so much choice'
	18.Took half an hour trying to decide what to have
	19. Did not know what he wanted to drink
	20.Not in a reasonable state of mind to be able to think
	through what he was doing
	21. What he was doing did not seem like a good idea (did not
	even want what he had chosen)
	·
	22.D was doing it to get out of a horrible situation as soon as
	possible

- 23. A decision was made that he needed to get out of the shop
- 24. Was not making rational or reasonable decisions at that point
- 25. Had no power to stop
- 26. In a completely confused state
- 27. High levels of activity had led to mental tiredness
- 28. Not in control
- 29. Could not stop what he was doing
- 30. Felt drained, no resources left
- 31. When drained feels dead inside
- 32. 'Nothing left of me'
- 33. When drained D does not have the recourses to cope with anything
- 34. Cannot make a decision
- 35. Too much choice in the shop
- 36. Cannot decide what to have
- 37. Not in control or able to stop

38. Shoplifting is a hobby, pastime, fills a void when D does not know what to do

39. No alternative at the time

40. If the 'right' circumstances are there it will happen

41. Depends on stress levels

42. Only choice

43. Stealing is only as bad as what the shops do, balances things out

44. Quite noble – shops have atrocious business practice

45. It's a habit

# **Breakdown for Analysis**

# **AS Specific**

Executive Functioning	1,4,5,10,11,12,13
Sensory	2,6,7,8
Theory of Mind	3
Communication	9

# **AS Inferred**

Routine	14,38,45
Anxiety / Stress / Draining	15,16,27,30,31,32,33,41
Too much choice	17,18,19,34,35,36
Inability to think	20,21,24,26
To reduce stress	22,23
Lack of control	25,28,29,37
Only choice available	39,40,42
Fairness	43,44

# Discussion of Data, Case Study Five

# Anxiety / stress / being drained

New to London

He was unwise to be travelling round London, it was very busy, wore himself out

D provides the reason behind why he felt so tired and drained in these examples. People with AS do not generally cope well with new situations and D had spent a long time travelling around his new environment with a packed schedule.

High levels of activity had led to mental tiredness
Felt drained, no resources left
When drained feels dead inside

'Nothing left of me'
When drained D does not have the recourses to cope with anything
Depends on stress levels

In these example D notes that the high levels of activity have, in turn, led to mental tiredness and the feeling of being drained. He articulates how the feeling of being drained affects him, noting that he feels 'dead inside' and that there is 'nothing left of me'. His ability to think appropriately and behave accordingly are affected by his levels of mental tiredness and the stress that comes with it.

### **Executive functioning**

D did not know what he was doing or what would happen next

This appears to be a good example of a person with AS not have the ability to plan or sequence his own actions. Executive functioning effects the ability to predict what may happen next, and here D explicitly notes that he did not have the ability at that time.

His plans for the day did not get fulfilled

Gallery was unexpectedly closed

Both of these example link in directly with executive dysfunction. Many people with AS plan an itinerary in order to reduce stress and anxiety over not knowing what might happen. Here, D had planned his day but those plans, as a result of an unexpected circumstance (in this case the gallery being closed) have not come to fruition.

Did not want to queue

Did not have to suffer waiting in the queue

Similar to many people with AS, particularly at times of stress, D appears to find queuing highly problematic. Not knowing how long one has to wait, as well as close proximity to others can mean queuing is a highly stressful proposition to many individuals.

Period of unstructured time

Had no idea what to do with himself

These examples demonstrate that D found himself, unexpectedly, in a period of unstructured activity. Lack of ability to plan effectively in such situations can lead to escalating anxiety levels for people with AS, and D's lack of executive functioning in this situation lead to – as D notes – having no idea what to do.

### Too much choice

'so much choice'
Took half an hour trying to decide what to have
Did not know what he wanted to drink
Cannot make a decision
Too much choice in the shop
Cannot decide what to have

D explains very clearly that he finds choices, specifically over what to eat and drink in this situation, incredibly difficult. He suggests that it took him half an hour to decide on what to eat – indeed, even after this time feels that he has made the incorrect choice. In a highly logical manner, if presented with a choice, it would be fair to suggest that statistically the more choice available, the harder the decision will be. Added to this, D's state of mind at the time exacerbates the problem, leaving D in a situation whereby making a considered choice almost impossible, leading to even higher stress levels.

# **Sensory issues**

Shop was packed
The lights in the shop were flickering
The fridges were buzzing
There was a lot of noise from people and babies

D identifies three specific areas of sensory problem; firstly, he notes that the shop was packed; secondly, that he was processing the flickering of the lights; thirdly, that there were auditory issues stemming from both the fridges making a noise, and other people and babies making a lot of noise. Many individuals with AS report on huge problems with sensory issues, particularly at times of high anxiety. Hypersensitivity to sound and light are very common in such reports, and it would appear here that D was experiencing hypersensitivity in these areas.

# **Inability to think**

Not in a reasonable state of mind to be able to think through what he was doing

What he was doing did not seem like a good idea (did not even want what he had chosen)

Was not making rational or reasonable decisions at that point In a completely confused state

D suggests that his ability to think cohesively and sensibly was not present while he was in the shop. He describes his state of mind as 'completely confused'. It may be reasonable to suggest that his levels of stress at this point were such that he did not have the cognitive ability to process information in an appropriate way.

### Lack of control

Had no power to stop

Not in control

Could not stop what he was doing

# Not in control or able to stop

D demonstrates clearly that his ability to control his own actions had ceased to exist when in the shop. He does not feel at all in control of his own behaviour.

### **General Discussion**

D clearly took food and drink out of the shop without paying, having placed the items in his bag. This is far too simplistic a view on the incident, however; D's AS appears to play a hugely important part in the process:

D was mentally drained after a busy day in a new environment. His plans were not fulfilled when a gallery was unexpectedly closed, and D found himself in the stressful situation of having two hours of unstructured time prior to his next engagement. D decided to get something to eat, and entered the shop; at this stage it could be suggested that D's anxiety levels were higher than the norm taking elements thus far in the day into account. While in the shop D faced a considerable choice in what to buy, while at the same time having his senses overloaded by the environment. At this point D had no control over his own behaviour, but simply needed to get out of the shop as quickly as possible. The combination of poor executive functioning, sensory issues, and lack of control as a result of high levels of stress led to the behaviour.

Issues that this case study raises include:

- How to teach people with AS alternative strategies when stressed
- Public environments

D does not appear to have any coping mechanisms outside of shoplifting, although he does recognise that he needs to develop alternatives. He has had no support in doing this, and yet it would seem integral to his ability to behave in an appropriate manner.

Many individuals with AS articulate how problematic some public environments are, particularly large shops, from a sensory perspective. While it is recognised that large shops would find it tremendously problematic to redesign the environment for a relatively small percentage of the population, it could help many individuals if there were areas of low arousal where individuals could escape to at times of high anxiety.

# Case Study Six Background

P has been arrested on a number of occasions for criminal damage, almost invariably involving throwing bricks through windows. Two incidents are included in the matrix; firstly P threw a brick as a result of an altercation with a person in the street; the second incident involved P's girlfriend's previous boyfriend who, when they had been going out together, had cheated on her.

# Case Study Six Matrix

<del></del>	
AS Specific	P did not think about what would happen to him
	P just thinks about what he is going to do, not what might happen to him as a result
AS Inferred	3. He was 'winding me up'
	4. He was rude to P
	5. Being rude to P's brother
	6. P was being ignored
	7. He felt angry
	8. He was punishing him for cheating on his girlfriend
	9. He always breaks windows, he likes things to be fair

	10. He punishes people
	11.'I'm a fair guy'
	12.P asserts that if someone was in the wrong then he would beat then up
	13.P thinks lots about things being fair
	14.He would never harm anyone who had not harmed him or his girlfriend
	15.Would only harm someone if they had upset him or his girlfriend
	16. Feels wound up a lot of the time
	17. Kick and breaks things to calm himself down
	18. Feels angry so kicks and breaks things
	19. Wants to be seen as a good person and big hearted
	20.P believes he is right and fair
Non AS Specific	21. Has total control over his behaviour
	22. Feels he could stop any time

# **Breakdown for Analysis**

# **AS Specific**

Executive Functioning	1,2	
i <sup>r</sup>	1	┙

# AS Inferred

Anger	3,6,7,16,17,18
Being rude to him / brother	4,5
Fairness	8,9,10,11,12,13,14,15,19,20

# **Non AS Specific**

Control	21,22	

# Discussion of data, case study six

# **Fairness**

He was punishing him for cheating on his girlfriend
He always breaks windows, he likes things to be fair
He punishes people
'I'm a fair guy'

P asserts that if someone was in the wrong then he would beat then up
P thinks lots about things being fair
He would never harm anyone who had not harmed him or his girlfriend
Would only harm someone if they had upset him or his girlfriend
Wants to be seen as a good person and big hearted
P believes he is right and fair

Many people with AS demonstrate high values and a need to be fair. In this case on several occasions P stresses his need to be fair, and seems to believe genuinely that his actions are just and appropriate taken in context. This may explain why P notes that he is totally in control of his behaviour; it is possible that in a highly rigid way he believes that he is justified in acting in certain ways towards other people; his rigidity suggests that his sense of fairness is only based around himself and those close to him, for example his girlfriend and his brother.

# **Anger**

He was 'winding me up'
P was being ignored
He felt angry
Feels wound up a lot of the time
Kick and breaks things to calm himself down
Feels angry so kicks and breaks things

It appears that almost as important to P's behaviour as fairness is his issues with anger. It seems that P often feels in a high state of arousal, and one way of reducing this feeling of stress is to break things.

### **General Discussion**

Although it seems fairly clear that the combination of the need to be fair and high levels of stress and anger are at the root cause of P's behaviour, it is difficult to link these directly to any one aspect of P's situation. Certainly it could be suggested that had P been taught using databases such as the 'scales of justice' (Attwood, 2007) then potentially his behaviour could have been altered. Similarly, had P been given the opportunity to recognise his own emotional state and control it, then his anger may have not given rise to extreme behaviour. P clearly believes that he is a fair and just individual. His attitude appears to be that if a wrong doing has been committed against him (or someone he sees as his to protect) then he will react in a specific way; this could be attributed to an inflexible thought process; in combination with a lack of teaching around concepts such as justice this may mean that P only has one reaction to feeling angry at other people's wrong doings.

# Case Study Seven Background

C is a woman who purchased several knives and a gun in order to act against a particular group of individuals who had been bullying her. She had attempted to get the individuals concerned arrested by complaining to the police, but no action had been taken. C cut the interview short as she was feeling somewhat overwhelmed, which meant I could not ask her questions specific to AS; however, the material she did offer provide a great deal of insight into her behaviour.

# **Case Study Seven Matrix**

# AS Inferred 1. Bullying at school 2. Lost her favourite mobile phones 3. Being unfairly treated 4. Bullying (being bullied) 5. Bullying led her to buy a gun 6. Bullying made her commit the crime 7. They (the bullies) threw sticks and stones and rocks at her 8. They took things from her 9. They kicked and punched her

	10. They threw things at her window which led her to commit
	the crime
	11. Brought the gun to fight off bullies
	,
	12. Had no other choice
	12. Had no other choice
	40 Delian did not amond amond a Chad to take the law fints
	13. Police did not arrest anyone so S had to take the law 'into
	her own hands'
,	
	14. Had nightmares about relationships
	15.C did not care if she went to prison, just wanted bullying to
	stop
	·
	16. Wished others had been arrested
	10. Wished others had been arrested
	47. They would had appropriate about C and builtied have
	17. They made bad comments about S and bullied her
	18. They tried to make her do things – e.g. swear and fight
	19. She would not have done it had the others been arrested
	·
	20. She had no other choice
	21. Tried to involve police but to no avail
	2
	•
Continuo se	22 Loot har family / navanta
Environmental	22. Lost her family / parents
	23. Been through 'so much' in her life
	24.Did not like the residential home she had to stay in for ten
L	

years
25.C was beaten up as a child by her father

# **Breakdown for Analysis**

# **AS Inferred**

Being bullied / victimised	1,3,4,5,6,7,8,9,10,11,14,15,17,18
Loss / bereavement	2
Lack of choice	12,13,16,19,21

# **Environmental**

Global reasons for feeling negative	22,23,24,25	
-------------------------------------	-------------	--

# Discussion of data, case study seven

Bullying at school

Being unfairly treated

Bullying (being bullied)

Bullying led her to buy a gun

Bullying made her commit the crime

They (the bullies) threw sticks and stones and rocks at her

They took things from her

They kicked and punched her

They threw things at her window which led her to commit the crime

Brought the gun to fight off bullies

Had nightmares about relationships

C did not care if she went to prison, just wanted bullying to stop

They made bad comments about S and bullied her

They tried to make her do things - e.g. swear and fight

C was asked in her interview what the first thing she believes that she recalls influencing her behaviour at the time the incident occurred, and almost straight away she mentions being bullied at school. The bullying or victimisation is mentioned more than any other element identified in the narrative, much of it not by the individuals she eventually responded to. She is emphatic that she wanted the bullying to stop, even if it meant that she had to go to prison. It appears that at the forefront of C's mind is her being a victim rather than a criminal.

### Lack of choice

Had no other choice

Police did not arrest anyone so S had to take the law 'into her own hands'

Wished others had been arrested

She would not have done it had the others been arrested

She had no other choice

C seems to believe firmly that she had no other choice but to act in the way she did. Her only other option, as she sees it, was to involve the police. She did so, but without the desired result. Essentially this left in a position where all other options had been explored and she was left, from her perspective, with only one logical choice left. She does acknowledge that she wished the bullies had been arrested instead, but appears to be highly logical in her reasoning that as they had not been she had to 'take the law into her own hands'.

#### **Environmental**

Lost her family / parents

Been through 'so much' in her life

Did not like the residential home she had to stay in for ten years

C was beaten up as a child by her father

It is interesting to note that none of these aspects followed any prompt during the interview; S provided the information as a direct result of being asked what had led her to behave in the way that she did. Interspersed with the many references to being bullied C also notes other reasons that could be interpreted as leading to a negative emotional state.

#### **General Discussion**

Although C appeared to be premeditated and clear in her conduct, there appears to be key underlying factors that led her to behave the way in which she did. Not only has she led a life of long term negativity, she has also been a victim of long term abuse, in the form of bullying. She was also beaten as a child by her father; according to her mother this almost killed her. Many people with AS are vulnerable to bullying, and it seems that in C's case the potential consequences are severe. Although C had long since left school, the bullying continued; it was frequent and violent. C attempted to take appropriate action by contacting the police, but the bullying continued until C, ultimately, perceptually had no choice but to attempt to stop the bullying in her own way.

#### Issues that this case raises include:

- How are individuals protected from bullying at school?
- Is C a victim of post traumatic stress disorder(PTSD)?
- Could an argument of self defence be used for C?

It would appear sensible to suggest that had C not been bullied then she would not have behaved in such a manner. Many individuals with AS are vulnerable to bullying, and this case highlights the necessity of preventing bullying taking place with this population.

The question as to whether C is a victim of PTSD is a hypothetical one, but one of potentially huge importance. While being a victim of bullying may not cause everyone to react in the same way, it is possible to argue that for someone with AS, who may be constantly misunderstood and abused (often unintentionally), overt and consistent bullying could lead to major trauma. If this is the case then it may help to explain C's behaviour.

In a similar vein to the above, could long term victimisation provide C with a case to argue for self defence? She clearly attempts to involve the police, an appropriate form of action, but with the bullying continuing unabated it could be argued that she had no other choice but to defend herself. Additionally, C is a person who has not had a positive life; she was bullied at school and had to live in a home that she did not like. It is probable that C does not have a history of other people defending her which may lend weight to the argument that C had little or no choice (from her perspective) but to take matters into her own hands.

## **Case Study Eight Background**

R is a young adult who went on holiday with his mother when he was 17 years old. The holiday was not a success; the caravan that they were staying in had problems with the sewage so R left to take a walk. He ended up in a playground where he noticed 3 young children. It transpired that they were looking for a locket that the 6 year old girl had lost. R attempted to help look for the locket, which included him searching under her clothing, leading to R's arrest for sexual offences.

## Case Study Eight Matrix

## **AS Specific**

- R approached the children without being asked or prompted in any way
- 2. R's previous experience was when his Mum lost a locket which she found in her clothing
- 3. Why would I do it in front of a camera?
- 4. CCTV clearly marked
- 5. Was not able to read her body language
- 6. R finds it difficult to interpret situations
- 7. Other people can read situations and know when to stop (R cannot)
- 8. Saw nothing wrong with approaching the children

	<del> </del>
	9. R does not like surprise, he has to know 'what is going on – else I panic'
	10.R's sister had also once lost a locket and found it in her clothing
	11.R was well aware of the CCTV
	12.Never occurred to R that his behaviour might be
	13.At that point in time 'nobody else in the entire world existed'
	14.R was unconcerned with CCTV or passers-by, and was surprised by the outcome
	15.His problems with body language meant that he did not notice any from the girl
	16.Thinks it is probably quite common to lose jewellery in clothing
AS Inferred	17.R describes himself as curious (about his environment)
	18.R notes that he could have taken her into the nearby woods if he was doing anything inappropriate
	19.R likes to help people
	20. The girl was in distress and he wanted to make her happy

21. Other people's happiness is a great motivator for R
22.R is committed to helping people

# **Breakdown for Analysis**

# **AS Specific**

Social understanding	1,6,7,8
Rigidity of thought	2,10,16
Theory of Mind	3,4,11,12,14
Communication	5,15
Executive functioning	9
Central coherence	13

# **AS Inferred**

Curiosity	17
Logic	18
Need to help	19,20,21,22

# Discussion of data, case study eight

# **Theory of Mind**

Why would I do it in front of a camera?

CCTV clearly marked

R was well aware of the CCTV

Never occurred to R that his behaviour might be misconstrued

R was unconcerned with CCTV or passers-by, and was surprised by the outcome

R clearly demonstrates a lack of ability to think about or understand how someone else might perceive his actions. He states that he was totally aware of the CCTV cameras that were present, inferring that he does have a good understanding that he was being filmed. Indeed, he also mentions passers-by – it is not clear whether there actually were any or not; either way R is not concerned with what they may be thinking. R shows a total lack of other peoples' perspectives in his narrative; he clearly believes that what he was doing was perfectly innocent and therefore would be seen as such by other people. He does not recognise that other people may interpret his behaviour in any different way – noting that he was surprised by the outcome.

## Social understanding

R approached the children without being asked or prompted in any way
R finds it difficult to interpret situations
Other people can read situations and know when to stop (R cannot)
Saw nothing wrong with approaching the children

R implicitly demonstrates his inability to recognise how to approach and deal with social situations appropriately by approaching the children and getting involved in the first instance, without any thought of negative repercussions. He also explicitly suggests that other people know how to behave in social situations and 'know when to stop' – something that he is not able to do. This incident required social skills in order to behave in what would be deemed an appropriate manner, skills that R did not have.

## The need to help

R likes to help people

The girl was in distress and he wanted to make her happy

Other people's happiness is a great motivator for R

R is committed to helping people

R notes that it is a highly motivating factor for him to help people and that making other people happy is very important to him. In a simplistic way R saw the young girl in distress and felt a need to help her; thus, logically, he did everything he could think of to do so.

### Rigidity of thought

R's previous experience was when his Mum lost a locket which she found in her clothing

R's sister had also once lost a locket and found it in her clothing Thinks it is probably quite common to lose jewellery in clothing

R's main associated recollection of lost lockets is from when his mother lost one several years prior to the incident; she found the locket inside her clothing when getting ready for bed. R was aware of this; in addition his sister had also found a lost necklace in her clothing. It was highly logical for R, with a rigid thought process highly characteristic of AS, to look for the locket in the same place where previously, in his experience, lockets are to be found.

#### **General Discussion**

It would seem that this case study is extremely clear once R's AS and perspective is taken into account. In the first instance R is highly motivated to help people. He has demonstrated this since by being a volunteer for St John's; previously he was a volunteer marshal. R gets a lot of pleasure out of making other people happy, irrespective of who they are. It seemed perfectly natural for R to approach a young girl who he noted was in distress. On hearing that her distress was caused by losing

a locket he assisted in finding it. Once he had searched the small playground he logically searched the place where he knew from past experience (associated with his mother and sister) lockets were most likely to be found. Clearly R did not think how this might affect the girl, nor did he think there was anything untoward in his behaviour; he was simply performing an action that might help find the locket and make her happy.

Issues that this case study raise include:

R's education of non curriculum subjects

If R had had the opportunity to learn directly about social situations, in particular what appropriate boundaries are, then it is less likely that the incident would have taken place. Similarly, had R been taught how to make appropriate choices around his own behaviour then he may have approached the situation differently. Certainly it would seem that had R had a better understanding of what other people deem appropriate and inappropriate, alongside guidance as to how to judge for himself, then it is, again, less likely that R would have behaved in exactly the same way. What does seem clear is that R was behaving out of kindness and a need to help, rather than having any malicious intent whatsoever.

### Case Study Nine Background

F did not wish to disclose what he had been arrested for, but did state that he had been arrested several times, that he had been sentenced to 12 years in prison, and that if he had gone to prison (as opposed to a secure hospital) then he would have had to be segregated for his own safety.

## **Case Study Nine Matrix**

## AS Specific

- F did not know what was appropriate and what was not (social behaviour)
- 2. F did not know what to do (social behaviour)
- 3. F did not understand when people tried to teach him between right and wrong
- 4. F needs things to be broken down into individual components in order for him to understand them
- 5. Could not maintain social relationships
- 6. Social inadequacy played a part in his behaviour
- 7. F isolated himself went 'into his own world'
- 8. F is unable to 'see' the bigger picture

	9. Thoughts about his victims (F's word) entered his head but he did not understand them
	10. Never knew if other people were laughing at him or making fun of him
	11.Right and wrong is confusing
	12.In some situations it is difficult to know how to go about things, what is right and what is wrong
AS Inferred	13. Problems at school
	14. Lots of bullying
	15.Was a loner
	16. Minimal number of friends
	17. Bullying got worse
	18. 'Wanted out of life itself' because of lack of friends
	19.Very socially isolated
	20. Nearly committed suicide twice due to isolation
	21.Felt he was the odd one out
	22. What could I do, what else could I do' (in relation to behaviours)

	23.Tried suicide, social workers and Educational Psychologists, but none of it worked
	24. All of it was down to others' judgement of him or reaction to him
·	25. Other people did not want to know him
	26.Following rejection F entered 'an autistic mute state of mind' – isolated self emotionally and physically
	27. Had no friends, nor anyone to talk to
	28. Everybody was out 'to take the piss' of him
	29. Wanted to opt out of his situation
	30.Was not in control of his own life
·	31.F was isolated – he had no life
	32.Wanted to be taken for who he was, not what people judged him to be
	33. Constantly misjudged
	34. Lack of acceptance
Environmental	35.Was a victim of child abuse as a child
	,

Non AS Specific	36. It is a choice (the behaviours) – the wrong one, of course
	37. It was a daft choice to make (in hindsight)

# **Breakdown for Analysis**

# **AS Specific**

Social	1,2,5,6,7
Communication	3,4,10
Central coherence	8
Theory of Mind	9
Rigidity of thought	11,12

# **AS Inferred**

Being bullied	13,14,17
Lack of friends / isolation	15,16,18,19,20,21,25,26,27,28,31,34
Lack of choice	22
Logical thought	23,24,29
Lack of control	30
Being misjudged	32,33

# **Environmental**

Victim of abuse	35

# Non AS Specific

Choice	36,37	

## Discussion of data, case study nine

#### **Lack of Friends**

Was a loner

Minimal number of friends

'Wanted out of life itself' because of lack of friends

Very socially isolated

Nearly committed suicide twice due to isolation

Felt he was the odd one out

Following rejection F entered 'an autistic mute state of mind' – isolated self emotionally and physically

Had no friends, nor anyone to talk to

Everybody was out 'to take the piss' of him

F was isolated - he had no life

Constantly misjudged

Lack of acceptance

F clearly has major issues regarding his social isolation and lack of friends. Despite there being seemingly no direct link between his social life and committing a crime, F mentions his isolation and lack of friends regularly throughout the interview, and suggests that perceptually, at least, from his point of view there is a more direct link than one might have thought.

# Social understanding

F did not know what was appropriate and what was not (social behaviour)

F did not know what to do (social behaviour)

Could not maintain social relationships

Social inadequacy played a part in his behaviour

F isolated himself – went 'into his own world'

Similar to almost everyone with AS F notes that socially he is not able to maintain relationships and that he found it difficult to recognise what is socially appropriate behaviour and what is not. The last example here relates to when F had been confused in how to develop friendships and relationships so had to isolate himself as a result. It would appear sensible to suggest that F's inability to understand social appropriateness is linked closely with his being bullied at school.

#### Communication

F did not understand when people tried to teach him between right and wrong

F needs things to be broken down into individual components in order for him to understand them

Never knew if other people were laughing at him or making fun of him

F does not appear to have the communicative comprehensive ability to process the way in which people had attempted to reach him. Of poignant note he refers to not understanding the difference between right and wrong when being taught. He also notes that he was unable to tell whether others were making fun of him or laughing at him, a non verbal communicative function that many people with AS have issues with.

## **Being Bullied**

Problems at school

Lots of bullying

Bullying got worse

F appears to have been a victim of bullying at school. It is likely that his difficulty in making friends, his poor understanding of social rules and lack of understanding of non verbal communication as well as receptive verbal communication left him vulnerable to bullying from other pupils.

# **Logical Thought**

Tried suicide, social workers and Educational Psychologists, but none of it worked

All of it was down to others' judgement of him or reaction to him

Wanted to opt out of his situation

This provides an excellent insight into the possible reasons behind F's behaviour. He notes that his aim was to 'opt out' of his then current situation. He has already tried, unsuccessfully, to commit suicide (twice) and had not been successful with the professionals he was involved with. It appears that his highly rigid and logical thought process led him to believe that his extreme behaviour would trigger a change in his circumstance – and, indeed, it 'worked'. He chose to be hospitalised rather than go to prison, and in his own words his life is considerably better now.

#### **General Discussion**

F has been bullied; he has not been able to maintain any friendships successfully in his life; he is isolated; he finds receptive communication problematic. F found himself in an intolerable situation, and has already attempted to 'opt out' of it by trying to kill himself. Ultimately he makes a considered decision to behave in such a way as to trigger a change in his circumstance, and commits an offence. This appears to have been a cycle for F; the behaviour eventually broke the cycle and F is now reasonably

happy in a unit where he attends college and has (according to him) about fifty friends.

Issues that this case study raises include:

- How is it best to teach individuals with AS abstract concepts, such as right and wrong?
- How can individuals with AS be supported in such a way so that they do not feel so isolated that they must behave in extreme manners to change their circumstance?
- How can individuals be supported to feel less isolated, and how can bullying be prevented?

It could be argued that had F been supported better during his school years – for example protected from being isolated and bullied, and taught in a manner that was suited to his AS – then his behaviour later on in life may not have been so extreme.

# Case Study Ten Background

H is a woman who was bullied extensively at school. When she left she became increasingly depressed and attempted to commit suicide, unsuccessfully. With no other history of violent behaviour she planned and carried out an attack on her Grandmother, hitting her three times on the head with a hammer.

# **Case Study Ten Matrix**

AS Specific	Finds it difficult to make friends
.	Really wanted to make friends but could not
	3. Did not think about what would happen to her
	4. Did not think about what other people would think
	5. Could not make friends properly
	6. Always found it difficult to make friends
AS Inferred	7. 'Parents should have helped me more'
	8. Parents did not seem to care when I took overdose
	9. Parents should have realised and done something
	10.Parents did not do anything to stop the bullying
	11.Parents let me down
	12.Angry with Gran for not helping

13. Chose the behaviour as suicide did not work 14. Was feeling suicidal 15. Found it hard to cope with life 16. Wanted to die because of having no friends 17. Was a loner at school 18. Bullied at school 19. Only one friend at school 20. Felt really angry 21. Really upset, lonely, angry 22. Thought by doing it would stop her feeling upset or angry 23. Did not know what I was doing 24. Not aware of any other options at the time 25. Wanted a release from her feelings 26. Behaviour strongly related to being bullied and feeling depressed 27. Felt sad and angry since she was 14 28. Behaviour was a cry for help

	29. Depression would have got worse if she had not done it
Environmental	30.Raped at the age of 10
	31. Always felt her brother was her parents' favourite
	32. Had had an argument with parents the night before
Non AS Specific	33. Planned it the night before

# **Breakdown for Analysis**

# AS Specific

Social	1,2,5,6
Theory of Mind	3,4

# AS Inferred

Logic	7,8,9,10,11,12,13,14,15,16,22,25,28,29
Bullied / isolated	17,18,19,26
Angry	20,21,27
Lack of control	23
Lack of choice	24

# Environmental

Being raped	30
Feeling secondary to brother	31
Trigger	32

# Non AS Specific

Premeditation	33	•	

### Discussion of Data, Case Study ten

## Logic

'Parents should have helped me more'
Parents did not seem to care when I took overdose
Parents should have realised and done something
Parents did not do anything to stop the bullying
Parents let me down
Angry with Gran for not helping

H appears to target her parents and Gran (she attacked her Gran but originally intended to attack her parents at the same time) as a direct result of feeling let down by them; she seems to attribute her feelings of depression to her being isolated and bullied at school, but then blames her family for not protecting her or supporting her. In a rigid but logical manner she attempts to attack those whom she blames for her problems.

Chose the behaviour as suicide did not work

Was feeling suicidal

Found it hard to cope with life

Wanted to die because of having no friends

Thought by doing it would stop her feeling upset or angry

Wanted a release from her feelings

Behaviour was a cry for help

Depression would have got worse if she had not done it

H seems here to be indicating that her life was so bad that she needed to opt out of it in some way. She attempted to commit suicide which did not work; therefore it would seem that she chose an alternative option, one which she hoped would stop her having to feel the way that she did. She needed a release from the feelings that she had been feeling for a lengthy period of time; attacking her Gran seemed to be an option that may help this release.

### **Social Understanding**

Finds it difficult to make friends
Really wanted to make friends but could not
Could not make friends properly
Always found it difficult to make friends

H clearly has problems in her social development, particularly when it come to making friends, something that by her own admission she finds difficult. This lack of friends may well have led to her feelings of isolation and to being bullied, a major factor in the interview.

#### Bullied / isolated

Was a loner at school
Bullied at school
Only one friend at school
Behaviour strongly related to being bullied and feeling depressed

Not only does H demonstrate that she was isolated, lonely, and bullied at school, she herself acknowledges that was a strong factor influencing her behaviour.

#### **General Discussion**

H appears to have been a victim, both of being bullied and isolated at school, and of depression – with the two possible intrinsically linked. H left school and despite making friends at college continued to feel depressed, eventually attempting to take her own life. This did not work, and H remained in the depressive state, a state she blames at least in part on her parents and Gran as she felt they were not helping her. H needed to stop feeling the way she did, and the option of suicide had not worked; thus she attempted something else, in this case trying to kill her Gran and parents. She admits to being shocked afterwards, and although planned the attack also notes that she did not really know what she was doing. It is possible that H was not in her

'right mind' as a result of the long term suffering and depression; it may also be possible to attribute PTSD as a contributing factor.

Issues that this case study raise include:

- How can individuals with AS be protected from bullying?
- How can social understanding be developed in people with AS?
- How can individuals with AS be taught how to make a considered choice involving all the options?

The fact that H was isolated and bullied and had few friends may have been a factor in her behaviour later on in life. If she had been better protected and allowed the chance of learning how to develop social understanding then the bullying may have been reduced or eliminated. It also appears that H is highly rigid and narrow in her understanding of options available to her – first suicide, then attempted murder. This raises the question of how people with AS are taught to understand what choices are available to them? Had H been given the opportunity to understand what options were actually available, as opposed to what she believed at the time, it may have reduced the need for her to behave in the way that she did.

### Case Study Eleven Background

G is a young man who described to me two separate incidents both of which culminated in his being arrested. I have developed two matrices as a result. The first incident described was when G stole up to thirty 'dust caps' which he then gave to two 'friends'. He was spotted stealing and the police were called. The second incident was a physical assault on a young lady who had been calling him names; G pulled some hair out of her head and the police were called.

## Case Study Eleven Matrix 1

## AS Specific

- Was not worried because the worst thing that could have happened was to go to a cell, and he did not mind this as it would be dark and quiet
- 2. G finds it difficult to make friends
- 3. G describes himself as acting weirdly in a social context
- 4. G thinks he can trust people but then they call him names and stop being his friend
- 5. Even though G explains to people why he 'acts weirdly' they still call him names
- His friends had stopped playing with him, G was worried they were going off him and 'wanted to do whatever I could to keep them'
- 7. G wanted them to remain his friends

	8. G thought that if he refused to steal for them then they
	would fall out with him
	9. thought if he stole for them they would stop
	10. People pretend to be G's friend to get what they want
	11.G really believed that if he stole for them then they would
	stay being his friends
AS Inferred	12. My friends were doing it
	13. If he did not steal 'they would start calling me names and
	not be my friends'
-	
	14. People bully G
	15. Has been bullied all his life and been called names
	16.G has had enough (of being bullied)
	17.G is scared of being bullied to the point of there not being
	many places locally that he feels safe
	many places recally that he redic date
Environmental	18. Having friends is important
Livioiiiieillai	10.1 laving menus is important
Non AS Specific	19.G knew that stealing was in the wrong

## **Breakdown for Analysis**

## **AS Specific**

Executive Functioning	1
Social Understanding	2,3,5,6,7,8,9,10,11,12
Theory of Mind	4

#### **AS Inferred**

Echopraxia	12
Logic	13
Being bullied	14,15,16,17

# Discussion of data, case study eleven - 1

## **Executive Functioning**

Was not worried because the worst thing that could have happened was to go to a cell, and he did not mind this as it would be dark and quiet

G notes that he was not particularly worried about the consequences of his behaviour as he thought that the worst that could happen would be incarceration in a cell; he had previously spent a few hours in a cell which was quiet and dark, two aspects of an environment that G actively seeks out. He demonstrates a total lack of understanding of what other consequences might occur, basing his thought process entirely on one incident in the past.

# **Social Understanding**

G finds it difficult to make friends

G recognises that he finds the process of making friends problematic. Similar to many people with AS G does not have an intuitive understanding of social situations, including the innate ability to develop friendships.

Not only does G recognise his own difficulties in developing friendships, he also shows an insight into why this might be the case. He describes himself as 'acting weirdly' when in social contact, which may reduce his chances of making and maintaining friendships.

Even though G explains to people why he 'acts weirdly' they still call him names

This shows G's social naivety; he believes that in order to maintain a relationship he ought to explain why he behaves in certain ways. However, when he has tried this in the past the results have been negative. G is clearly socially lacking in the skills necessary to read social situations and how to respond to them in ways not detrimental to self.

His friends had stopped playing with him, G was worried they were going off him and 'wanted to do whatever I could to keep them'

G wanted them to remain his friends

G thought that if he refused to steal for them then they would fall out with him

thought if he stole for them they would stop

G really believed that if he stole for them then they would stay being his friends

These are additional examples of G's lack of social understanding. He genuinely believed that in order to keep a relationship with the individuals involved all he had to do was to steal for them. G does not realise that he is being socially manipulated – this is also a good example of G's poor Theory of Mind.

People pretend to be G's friend to get what they want

Interestingly G shows here a degree of insight (in hindsight) of why people were pretending to be his friends. It also demonstrates that at the time of occurrence G did not have the ability to recognise the social interplay that was taking place.

My friends were doing it

This echopraxic type of behaviour is not uncommon in people with AS, where socially poor individuals copy other people's behaviour as a coping mechanism.

## **Theory of Mind**

G thinks he can trust people but then they call him names and stop being his friend

G does not have the Theory of Mind ability to recognise how other people might react to him. He also demonstrates a lack of ability to know who to trust and who not to. As noted, many of the examples regarding social understanding also involve an element of poor Theory of Mind.

## Logic

If he did not steal 'they would start calling me names and not be my friends'

G is highly logical (as well as socially naive) in this example; he believes that it was a simple equation of behaving in a way that was instructed, otherwise those involved would act negatively towards him.

People bully G

Has been bullied all his life and been called names

G has had enough (of being bullied)

G is scared of being bullied to the point of there not being many places locally that he feels safe

These are all examples of G noting that he is a victim of bullying. It appears that the bullying has been ongoing and prolonged, starting from a very early age.

#### **Environmental**

### Having friends is important

G is an individual who does want to make and maintain friendships. It is important to note that he does not have a mature understanding of how to do so as noted above; nor does he have a good understanding of what makes a good friend. During the interview he does note that of the two people involved who stated that they would be his 'friends' that currently one was no longer his friend as she had found others to socialise with; the other, G notes, was probably never his friend anyway.

## Non AS Specific

#### G knew that stealing was in the wrong

One might expect that if G knew that it was wrong to steal then as a person with AS he would be less likely to do so. However, in this case it appears that while G knew it was wrong the desire to maintain friendships and reduce the possibility of being bullied overcame any other reason for behaviour.

#### **General Discussion**

G appears to be a person with high levels of motivation for friendships; he also has a history of being bullied. G is socially poor in his understanding of how to make and maintain friendships, and believed that in order to keep so called friends all he needed to do was to steal on their behalf. It is likely that G is also motivated to behave in this way to reduce the potential of being bullied. Although it is clear that G broke the law with full knowledge and control over what he was doing, the underlying causes of why he felt the need to do so are related not to criminal intent, but to his attempts to be socially accepted and not abused.

Issues that this case study raises include:

- G's education of non curriculum subjects
- People with AS being bullied

G does not have the ability to understand relationships, in particular making friends and keeping them. Had he been taught successfully how to do so then it is possibly far less likely that he would have behaved in this way. Similarly, had G not been a victim of bullying it would seem that he would not have been so anxious to appease potential bullies by stealing for them.

## **Case Study Eleven Matrix Two**

AS Specific	G did not think what would happen to him
	2. 'While it is happening I do not think'
	3. 'I don't think, I just do it'
	During the incident G did not think about anything
	4. During the incident of did not think about anything
AS Inferred	5. Hates being called a 'paedo'
	6. Worst thing to be called (paedophile)
	7. Will get really mad if being called names
	8. Kept calling G names
	9. She kept saying it
	10.'I have no control over what I do'

	11.When he was pulling her hair he wanted to stop but was not able
	12.'I don't actually have much control'
	13.If being called a 'paedo' G would go from calm to 'super angry' straight away
	14.G hates paedophiles and what they do
	15.G would understand if he actually was a paedophile but he is not
	16.G gets beaten up quite a lot
	17.Bullied every day
	18. Cannot control what he does when he is angry
	19.Whatever G feels he then wants those responsible to feel the same pain
Non AS Specific	20.'I know what's right and wrong because Mum and Dad have taught me'

## **Breakdown for Analysis**

# **AS Specific**

Central Coherence	1,2,3,4
-------------------	---------

#### AS Inferred

Being called names	5,6,7,8,9,13
Lack of control	10,11,12,18
Logical thought	14,15
Being bullied	16,17
Fairness	19 .

## Discussion of Data, Case Study Eleven - 2

#### **Central Coherence**

G did not think what would happen to him

'While it is happening I do not think'

'I don't think, I just do it'

During the incident G did not think about anything

It appears that at no point during the incident did G contemplate what the consequences might be. Indeed, he is clear that he is not thinking at all; central coherence allows an individual to understand the broader perspective – the macro as well as the micro – something that is not in evidence in this example.

# Being called names

Hates being called a 'paedo'

Worst thing to be called (paedophile)

Will get really mad if being called names

Kept calling G names

She kept saying it

If being called a 'paedo' G would go from calm to 'super angry' straight away

G clearly dislikes being called names, in particular anything that suggests he is a paedophile. In this instance the antagonist called him a 'paedo' several times, something that, as G notes, escalates his anger exponentially.

#### Lack of control

'I have no control over what I do'

When he was pulling her hair he wanted to stop but was not able

'I don't actually have much control'

Cannot control what he does when he is angry

G articulates clearly here that he has no control over his behaviour. During the interview he was extremely clear that he could not control his hand pulling the other individual's hair, and could not have stopped even though he wanted to.

# Logical thought

G hates paedophiles and what they do

G would understand if he actually was a paedophile but he is not

G understandably hates being called names. It would appear from the second comment, however, that he has some belief that the name calling is a genuine reflection of who he is. It appears that one of the frustrations for him is that people are calling him a name that is not an accurate description of himself. As he himself 'hates' paedophiles and what they do to children, and he is being 'accused' of the very same behaviour, it is logical to him to become highly distressed when being called by this name.

#### **Getting bullied**

G gets beaten up quite a lot

Bullied every day

It is not clear how this has an impact on G's behaviour in this instance, but G does mention it during the interview, so it may be that it has some relevance.

#### **Fairness**

Whatever G feels he then wants those responsible to feel the same pain

G explains during the interview that he feels the need to balance pain out – that if someone has caused him pain then that person should also feel the same level of pain. He articulates that the pain he feels is emotional, but that he does not understand how to hurt someone else emotionally, so has to 'translate' the pain into something he does understand – physical pain. Thus his 'instinct' in a situation outlined above is to physically harm the individual in order to balance out his own emotional pain.

### Knowledge of right and wrong

'I know what's right and wrong because Mum and Dad have taught me'

G suggests here that he has a knowledge of what is right and what is wrong, and admits that he is wrong to harm someone else. It is interesting the way G articulates this – that he knows because his parents have taught him, as opposed to having any innate understanding of behaviour. This also strengthens G's argument that he had no control over what he was doing – he harmed the individual despite knowing that it was wrong, indicating, again, a lack of control.

#### **General Discussion**

This incident appears to be fairly clear; G is a young man who has a specific and understandable dislike of being called a specific name; he is taunted by another individual who repeatedly calls him this name until G's anger and need to balance out the pain take over his self control and he attacks the person.

Issues that this case study raises include:

- G's education of anger management
- How to support individuals with AS in decision making

G does not appear to have control over his own emotional state – in this example he notes that his emotional response was extreme in a very short space of time. If he had a better understanding of choices available to him, for example how to release anger and pain in alternative ways, then potentially the 'attack' would not have taken place.

# **Case Study Twelve Background**

S is a woman who has been arrested on several occasions for harassment of various different individuals. Generally the harassment takes place via her writing letters that start off innocuously, and then become inappropriate both in terms of content and volume.

# **Case Study Twelve Matrix**

AS Specific	1. S 'knew her for quite a while'
	Did not think about how the woman would feel receiving the
	letters
	3. S believes people are her friends if they keep looking at you
	and smile at you
	4. Wrote either every day or what seemed to be every day
	5. Did not get any letters back
	J. Did not get any letters back
	6. When she saw the individual S would get sworn at
	7. Did not think of any consequences when writing
	8. S hoped that 'she would give in'
	give in
	9. Despite him being married S did not consider his wife's
	feelings
	10.S did not think what would happen to herself when writing
	the letters

AS Inferred	11.S simply 'kept on doing it'
	12.Knew it was wrong but just kept on doing it
	13.S kept on asking the woman to come with her to an appointment despite being told clearly that she would not come with her
	14. Became 'infatuated' with a bus driver
	15.S claims she had no choice in writing
	16.She kept writing – if she had tried to stop it would not have worked
	17.'Just the way I was at the time'
	18.S is still writing letters to various individuals
Environmental	19. Wrote letters to be friendly
	20. S's original reason for letter writing was to make friends
	21. She wanted a relationship
	·

# Breakdown for analysis

## **AS Specific**

Social understanding	1,5,6
Theory of Mind	2,8,9
Literality	3
Repetitive behaviour	. 4
Central coherence	7,10

#### **AS Inferred**

Compulsion	11,12,13
Obsessional	14
Lack of choice	15,16,17,18

## **Environmental**

Wanting friends	19,20,21

# Discussion of data, case study twelve.

# **Social Understanding**

S 'knew her for quite a while'

While strictly this has an element of truth S actually only 'knew' the woman in question from seeing her at the bus stop every day (she was a friend of S's cousin) and once answered the door to her when she was visiting her cousin. S had never actually spent any time with her alone and the only verbal exchanges were simple 'hellos'. This demonstrates a poor understanding of social relationships and appropriate social behaviour.

Did not get any letters back

When she saw the individual S would get sworn at

After having written several letters and not getting any in return S continued to write, highlighting her lack of social understanding. Indeed, when she did see her the woman spoke negatively to her, swearing at S. This did not deter S who continued writing, once again demonstrating a very poor understanding of social boundaries and behaviour.

### Theory of Mind

Did not think about how the woman would feel receiving the letters

Despite him being married S did not consider his wife's feelings

Both of these examples are clear indications of S lacking the empathic ability to consider the feelings of others. In the first instance S does not think about the feelings of the woman she was writing to; the second relates to S writing to a married man – whose wife she does not consider.

S hoped that 'she would give in'

In this example it appears that S does not regard the woman's feelings at all, but sees the letter writing as a way of trying to 'force' the woman to 'give in' – in this case to accompany S to a hospital appointment.

### Literality

S believes people are her friends if they keep looking at you and smile at you

S's understanding of how to decide whether or not someone is a friend appears somewhat limited, possibly a reflection on poor social understanding as well as non verbal communication. In this example she is referring to the bus driver that she became 'infatuated' with; it may well be that she mistook him looking at her and smiling as meaning that he could be regarded as a friend.

## Repetitive Behaviour

Wrote either every day or what seemed to be every day

S appears to get into habitual or repetitive letter writing once she has 'chosen' someone to write to. This is a familiar pattern for S, and it seems that she writes either every day or nearly every day.

#### **Central Coherence**

Did not think of any consequences when writing

S did not think what would happen to herself when writing the letters

Both examples here show how S did not think about possible wider consequences of her behaviour, either in a global sense or specifically relating to herself. Her central coherence appears to be weak taking these examples into account.

#### Compulsion

S simply 'kept on doing it'

Knew it was wrong but just kept on doing it

S kept on asking the woman to come with her to an appointment despite being told clearly that she would not come with her

S seems to be acting compulsively by writing the letters despite knowing that it was wrong and despite being told in one case that she would not be getting what she was asking for. S does not seem to have control over her letter writing at this point.

#### **Obsessional**

S herself describes her 'relationship' with the bus driver as an 'infatuation' – this could also be seen as obsessional type behaviour, not uncommon in people with AS.

#### **Lack of Choice**

S claims she had no choice in writing

She kept writing – if she had tried to stop it would not have worked

'Just the way I was at the time'

S is still writing letters to various individuals

S claims that she had no choice in her letter writing; it would seem that she is almost unable to resist writing to people, and continues to this day to demonstrate this pattern of behaviour. She notes that this year 'has been a good year' in that she has not written to many people, but also mentioned that she was due in court soon for another incident of harassment by writing letters.

Wrote letters to be friendly

S's original reason for letter writing was to make friends

She wanted a relationship

As S states, the primary reason for initiating contact was to develop some kind of a relationship with the individual involved; in the examples S discussed in the interview the relationship sought was usually friendship (the bus driver being the exception) at first; after a period of (non reciprocal) letter writing the content often became more intimate with S suggesting a closer relationship.

#### General Discussion

S appears to be acting in a way that displays many characteristics of her AS. She seeks friends and initiates contact with them, often based on a socially naive premise. Subsequently she becomes habitual in her letter writing, continuing even when she either has no response or a definitively negative one. There appears to be a level of compulsion regarding her behaviour and a lack of control over it. She does not consider the impact her behaviour might have, either on herself or anyone else involved, demonstrating both a lack of Theory of Mind and central coherence.

Issues that this case study raise include:

- S's education of non curriculum subjects
- S's support mechanisms for controlling her own behaviour

If S had successfully been educated in subjects such as appropriate social contact, how to initiate relationships and how to develop friendships then she may not have needed to write letters to those involved in these cases. S also appears compulsive in her behaviour, an element that she does not seem to have had any support in

either understanding or controlling in any way. Had S been the recipient of support in how to control her own behaviour, in combination with a better social understanding she may not have behaved in such a way.

# **Case Study Thirteen Background**

T is an individual who approached a young female (aged 16) with whom he had had no previous contact. He put his arms around her touching her inappropriately and was arrested for sexual assault.

# Case Study Thirteen Matrix

AS Specific	Because of my autism I could not make friends properly
	It affected relationships with women
	I tried everything [relating to trying to make friends/have relationships] but it didn't work
	4. Would go the wrong way about things
AS Inferred	5. Got frustrated
	6. Frustration got worse
,	7. At the time had no confidence
	8. No control over self at the time of the incident
	9. People tended to get the wrong impression of T
	10.'I am a very misunderstood person'
	11.Went all out to overcome the problems he was having – to get over the 'brick wall'
	12. Tried lots of different things to have friends

	13. Frustrated
	14. Just was not thinking
	15. His mind was stressed
	16.When T does things he uses them as experiments; he is a perfectionist – thought this would work but it did not
Environmental	17.Very troubled time at home
	18.Got no outside help
	19. By myself, no help

# **Breakdown for Analysis**

# **AS Specific**

Social understanding	1,2,3,4
·	

#### **AS Inferred**

Frustration	5,6,13
Lack of confidence	7
Lack of control	8
Being misunderstood	9,10
Trying to make friends	11,12
Poor cognition	14,15
Logical thought	16

#### **Environmental**

Stress at home	17
Lack of support	18,19

# Discussion of data, case study thirteen.

# **Social Understanding**

Because of my autism I could not make friends properly

It affected relationships with women

I tried everything [relating to trying to make friends/have relationships] but it didn't work

Would go the wrong way about things

T notes that his autism (or, more accurately his AS) affected his ability to make friends. He tried many different things to develop relationships, in particular trying to gain relationships with women, but none of them appeared to be successful. He

acknowledges that he did not know how to 'go about' finding a relationship and that everything he did try went unrewarded.

## **Frustration**

Got frustrated

Frustration got worse

Frustrated

It appears that the incident occurred after a period of T becoming more and more frustrated at his lack of success in developing relationships with women. Despite trying hard in various different ways T is not able to gain a relationship, leading to high levels of frustration.

#### Lack of confidence

At the time had no confidence

By the time the incident took place T had lost any confidence in his ability to develop a relationship that he might have previously had. This may have had an impact on his behaviour at the time; his lack of confidence, need for a relationship, and inability to innately understand how to develop one may have led T to act in a manner that ordinarily would not have occurred.

#### Lack of control

No control over self at the time of the incident

It seems that the act itself was outside of T's control; this may be due to a number of reasons – having run out of options, stress levels being high, for example, though this is speculative. What T does insist on is that, whatever the reason, he did not feel in control of his own behaviour at the time of the incident.

## Being misunderstood

People tended to get the wrong impression of T

'I am a very misunderstood person'

T feels that other people do not understand him and get an incorrect impression of him. It is likely that this increases his levels of frustration when trying to develop a relationship with others. Not being understood as a person with AS is common, and can be extremely stressful; if T had high levels of frustration it would only be exacerbated by others misunderstanding his attempts at developing relationships.

## Trying to make friends

Went all out to overcome the problems he was having – to get over the 'brick wall'

Tried lots of different things to have friends

T makes the point that he tried lots of different ways to formulate relationships, but also acknowledges that they did not work. He was desperate to achieve his goal of having a relationship and to overcome his lack of ability to know the right thing to do.

# Low cognition

Just was not thinking

His mind was stressed

By acknowledging that he was stressed T infers that his cognitive ability was running at a lower capacity than he was usually capable of. Essentially, the higher his stress levels the poorer his ability to process information and to think. He notes here that he was stressed, and eloquently recognises that he was not thinking at the time.

## Logical thought

When T does things he uses them as experiments; he is a perfectionist – thought this would work but it did not

T makes the point here that his behaviour is akin to social experiments. He also mentions that he is a perfectionist; to T it would seem sensible to behave in as wide a variety of ways in order to seek out the most effective use of behaviour – and he sees the incident as one in a series of experiments; as it did not 'work' T goes on to say that he would never do it again – as this would not be a logical way to behave.

As he did not know at the time whether or not it would benefit him, it was a logical for him to behave in that way.

#### **Stress**

Very troubled time at home

T described to me that his home life at the time was highly stressful; if T's global levels of stress were high then this may have affected his behaviour.

### Lack of support

Got no outside help

By myself, no help

T notes that he did not get any support or help in developing friendships or relationships. He was left to try and work it out on his own, something that he found very difficult to do.

#### **General Discussion**

This case study has several elements to it that relate to AS or AS inferred characteristics. T is an individual who is desperate to make friends and have relationships; as a result of his AS he is not able to understand how to do so in an effective manner, and he has no support to enable him to develop the appropriate skills; T attempts all sorts of different ways to gain a relationship, none of them working leading to high levels of frustration; ultimately T behaves in what is deemed a highly inappropriate way – but in his view in a logical way trying out yet another way of gaining a relationship.

The key issue that this case study raises is:

## Education of non curriculum subjects

If T had had the required support to understand boundaries (physical and social), how to appropriately attempt to develop relationships, and what is appropriate social behaviour, it is likely that his behaviour would have been very different.

# **Case Study Fourteen Background**

L is an individual who was attempting to hitch a lift from Sheffield to London. He started off walking and when he did not manage to get a ride on the main road out of Sheffield he walked onto the M1 motorway, crossed over to the fast lane and tried to hitch a lift from there. The police were called and he was arrested.

# **Case Study Fourteen Matrix**

	7
AS Specific	Suppose it was dangerous once I had had time to think about it
	2. Did not realise how dangerous it was
	Did not think about the speed of the cars at the time
	Did assume someone would stop
	5. Did not think about the drivers
	6. Did not consider his own safety or other people's
	7. Did not realise it was against the highway code
AS Inferred	8. Got frustrated (at not getting a lift)
	9. Nobody was picking me up (on original road)
	10. Did not use my common sense
	11. Did not stop to think about what I was doing
	12.Previous experience had been in Canada (where it was

acceptable to hitch on the equivalent to a motorway)

13. Lacks awareness of what is going on around him

# **Breakdown for Analysis**

# **AS Specific**

Central Coherence	1,2,3
Theory of Mind	4,5,6
Literality	7

#### **AS Inferred**

Frustration	8
Logical thought	9,12
Lack of awareness/common sense	10,11,13

## Discussion of data, case study fourteen.

#### **Central Coherence**

Suppose it was dangerous once I had had time to think about it Did not realise how dangerous it was Did not think about the speed of the cars at the time

L acknowledges that he did not think about the danger that was involved in trying to hitch a lift on the fast lane of the M1 motorway. This is indicative of a poor understanding of the consequences of his actions, the inability to relate cause to effect – a demonstration of weak central coherence.

## **Theory of Mind**

Did assume someone would stop

L does not appear to be able to understand the perspective of other people – in this case, the drivers of the cars on the motorway. It is highly unlikely that a driver on the fast lane of a motorway would stop to pick up a hitch-hiker; L does not consider this and simply makes the assumption that someone would stop, an indication of poor ability to 'see' things from another person's perspective.

Did not think about the drivers

Did not consider his own safety or other people's

Not only did L not realise the perspective of the drivers he also does not consider their safety as a factor. Again, this is an indication of a poor Theory of Mind.

## Literality

Did not realise it was against the highway code

L did not realise that it was against the law to hitch on the motorway, so in a literal way of thinking it made sense to move on from the road where he was not getting picked up to another possibility. As the M1 was the next road available on the route to his destination L simply walked onto it to try his luck there.

#### Frustration

Got frustrated (at not getting a lift)

L acknowledges that he was frustrated at not getting a lift; this may have led L to decide to move on from where he was being unsuccessful to an alternative road – in this case, the motorway.

# Logical Thought

Nobody was picking me up (on original road)

As no one had stopped it was a logical decision from L to find somewhere else to try and get a lift from. The next road on his route was the motorway, thus it was a logical place to move to.

Previous experience had been in Canada (where it was acceptable to hitch on the equivalent to a motorway)

L had previously hitched while living in Canada; the equivalent roads there (according to L) are safer for hitching on; L made the assumption, logically but in a highly rigid manner, that hitching on 'main' roads is acceptable, simply because it was acceptable in Canada.

## Lack of common sense

Did not use my common sense

Did not stop to think about what I was doing

Lacks awareness of what is going on around him

L admits that his lack of common sense and awareness of what was going on around him led to his inappropriate behaviour.

#### **General Discussion**

This appears to be a fairly clear case of an individual with AS thinking in a logical and literal manner; combined with a lack of Theory of Mind and poor central coherence it could be argued that L hitching a lift on the fast lane of the M1 is totally understandable, given those particular aspects.

Issues that this case study raises include:

- How to teach 'common sense'
- How best to develop an understanding of other people's perspectives

L notes himself that his lack of common sense and awareness led, in part, to his behaviour. Many people with AS are deemed to lack common sense while retaining what they might argue is a highly sensible and logical thought process. In reality, having a totally logical and literal perspective may not be ideal in terms of influencing behaviour; had L been provided with the opportunity to learn how to consider all the options, as opposed to the ones that occurred to him, the behaviour may have been different.

#### **Methodological Corroboration**

This chapter explains how data was checked for accuracy, and how the analyses were corroborated by an independent expert. It is essential for the data to be as robust as possible in order to give the best chance for recommendations to be implemented. If suggestions are to be taken forward (for example in a pilot study and additional research) then the more robust the process in this paper the better chance of funding and interest by key parties (e.g. CJS, Local Authorities, research departments). In order to achieve this I have written this chapter to evidence the attempts made to provide validity to the qualitative data stemming from the narrative. The validity is achieved via two pathways entirely independent of one another. The first stage of validity was to ensure that the narrative was accurate in its representation of the individual's perspective. The second stage was to ascertain the accuracy of the interpretation of the narrative data; thus, both the data and the initial analyses were validated.

## **Checking the Data**

There were two ways in which data was checked. Firstly, completed case study analyses were sent via email to participants who had shown an interest in reading the results of their interviews. This amounted to three individuals (D, R, and M). The participants were asked to read the analysis and check for accuracy. The participants were asked specifically to check whether they felt the representation was an accurate reflection of their narratives, and make any comments on aspects that were either inaccurate, missing, or not relevant. The replies were very simple. Two participants replied simply stating that the analyses were accurate (one stated 'this is 100% accurate', the other replied saying 'yes I agree with this'). The third replied: 'What you've written closely matches what I remember us discussing, and it does all sound 'right' to me, in that it matches my memories now of how I perceived the incident itself at the time'. These responses were deemed to be verification that the write up of the narrative and the subsequent analyses were appropriate for each of the three case studies. Not only did the participants agree that the raw data (the narrative) was accurately represented, they also viewed the case studies as a whole and thus verified that my noting of the various elements within the matrices were

accurate. While the same level of verification could not be achieved for all case studies, the assumption was made that since exactly the same protocol had been used for each case study write up then a similar level of accuracy could be assumed.

In addition to sending the analyses to individuals with AS, I also sought an alternative source to provide external, independent corroboration of the method of analysis – i.e. the identification of elements from the narrative for the matrices. For this I required an individual as close to a peer in the field of AS as possible in order that s/he had a similar level of understanding of AS as did I. I approached the local psychology department, specifically the trainee psychologist working for the Asperger service. She is a final year psychologist with a special interest in AS and has a good degree of experience and understanding of AS. I met with her and explained the process I had used, presenting a mock matrix to allow her to have a good understanding of the process. On request I emailed an electronic template of the matrix for her to fill in. I requested that she fill in both the matrix and the breakdown for analysis, and once completed I compared her data with mine.

# **Comparison of Data**

Trainee Psychologist's matrix	Luke Beardon's matrix
R failed to understand the 'social rule':	R approached the children without being
adult strangers should not talk to children	asked or prompted in any way; <b>social</b>
(let alone touch them); social rule	rule
It made sense and seemed highly logical	R's previous experience was when his
for R to check the girl's clothing to see if	mum lost a locket which she found in her
the charm had fallen and got caught	clothing; <i>rigidity of thought</i>
there because this happened to his	
mother and sister in the past. He was	R's sister had also once lost a locket and
repeating what he had seen others do in	found it in her clothing; <i>rigidity of</i>
the past; <i>rigidity of thought</i>	thought
It seemed highly logical for R to check	
the girl's clothing to see if the charm had	

fallen and got caught because this happened to his mother and sister in the past. R felt that "the logical course of action" was to look on the ground and then in the little girl's clothing; logic, made sense to the individual

R described having a "tuned up sense" for detail and he exhibited this in his precise knowledge of the type and location of the play ground camera. In contrast, he did not appreciate 'the bigger picture' and what those viewing the security camera footage might think; Theory of Mind

R felt that to look inside the little girl's clothes in view of a security camera made sense...others would realise that if he intended on doing harm he would have taken the girl into the nearby forest. "If I was that [a sexual predator] why would I do it in front of the security camera". Later R stated: "If I was to do something... I would have taken her into the trees and whatever"; logic / makes sense to the individual

Why would I do it in front of a camera? Theory of Mind

CCTV clearly marked; *Theory of Mind* 

R was well aware of the CCTV; *Theory* of Mind

situations" (vis a vis "normal people"); social rules

R talks about his inability to "read [social] R finds it difficult to interpret social situations; social understanding

R failed to understand the 'social rule': adult strangers should not talk to children (let alone touch them); **social rules** 

Saw nothing wrong with approaching the children; **social understanding** 

R stated: "because of my Autism...I don't like surprises...in my head I have to know what's going on other wise I panic".

This probably led to R getting involved in the hunt for the necklace charm; lack of choice

R does not like surprises, he has to know 'what is going on – else I panic'; executive functioning

R stated: "I like to know what's going on around me - that's just being me" - this probably led R to ask and become involved in the hunt for the necklace charm; lack of choice

R failed to understand how others might

interpret his behaviour if they witnessed him searching inside the little girl's clothes (e.g. those watching the security camera footage). R thought there was no harm in looking. This perhaps shows impaired planning and evaluation, as well as difficulties understanding 'bigger picture'. R did not consider the consequences of searching a small child's clothes. In particular he did not realising the risks involved in searching underwear; Theory Mind, her executive functioning, central

coherence

Never occurred to R that his behaviour might be misconstrued; *Theory of Mind* 

R stated: "I was focussed on finding the locket". R was oblivious to anything else i.e. how others might view his actions; central coherence

At that point in time 'nobody else in the entire world mattered'; central coherence

R stated that while he was searching the girl's clothes "nobody else in the entire world existed...I was not concerned with what the security camera saw... I was not concerned about what any passers by saw". R was solely focussing on finding the locket; central coherence

R was perhaps only focused on 'obvious' expressions of body language during the incident... "all I can remember was that she was happy...that a big person was helping look for her special thing...I didn't notice any other body language apart

from that; communication

R admitted difficulties he has understanding non-verbal communication e.g. body language: "body language I still struggle with at the moment". He acknowledges that he may not have been able to understand the body language of the little girl; communication

His problem with body language meant that he did not notice any from the girl; communication

Was not able to read her body language; communication

around me - that's just being me" - this

R stated: "I like to know what's going on R describes himself as being curious (about his environment); curiosity

probably led R to ask and become involved in the hunt for the necklace charm: *lack of choice* 

R described himself as a "curious" or "nosey" person and as such he felt compelled to find out why the children were looking on the ground; lack of choice

R felt that to look inside the little girl's clothes in view of a security camera made sense...others would realise that if he intended on doing harm he would have taken the girl into the nearby forest. "If I was that [a sexual predator] why would I do it in front of the security camera". Later R stated: "If I was to do something... I would have taken her into the trees and whatever"; logic / makes sense to the individual

R notes he could have taken her into the nearby woods if he was doing anything inappropriate; *logic* 

R talks about difficulties regarding "knowing when to stop" (vis a vis "normal people"); compulsion

Once R focussed on the task of finding charm he probably couldn't stop..."I was focussed on finding the locket...I would do anything to see it through to the end". S probably felt compelled to help and couldn't stop once he had started; compulsion

Other people can read situations and know when to stop (R cannot); **social understanding** 

In his roles as a fire marshal / first aider,	R likes to help people; <i>need to help</i>
R is motivated to help other people.	
During the play ground incident he was	
also motivated by this; repetitive	
behaviour	
R found himself in a situation where	The girl was in distress and he wanted to
somebody needed help and he admitted	make her happy; <i>need to help</i>
to being somebody who likes to help	
others; wanting to help those in need	Other people's happiness is a great
of help	motivator for R; <i>need to help</i>
·	
	R is committed to helping people; <i>need</i>
	to help

## **Discussion of Comparison**

While it can be seen that there are some discrepancies between the two matrices, there is clearly a huge overlap and level of similarity between the ways in which the two analysts interpreted the data. The TP also included additional elements not found in mine, including:

R's idea of seeking refuge in the play park perhaps shows impaired planning and evaluation. R did not consider what others might think seeing a young man in a play park

This appears to me to certainly be an aspect of AS, but one that led R to the park, rather than the behaviour leading to arrest.

It was alleged that R asked the little girl if he could "look down her clothes". R did not understand that this language and behaviour could be interpreted as malicious/inappropriate.

This is certainly an AS specific element demonstrating poor understanding of appropriateness; once again, however, I omitted this as I felt it was more to do with inappropriate communication rather than having a direct influence on behaviour.

R acknowledges that his expression of facial emotion does not always represent what he is actually feeling (e.g. might look angry when he is actually happy)

I did not include this as I felt it was a simple indication of poor non verbal performance, rather than anything related to his R's behaviour.

R seemed to directly transfer 'rules' and a way of behaving from one situation (his role as fire marshal) to a very different kind of situation (the incident at the park).

R stated that St John's Ambulance colleagues have said: "The best reward of the job is to have someone come back to you ...and to say thank you". Regarding the play ground incident, R appears to have acted rigidly/literally in view of this statement

Both of these examples make great sense; I did not include the latter as R's role with St John's was subsequent to his behaviour. The former element, however, could well have been included.

"I have a problem with eye contact...I can't really look people in the face". The police interviewing R may have misinterpreted this for feeling of guilt?

This was not included in the matrix as it relates to after the event, something that was not included in the original research question.

R believes that if he had said "no comment" in the police interview this could only have implied guilt. It is possible that during the interviews he may not have fully understood when he should and shouldn't speak.

As above, this relates the events after the arrest.

R stated that "...from the start of the holiday nothing had gone right". R had to cope with an unexpected and unpleasant incident (the sewage leakage) and he coped by taking himself off to a guiet place – the park.

I did not include this as it seemed that it had little to do with R's behaviour, and more to do with the rationale as to why he was in a particular location, not something relevant to the research question.

R could see that the little girl was upset about losing her necklace charm.

This is a genuine element possibly demonstrating some level of Theory of Mind that I did not include.

Elements that I included that were omitted by the TP included:

- R was unconcerned with CCTV or passers-by, and was surprised by the outcome.
- [R] thinks it is probably quite common to lose jewellery in clothing.

Overall the comparison between matrices is highly encouraging. The level of similarity far outweighs dissimilarities; discrepancies were likely to occur anyway due to the TP not having the opportunity to view the interview ten times, and the very nature of qualitative narrative analyses. Overall I felt that the similarities allowed a degree of validation that I felt comfortable with; the whole process was as transparent as possible, and while I could have continued along the lines of further verification of data, the twofold process including the individuals with AS themselves, and a peer in the field of AS was deemed an appropriate standard of robustness for the purposes of the research.

To summarise, this chapter has explored the nature of how data was verified by independent 'others'; the process of accurately representing individual narrative was corroborated by three of the individuals with AS who had taken part in the study; the process of developing an accurate matrix following analysis of the narrative was corroborated by a peer in the field of AS. Both processes demonstrated the level of

accuracy in the two key stages of analysis, thus transparently demonstrating the level of validity of the data and analysis.

#### Differing Neurology and Responsibility

This chapter outlines the key issues that have arisen from analyses of the data generated by interviews with individuals with AS who have been arrested. The chapter includes a discussion of the pertinent issues, including whether the legal framework appears to be beneficial or otherwise when governing individuals with AS. It challenges some of the conceptual frameworks on which the law is based, noting that it could be discriminatory to use the same concepts for those with AS whose neurology is different (by definition) to those without (Baron-Cohen, 2000).

A person is a responsible actor where he has the capacity to make conscious decisions. If a person is incapable of foreseeing the consequences of his actions because of mental deficiency he cannot be considered blameworthy; unless, that is, he is to be blamed for being mentally deficient. It is hardly conceivable that people with inadequacies, for which they bear no responsibility and over which they have no control, merit the censure of criminal law (Allen, 2007:81).

There is no way that I would argue that people with AS are 'mentally deficient' – however, in many of the case studies it does appear (strongly) that compared to an NT individual of similar maturity and intellectual capability the individuals with AS have radically different perceptions (e.g. case studies R, L). If the law 'judges' against what a 'reasonable' person might understand in terms of likely consequences, then surely those with AS who are neurologically different to the NT population, are at a distinct disadvantage. People with AS, generally, have average or above average intellectual capabilities (Wing, 1996); however, individuals will have marked differences in perception and interpretation of the behaviours and communications of those around them (Frith and Happe, 1994). They will also often be more vulnerable to high levels of anxiety and stress as a result of the combination of AS and environmental factors. Is this, then, an argument for alternative treatment at the legal level?

Prior to conducting and analysing the interviews it was envisaged that each case would provide the necessary information in order to assess *actus reus* and *mens rea* and come to a relatively sound conclusion. This was not the case; neither the law nor the interviews are clear cut or neat. However, there are several issues that have been raised that clarify the direction in which further research should take place, both in the legal arena and in the field of AS.

## Actus Reus / Mens Rea

Case one. E. involved E sending letters to her tutors. In this case it might appear that actus reus is clearly evidentiary, that harassment was taking place. However, Allen (2007) notes that for actus reus to be assumed the act must be voluntary. Certainly E's behaviour initially was voluntary - but at that stage, i.e. simply writing (however inappropriately) to her tutors, no offence had been committed. As her behaviour continued, as can be seen from the analysis, E's behaviour became less voluntary and more compulsive. The nature of her AS appears to take over and her letter writing, in a logical albeit naive manner, is exacerbated by her need to gain a response. Indeed, for mens rea to be in evidence there has to be an intention on behalf of E for the prohibitive result (harassment). In E's case, however, the intention was for a response of some kind from the tutors, and the development of a friendship - something she had previously assumed to be probable, based on her socially naive and logical or literal response to social situations. At no point, it would seem, did E intend in any way to 'harass' her tutors, despite the fact that this is exactly what she had done. The Law Commission (no. 177) refers to intention whereby if an event occurs as a result of behaviour and that the individual knows that the event will occur 'in the ordinary course of events' then the individual must be held liable. However, in E's case there is a strong argument to suggest that she did not, in fact, understand that the letter writing and harassing behaviour were linked in any way. E differs from S, another individual whose letter writing culminated in arrest, as S claims that she knew that what she was doing was wrong. However, similarly to E, the case rests upon whether or not S was behaving in a voluntary capacity, or whether there should be a case for arguing that S was compelled to a degree that diminished her control over the situation. It does appear from her interview that S had little or no control over her behaviour at the time, and did not recognise or think of what the consequences might be. Her poor central coherence could be used as an argument that she genuinely could not see beyond her behaviour to make a considered judgement as to what outcomes were likely to occur. This argument brings together two legal concepts. Firstly, as discussed, intention – whether the act was voluntary, the second is automatism - when a person acts in a state of impaired consciousness or unconsciousness (see automatism). If the act is considered involuntary then E may have had a defence for lacking actus reus; if S was behaving in such a way

whereby there was no conscious awareness then possibly she could have a defence of automatism.

## Theft

When used in the context of theft there are five facts that must be proved. three relating to the actus reus and two to the mens rea. The actus reus consists in the appropriation, the property, and the belonging to another. The mens rea consists in the dishonesty and the intention to permanently deprive (Allen, 2007). In the two case studies of theft it seems fairly clear that both actus reus and mens rea are evident; in particular, G fulfils the criteria almost perfectly. The two cases, despite the charge being the same, are a demonstration of how different the causal elements can be in different cases, while having similar elements related to AS and AS inferred characteristics. In D's case it would seem that a plethora of factors combined, including AS specific elements, AS inferred characteristics, and environmental factors. High levels of anxiety alongside a busy sensory environment also influenced behaviour. D acted 'alone' in this case study, whereas G clearly had motivating factors and influences stemming from his 'relationship' with other people. In G's case the overriding factors appear to come from his need for friends, his lack of innate ability to make and maintain friendships, and his naive belief that by behaving in such a way would assist in his relationships with the others involved. According to the law, both individuals are clearly guilty; however, in reality one could argue that D was merely 'guilty' of being in a high state of stress and anxiety as a direct result of AS specific characteristics which led to his behaviour, and G was 'guilty' of having the social naivety to believe his actions would gain him valuable relationships.

## **Automatism**

There is a distinction between automatism caused by external factors (for example a blow to the head or drug induced) and internal (disease of the mind). Depression, stress and anxiety are not generally deemed to be diseases of the mind when in reference to automatism. However, where they are due to external physical factors and lead to impaired consciousness then automatism can be argued (Allen, 2007).

Dissociative states as a result, for example, of post traumatic stress disorder, can also be used – in certain circumstances – as a defence. Comparing Rabry (1973) with R v T (1990) the difference is based on whether the external factor is deemed part of ordinary life or not. In the former case the defence was automatism brought about by post traumatic stress disorder caused by the psychological distress of being rejected by a former partner. The latter was a similar argument, this time based on being raped. The former case was rejected, the second allowed to go to jury. In the case study examples there are clear cases where long term abuse in the form of bullying have occurred; it also appears that the abuse may have been partly or wholly a causal factor leading to offending conduct. H and C in particular have histories of being bullied, and post traumatic stress disorder could be considered for either one. Both note that they did not have control over what they were doing and both clearly see themselves as victims. However, the possibility of automatism being considered is debatable. Both H and C had conscious awareness over their physical actions, and both had an awareness of the possible consequences of their actions, though they may not have been consciously aware of them at the time. The fact that they did not think about what they were doing at the time of the offence is not, according to the law, relevant. In terms of liability they both had an understanding that in the one instance striking someone with a hammer, in the other shooting or stabbing a person or persons, could result in damage to the person or persons. Under such circumstances, both H and C are still liable for their actions. In such cases it could be argued - in a similar manner to R v T (above) - that long term suffering of bullying as an individual with AS is not part of ordinary life. The distinction between an individual with AS being bullied and an individual without is potentially critical. Certainly being bullied can be a traumatic experience for any individual; for the person with AS who is vulnerable in so many different ways and who possibly does not have the understanding of how to react appropriately (e.g. in terms of seeking help, realising that they are victims, avoiding potentially problematic social scenes) it may be that the resulting trauma is not comparable to the NT experience. Once again, it appears that the law is based on the NT experience, with AS not being considered. If, however, a death had resulted from the behaviour, it is possible that a case of diminished responsibility could be argued, reducing the charge from murder to manslaughter. Currently the diminished responsibility defence may only be used under charges of murder; thus, in all case studies, however clear it may seem that the individual should be able to claim diminished responsibility, unless a murder has been committed (successfully) then such a defence may not be used.

In 1963 Lord Denning included in his definition of automatism 'an act done by a person who is not conscious of what he is doing' (Bratty v A-G); this is clearly open to interpretation – dependent on what 'conscious' is defined as. If, for the purposes of some of these case studies (e.g. M, F) this means without conscious thought, then automatism could well be introduced as a defence. However, current law (Broome v Perkins, 1987) suggests that automatism is less related to conscious thought, and more to do with involuntary physical actions, such as spasm or behaviour while in an epileptic fit or diabetic coma. If the individual is capable of reacting to physical stimuli and has at least some control over their physical actions then automatism will not be deemed an appropriate defence. In all case studies examined an automaton state would not be a defence. However, as noted, some cases could potentially be presented with a possible post traumatic stress disorder as a key influencing factor.

#### Intention

The case of R raises some very interesting points. Although the arrest was for sexual assault it appears that R had no sexual intention whatsoever, but had made contact with a 6 year old girl in her genital area. The actual reason for this, it appears, was that R had been genuinely assisting in the search for a lost locket; the reason stated for searching underneath the girl's clothing was that it seemed a logical place to look, as previous experience (from his mother and sister) suggested that that was where lost lockets can be found. At the outset it would seem that despite the 'evidence' R is still liable, as he has a conscious awareness of what he is doing. However, it could also be argued that although he had an awareness of what he was doing, he did not have any understanding of the consequences of his actions. His lack of Theory of Mind and his determination to help in any way he could appear to combine to cause him to behave in the way in which he did. However, R is still liable if he has any conscious understanding of the fact that direct contact with a 6 year old might cause distress. This is a critical point - while an NT peer of similar intellectual ability and experience and maturity would (presumably) understand straight away that such behaviour falls outside acceptable boundaries in the normal course of events, it may not be so for R. He may genuinely not know that such contact could result in any distress. If not, can he truly still be regarded as liable? In 1999 the Home Office Review leading to the 2003 Sexual Offences Act. In part, this called for the law to be 'fair and non-discriminatory'. According to Allen (2007) the underlying philosophy should be that 'intervention of the criminal law into private sexual relations would only be justified where there was harm to an individual and generally the activity was non-consensual' (2007:390). There are three points here that relates to R's case. Firstly, the incident had nothing to do with private sexual relations. There was no sexual intent (on either part), and no relationship between R and the child. Secondly, it could be argued that no harm had been done to the child. Thirdly, there does not appear to be any evidence of lack of consent – indeed, R asked if it would be ok to help look for the locket. The overarching flaw in R's arrest, though understandable, was the assumption that his behaviour was sexual in nature. Unfortunately, the law at present does not appear to be flexible enough to include exceptions dependent on specific circumstances. R's included.

In T's case (sexual assault) it is noted in SOA (2003) that a person commits an offence if:

- He intentionally touches another person (B)
- The touching is sexual
- B does not consent
- A does not reasonably believe that B consents

The touching itself is defined as touching with any part of the body, with anything else, through anything (SOA 2003). T clearly fulfils actus reus for sexual assault. The critical question here, however, is whether he fulfils all criteria for mens rea. He certainly meets the first three criteria outlined above in that he intentionally touched another, that the touching was sexual, and that the person did not give consent. The issue is not one of intention; rather it is the belief over whether the individual involved consented or not. In T's case his self confessed lack of control and lack of thought over the incident appears to be the critical issue over whether or not he 'reasonably believed' that consent was forthcoming; in this instance it would appear that T did not consider consent at all rather than believing or not believing it. In such a case, the question then becomes, would T reasonably believe that the individual would

consent when he was in less of a state of emotional arousal and had the ability to consider the question. However, as many people with AS find abstract thought so problematic (Szatmari et al, 1995), and generalising concepts difficult to apply, even this consideration may not lead to a satisfactory conclusion. Hypothetically, T may recognise that an individual would not give consent to being touched in a sexual manner; however, this may bear no relation whatsoever to his actual behaviour, when such abstract concepts do not, for him, relate to his behaviour.

#### Recklessness

For mens rea to be established in most cases the individual must be deemed either to have intention (see above) or to be deemed reckless. The Law Commission (clause 18) states that 'a person acts recklessly with respect to: a circumstance when he is aware of a risk that it exists or will exist; a result when he is aware of a risk that it will occur; and it is, in the circumstances known to him, unreasonable to take the risk' (in Allen, 2007:76). Allen notes that 'in most cases the accused is a reasonable person and will have foreseen what other reasonable persons would have foreseen' (76). In identifying a definition of recklessness Lord Diplock makes reference to 'an ordinary prudent individual' – i.e. that the decision making should be assessed in direct comparison to what an 'ordinary prudent' individual might decide. The seminal case Elliot v C in which the defendant was not found to be reckless was due to the fact that she had intellectual impairments and did not have the ability to recognise the risk of her behaviour. Problematically, however, individuals with AS by definition - will not have intellectual impairment (Wing, 1996), nor could (or should) they be regarded as mentally deficient. My argument is that individuals should be judged on whether or not they had the capacity to recognise risk - but that this judgement is not solely on an individual's intellectual performance; it should also take into account the nature of that person's AS.

#### **Argument**

The critical argument running through the discussion is how individuals with AS are currently not viewed legally as any different to their NT counterparts, aside from the possibility of reducing a murder charge to manslaughter due to diminished responsibility. This is not to suggest that all individuals with AS should automatically

be seen as so qualitatively different as to be exempt in any way from the law, but that certain aspects of AS be taken into account when considering liability.

## Theory of Mind

If an individual has little or no Theory of Mind it is a reasonable argument that it may have a direct impact on liability in terms of recklessness and intention. If, for example, the crime was against another individual – R for instance – then a lack of Theory of Mind may mean that the potential for violation would not be considered by the individual, either during the incident or prior to it. If this is the case then recklessness, despite a lack of mental deficiency, should not be proven. However, the current state appears to be that an 'ordinary prudent' individual would have recognised that touching a six year old child would be behaviour considered indecent and inappropriate, thus the individual with AS could be prosecuted. In this instance it would seem that the individual with AS is being discriminated against as a result of his AS – he is being disadvantaged by being compared to NT peers without any allowances being undertaken.

#### Social Understanding

For those individuals whose behaviour stems directly from, or is influenced by, a poor or skewed understanding of social situations, liability could also be questioned. For example, E behaved in what she saw as a reasonable way – and would not have deemed the 'behaviour' of writing letters as in any way (legally) reckless. Indeed, the behaviour in isolation would not ordinarily be considered reckless. The concept of harassment by writing several letters on a regular basis is, however, one which would be understood by the majority of NT people. However, at what point does letter writing become harassment? There are certainly no rigid rules to be applied here, and certainly E does not appear to have the social understanding to have the ability to work this out for herself. In this instance E is being judged with the assumption that she had intention and was reckless in her behaviour, despite the fact that she does not have the social understanding that could have allowed her to recognise the inappropriateness and danger (to herself) of the behaviour.

T behaved in the way in which he did, not as a direct consequence of poor social understanding, but certainly as a result of long term problems with developing and

maintaining friendships. Similarly B's behaviour had clear influences from lacking the ability to develop and maintain friendships, and bullying is significant in many interviews, notably C and H. Poor social conduct, understanding, and recognition of boundaries may lead to individuals lacking in both intent and recklessness if the perspective of the individual with AS is to be taken into account and understood. At present, the law makes the assumption that individuals with AS should be deemed as having the same social understanding as the 'reasonable' person. This is problematic, specifically in two distinct ways. Firstly, the individual with AS is neurologically different to the NT; as it is the 'NT model' that the 'reasonableness' is based on it would seem inadequate, at the very least, and certainly potentially discriminatory, to use the same criteria for a person with AS. Secondly, by noting that individuals should not be regarded by the same criteria, it would seem that the suggestion is that people with AS are not 'reasonable'. Clearly this is an inaccurate supposition relating purely to terminology, but one which is of high importance.

## Literality / Rigidity / Narrow Thought Processes

Many of the case studies demonstrate that individuals felt that they had limited choice in their actions as a result of their own emotional responses as well as their neurology. The latter includes a rigidity of thinking styles as well as a literal and concrete interpretation of both language and events (Frith and Happe, 1994). Once again, the issues of intention and recklessness arise. For intention, as noted, the individual must have a conscious awareness of their intended consequences of action, and recklessness must include what a 'reasonable' individual might understand to be possible consequences of behaviour. If, however, the individual genuinely does not have an awareness of the potential consequences of their behaviour then should they be governed by the same case law as someone who does? Similarly, if an individual behaves in such a way intentionally, for example writing letters or seeking a locket, but does not have the capacity to understand alternative consequences, then are they being discriminated against by the law? If an individual truly does have such a limited repertoire that alternative possibilities as consequences of their actions are not recognised, then surely they could not be regarded as having intent; if an individual does not understand that their actions may potentially result in harmful activity then they could not be regarded as behaving recklessly.

# Executive Functioning

Individuals who lack executive functioning skills are likely to find it difficult to use past experiences to assist them in the understanding of current situations (Ozonoff et al, 1991). This is important when addressing the concept of risk. The legalities of risk relate to intention – for intention to be proven the individual must understand the potential risk. However, if an individual is not able to learn from experiences both pertaining to self and those observed from others then knowledge and understanding of risk may also be compromised. Children with AS, for example, may be coerced into inappropriate behaviour by their NT peers at school; while NT children may also be coerced, it is more likely that they will learn from the experience – if the behaviour led to a punishment, for example, then it is less likely that the coercion would be as successful a second time. Children with AS, however, may not associate the past experience with the second time of occurrence - may not, in fact, ever link such experiences together (Ozonoff et al, 1991). If this is the case then clearly it would affect the individual's concept of risk. In what might seem a somewhat contradictory notion, other individuals with AS will use past experience to 'dictate' to them their understanding of similar circumstances later on in life (Edmonds and Beardon (Eds) 2008). While this may appear paradoxical it is, in fact, an aspect of rigidity and inflexibility of mind. For example, an individual with AS, having experienced a situation for the first time, may then make the inflexible assumption that exactly the same process must be undertaken for all future similar situations, with no deviation. A parallel could be drawn here, for example, with R who genuinely believed that as his mother's locket had been found in underclothing, thus the girl's may also be found there. If, as in this case, the two situations (mother losing a locket and a six year old girl, otherwise unknown to R) were deemed by the individual to be similar then the expectation was that every aspect of them were similar. Clearly, this was not the case - but R seemed to lack an understanding of risk, not having had the ability to recognise the differences between the two situations. If the law does not take dysexecutive functioning into account for an individual whose behaviour results directly from it, then an argument could be put forward that the individual is discriminated against relative to his NT peers.

#### Central Coherence

Weak central coherence causes individuals to lack the ability to understand the wider context of their situations, particularly in a social context (Frith and Happe in Mehler and Franck, 1995). Thus, issues such as understanding cause and effect become problematic. If an individual does not have the capacity to understand that their behaviour has the potential to initiate consequences for others, then it may not be possible to guarantee that the same individual has a good understanding of risk. The individual may have a good (often relative to their NT peers better) understanding of the details within a given context (be it verbal, social, or sensory) but lack the ability to understand the interrelation between them (Lawson, 2001). In such a situation the ability to understand consequential risk is questionable. In order to fulfil the criteria for recklessness the individual must foresee the risk - in comparison with a 'reasonable' person. It is assumed that by 'reasonable' the law is actually referring to a neurotypical individual. As a person with AS the individual is less likely to have the inherent ability to understand possible outcomes of behaviour if they do not have the central coherence functioning of their NT counterparts. In such circumstances it would seem accurate to suggest that the law is discriminatory against the individual with AS.

#### Verbal and Non Verbal Communication

Individuals with AS will often misinterpret verbal language and non verbal language differently compared to their NT peers (Koning and Magill-Evans, 2001). Individuals may find non verbal performance in particular problematic to decipher, and verbal language may be taken in a literal form with little or no processing of prosodic intention. As a result situations that arise from social exchange can often be misunderstood by people with AS. Once again, issues of liability must be addressed. If an individual does not have the same capacity as an NT to understand a social situation, and how behaviours may affect the processes of interaction and further consequences, then potentially the individual with AS may not recognise possible risk.

### Insanity

The current legislation for insanity [the terminology here is taken from legal texts; most clinicians do not use the term insanity, preferring mental illness or disorder. AS is not a mental illness or disorder, but a developmental condition] causes problems when trying to place AS within a legal context. Allen (2007) notes the five different ways in which a mental condition might affect behaviour:

- 1. Impaired consciousness due to a mental condition or internal cause. This would not be deemed a voluntary act and thus no actus reus or mens rea would be evident.
- 2. The individual is conscious and has willed movement but does not know or understand what he is doing. In this case there is *actus reus* but no *mens rea*.
- 3. The individual is consciously aware of his behaviour but due to his mental condition does not know that it is wrong.
- 4. There is conscious awareness, knowledge that it is wrong, but due to the mental condition he is unable to control his actions.
- 5. He may be in a delusional state and believes the act to be appropriate.

The latter three all have actus reus and mens rea but the responsibility of the individual must be questioned. Essentially it could be argued that if the individual has no understanding that s/he is 'wrong' in the behaviour engaged in, is unable to control self, or believes (incorrectly) the behaviour to be appropriate then the person might fulfil the above criteria. The case studies demonstrate the possibility of this occurrence. Unfortunately, the only current plea (as opposed to unfit to plea) would be one of insanity, clearly utterly inappropriate for individuals with AS. AS is neither a mental illness nor a mental disorder, and thus the current legal framework is shown to be flawed. The critical issue is:

the law has evolved based on neurotypical concepts and is designed for neurotypical people; those that lie outside these boundaries are either not catered for or deemed 'insane'.

Relatively recent legislation (DDA, 2001; DED, 2006) has recognised neurodiversity and encourages a reduction of discriminatory practice by making it unlawful to discriminate against an individual with AS compared to their NT peers; reasonable adjustments must be made in order that discrimination does not take place. There is

currently a public sector duty to make reasonable adjustments for individuals with AS, and yet it would appear that there are no such adjustments being made within the legal arena. At present the law caters for those who share similar neurological development; intellectual impairment can also be taken into account, but it seems that those with average or above average intellectual abilities but whose cognition is qualitatively different could be vulnerable to discriminatory practice. It is public sector duty to adapt (with anticipatory duty) in order to reduce possible discrimination – I would suggest that the legal system is not exempt, and should be altered accordingly.

# **Counter Argument**

While I may appear to be partisan in the argument for changes in the law it must be recognised that the current legal situation appears, at the outset, to be appropriate in many ways. To suggest that an individual must have liability for their behaviour seems wholly right and just; to demonstrate that in comparison with a peer's understanding the behaviour is such that it is deemed reckless, for example, would seem acceptable – just, even. Individuals should take responsibility for their actions; should an individual not be deemed insane, an automaton, or whose behaviour is entirely out of their control, then surely they should bear the legal brunt of their lawbreaking behaviour. AS is not an excuse for breaking the law. Simply because one has AS does not automatically mean that one is exempt in any way from responsibility, or one's own behaviour. Many individuals with AS are extremely driven by following rules and regulations (Wing, 2006; Attwood, 2007) - surely then, the argument should be that an individual who breaks rules and regulations is more than culpable for their behaviour. However, this is to ignore the crux of the argument outlined above; that the law itself appears to be designed for a neurological group that differs from those with AS. The judgement by which individuals are deemed 'guilty' does not have the capacity to take into account differences in neurological diversity – AS being a prime example. The concepts that the legal framework are based on - liability, recklessness, actus reus, mens rea - these are highly likely to be concepts developed by neurotypical people, based on cases of neurotypical behaviour. As such there is a possibility – even probability – that the same concepts will be flawed for individuals whose neurology is qualitatively different to the NT. As such, until there is a change in the laws themselves to adapt to the neurological processes of those with AS to ensure that the conceptual legal framework is inclusive, there appears to be a need for alternative strategies to be in place for those with AS who break the law, but who do not appear to be 'covered' by the current legal framework.

### Recommendations

Use of the database to aid in decision making

I suggest the use of the database (see chapter seven), once it has been developed to an appropriate standard and rigorously tested, as a statutory requirement once an individual has been identified as having AS. The CJS must do its best to ascertain whether or not an individual has a 'disability' – including AS (DED, 2006). Once AS has been identified the recommendation is that the database is consulted in order to best make a decision regarding progressing the case. At the point of decision making – specifically regarding whether to prosecute and subsequently what 'sentence' to impose – the database should be used to provide decision makers with additional information in order to be as best informed as possible in the decision making process. Information on past incidents that have been formatted in a manner conducive to explaining behaviour from the AS perspective could help increase the level of knowledge of the CJS professional. While there may not be a clear cut parallel case at the very least there will be examples from the past that could assist in increased knowledge and understanding.

# Recommendations by CJS as statutory duty

The CJS should have the power to recommend alternatives to custodial sentences to include support for the individual with AS. Thus, should the CJS deem that the individual is 'guilty' of an offence, but that the offending conduct was as a result of the individual's AS or AS inferred characteristics, then they are able to place the individual under caution alongside a program of support to reduce the possibilities of recidivism. Such programs should be AS specific and the CJS should provide clear, unambiguous boundaries around what is expected from the programme.

It is likely that such programmes would include the development of an understanding of:

- social boundaries
- ♦ NT behaviour
- choices what is available and how to make considered decisions
- ♦ control of self
- consequences of actions

These areas have been highlighted not only from this current piece of work but also from the UK wide consultation process that was undertaken with adults with AS in 2007 (Beardon and Edmonds). In the study of 237 individuals there is a clear need cited by many of the participants for the above programmes of support.

Once the CJS has made their recommendation it is the duty of the local Health Authority and Local Authority to provide the appropriate programme using skilled personnel.

Awareness of issues at All Parliamentary Working Group on Autism (APWGA)

It is recommended that an awareness of the issues raised in this paper needs to be at a parliamentary level in order to facilitate change. The most appropriate arena would be the APWGA. In addition it is suggested that publications stemming from this research be penned and published in appropriate journals, including autism journals and law journals. The potential impact of this research is extreme, and could be highly beneficial to individuals with AS. In addition, a reduction in criminal offences and incarceration (as a result of appropriate responses from the CPS) would reduce overall costs, while having the added benefit of ensuring that appropriate programmes of support are in place for adults with AS. There are currently no statutory requirements for supporting adults with AS unless they meet eligibility criteria for crisis intervention or if they have a mental health problem — it could be argued that in both these scenarios support is potentially too late. The costs of providing services for adults with AS should, in theory, be more cost effective than leaving individuals to hit crisis intervention stage, or to imprison them — either in the traditional way or in secure hospitals.

# Changes in terminology

The term neurotypical has been used throughout this paper. It has been deliberately chosen to avoid as far as is possible any suggestion that there is such a state as 'normality' or that individuals with AS are in any way 'abnormal'. It is, however, useful to distinguish between populations who are neurologically different, thus the use of the terms NT and AS. However, the term NT still has some connotations of segregation between populations – that, in some way, if one is not neurotypical then one is considered a lesser individual. It is for this reason that I suggest the term 'predominant neurotype' (PNT) which is an accurate way of describing a population and differentiating it from those with AS. The term itself is referenced to a friend of mine with AS named Mark Cornwell who suggested it to me, and he has given me permission to use it here and advocate for its wider general use. The following is the original email message (sent 05.12.07) highlighting the issue:

So am I being fussy here. Since I learned of autism and all of the involved topics something has been bothering me. The term neurotypical. I feel it suggests that the species group being addressed is the preferred mode of function and neural ability. This cannot be the case considering the sorts of problems endemic of the neurotypicals. Would you agree that predominant neurotype is more accurate and should in fact be used? I have problems with the typical part of neurotypical. There is no evidence to suggest that their mode of operation is the preferred one. It is only preferred due to the ratio of numbers who represent that specific demographic not because it is the better way to be. I do not suggest that autism presents the image of perfection but it is another way in which stealth prejudice is to be banded about.

I fully believe that drawing on the experiences of individuals with AS and taking into account the perspective of individuals is the most appropriate and beneficial way of influencing thought and concepts and practise. While Mark's concept of terminology is not yet one which is globally recognised I certainly feel it is appropriate to introduce it here in the hope that change can be affected in the longer term.

# Teaching of non curriculum subjects in educational years

Many of the key issues highlighted following analysis of the individual case studies included the lack of effective teaching during school years of non curriculum subjects. Specifically, these relate either directly to AS (in terms of diagnostic

criteria) or indirectly (in terms of AS characteristics). It is thus recommended that teaching should be made available to those with AS covering the following areas:

- Theory of Mind
- Social understanding
- Planning and sequencing
- Understanding of choice
- Interpretation of verbal and non verbal communication
- Recognition of emotional states and how to respond appropriately to them
- Understanding of PNT behaviour
- How to cope with bullying

The current Social and Emotional Aspects of Learning (SEAL) framework in schools does cover some, but not all of these areas. For example bullying and social relationships are explored, and in some ways are done so in a manner that could be highly beneficial to people with AS – for example colour coding of emotions in the early stages of the relationship component. However, there are potentially two problems that I have identified. Firstly, the SEAL framework does not explicitly cover all the areas that a young person with AS may need support in developing; secondly, even if an area is included there is no guarantee that the manner of teaching will be conducive to those with AS. It is recommended that all areas of AS (identified above) should be taught, and done so in a way that individuals with AS will benefit from.

It is not possible to calculate the potential effects of such teaching, but it is sensible to suggest that effective teaching of non curriculum subjects will at least provide individuals with AS certain taught skills that are developed inherently, in the main, within the PNT population. As such it is possible that individuals who may have broken the law as a result of issues relating directly to AS or AS characteristics, may be in a better position to make more informed decisions governing their own behaviour.

As the study has progressed it is clear that there are issues that are as yet unresolved. The issue of PTSD as a causal factor for behaviour for people with AS requires a more in depth and specific study; the database needs additional work before it is to be of practical use; and the results of the study itself could be challenged or corroborated by a wider study. It is recommended that papers are published outlining the key findings and concepts developed from this study to raise awareness and promote interest in the professional, clinical, and justice communities. Key journals that will be targeted for publication include the Journal of Autism and Developmental Disorders (Springer), The Autism Journal (Sage), and the Journal of Forensic Psychiatry and Psychology (Routledge). Additional research to develop the database should be promoted; research should also be undertaken examining the possible impact of adopting the model of providing support to individuals as opposed to imposing custodial sentences, on individuals with AS, the wider community, and the prison system. A longitudinal study assessing the impact of alternative 'sentences' on individuals, including recidivism, would be likely to inform practice to a far greater extent than this project. Research grants could be sought from government bodies such as the Department of Health, Education and Skills Council, and the Home Office; funding streams that could be accessed include Community Champions Fund, European funding - for example Prevention of and Fight against Crime; the independent sector include autism and Asperger funding streams such as the Shirley Foundation; individual organisations and individuals that have a special interest in autism and AS could also be approached; the Autism Centre at Sheffield Hallam University already has close links with potential funders for research.

This chapter has discussed the legislation in light of the analyses of interviews, and whether all individuals are as liable as it may appear initially. The *acts reus* and the *mens rea* are discussed in relation to specific offences and individuals culminating in questions being raised regarding the legal culpability of specific individuals. Automatism, intent, and recklessness are discussed, once again raising pertinent legal issues. Characteristics of AS are analysed in relation to the law and the critical issue of how individuals are assessed by law is presented. The argument presented hinges on this fundamental concept, and recommendations are proposed that could

reduce discriminatory practice and possibly reduce the number of incidents of breaking the law by people with AS.

Chapter Seven - Developing a Database: 'Asperger Syndrome: A Guidance Database for CJS Professionals'

# **Developing a Database**

This chapter introduces the concept of developing a professional database to assist the CJS in decision making following arrest of individuals with a diagnosis of AS. As a professional Doctorate the community (in this case those with AS) should benefit in some way from the research. Part of that impact will stem from firstly establishing a database that will be effective in supporting the CJS and subsequently ensuring that it is embedded in CJS practice. Both aspects are beyond the scope of this project; nevertheless the initial foundation stages have been outlined to allow for further research to take place. It is essential that the database is seen as an ongoing enterprise; in its embryonic stage it is possible to see the potential impact it may have; however, it must be deemed an iterative process that will become more effective with usage and development based on that usage.

In order that this research instigates practical measures used to help support those with AS and those who are in contact with individuals a database will be developed to enable professionals within the Criminal Justice System better understand individuals with AS who have been arrested. This may help to give better information to those professionals when it comes to decision making regarding the most appropriate response to an arrest – for example whether to prosecute or not. Once an individual has been identified as having AS the database can be used to cross reference the offence with possible aspects of AS related to this current study. For example, if the offence is assault, the database can be consulted to indicate what aspects of AS have been influential in other recorded cases; this will assist the CJS in making a considered decision as to whether to prosecute or whether to progress down an alternative route.

# **Process for Using the Database**

Specifically, the process would be as follows:

- 1. Identification of AS
- Database consulted. Database provides information on previous cases that may have similar characteristics
- 3. Decision on outcome is based on individual case taking into consideration information from the database

# Identification of AS

The Disability Equality Duty (2006) covers all public sectors including the police and the CJS. It is a duty to ascertain as far as is reasonable whether or not an individual has a disability; self identification is acceptable, but in addition at each stage of proceedings individuals should have the chance to disclose should they wish do to so. Each stage includes: immediately upon arrest; at the commencement of any interview or questioning; prior to being put into a holding cell. The DED guidelines suggest that bodies 'will need to consider training needs and allocate appropriate budgets for training, research and involvement' (<a href="www.directgov.uk">www.directgov.uk</a>, 16.03.08). Included in training should be an overview of AS and possible indications that an individual may have AS. If AS is suspected then every effort should be made to ascertain whether or not the individual fulfils diagnostic criteria; in this way potential discriminatory actions may be avoided, and the public sector requirement for identification fulfilled.

### Database Consulted

Once an individual has been identified as having AS the database should be consulted with reference to the particular crime the individual has been arrested for. Characteristics of AS that may have an impact according to the database should then be carefully considered in the individual case. Pragmatically the database will be searched to view what characteristics have been previously noted to possibly influence people with AS in a similar crime. These can then be explicitly considered for the person with AS. The database will have a synopsis of all past case studies of individuals who have been arrested for the same offence — including long term

outcomes. While the population is in every way a heterogeneous group the database will still broaden the perspective of the CJS professional to better make an informed decision.

### Decision

At this stage the police and the CPS will have a clearer understanding of whether the individual's AS had an influencing effect on the behaviour leading to arrest. As such they should be in a better position regarding the most appropriate action to take. Judgement calls can be based not on the initial perception of the professionals concerned, but after having taken the nature of AS into account. As the individual, by definition, will have AS, that the AS is subsequently taken into account in the decision making process is of potential major benefit both to the individual and the community in general.

# Limitations of and Recommendations for the Database

Clearly the limit of the database thus far is correlated to the number of case studies and offences available. Additionally, as made clear, the population is not a homogenous group, meaning that any influential characteristics highlighted in one individual relating to one offence will not be guaranteed to have the same influence in another case. However, if the database were to be developed further along the guidelines (below) it would provide the CJS with (at the very least) a foundation of AS specific knowledge that would help inform them of the potential issues that should be taken into consideration in any individual case. I envisage that funding for a much broader piece of work will be sought to move this database from its current embryonic stage forward in two ways. Firstly, the numbers of individuals need to be increased - the more data available the more informative the database will be. Secondly, the formatting of the database - in its current form it could be seen as somewhat cumbersome and inaccessible. It should be possible to input data electronically to allow for simple cross-referencing, both for offence and for AS characteristics. In this way anyone in the CJS can search by offence to ascertain what AS characteristics potentially need to be taken into account, or search by characteristic to ascertain if a specific characteristic is associated with particular

offences. Similar to a library database that searches for key words the electronic database could follow the same process, allowing the user to search in either a general manner or including specifics. If this was developed the search could include any number of specifics, for example age, gender, type of offence. As a National database the information could be invaluable, accessible, and informative.

In order to lay the foundations of a potential database, I have used the interviews to outline some of the issues that have arisen in the hope that these can be expanded on in future research; ultimately I hope that continued research will culminate in a workable and beneficial database that CJS professionals are au fait with and use as a matter of course when responding to cases involving individuals with AS. In accordance with the DED it is suggested that once a database has been established it becomes a statutory requirement for the police and CJS to use it in connection with any case involving a person with AS.

In outlining this framework I have worked through the case studies available to me and given explanations as to how AS might contribute to behaviour that has led to an offence. I have excluded situations that seem to be so influenced by circumstance that it would seem highly unlikely to be repeated by another individual.

### **Database Exempla**

### **Key Issues Directly related to AS**

#### Theory of Mind

Theory of Mind provides people with the ability to understand the perspectives of other people. It allows the development of an understanding, relatively early on in childhood development, to recognise that other people have thoughts, feelings, and beliefs that can be distinctly different to their own. As a result of either a lack of development or poor development of Theory of Mind people with AS may not

appreciate the perspectives of others which may consequently directly affect their behaviour.

# Examples:

#### Harassment

If one cannot understand how another person might feel if 'harassed' – for example by continual letter writing or similar 'stalking' behaviour then logically there may be little reason to desist from the behaviour itself. In addition to an often repetitive side to the nature of AS a lack of Theory of Mind can lead to what may easily be recognised by the NT as behaviour that could cause great anguish to another person; to the person with AS, however, it may be that consideration of the other person's feelings is not ever part of their cognitive process.

# Physical Assault

Not recognizing how someone else might feel can equally apply to physical sensation and emotional response. Thus, an individual may physically harm another person with no conscious thought as to the resulting physical harm or emotional distress.

#### Sexual Assault

Lacking a Theory of Mind a person with AS may touch someone inappropriately — with or without sexual intent — without thought for the potential damage to the recipient's emotional or physical state. In some cases the touching may be entirely 'innocent' — i.e. totally lacking any sexual intent; in others, sexual intent may be there but without any intention of harm — indeed, a lack of ability to understand that harm may be a consequence could be within the nature of some individuals.

### Theft

Lacking a Theory of Mind may well mean that an individual with AS is more likely to steal on behalf of someone else without recognizing that they are being victimized. The reasons why an individual may be more easily coerced may include other factors, such as a desperate need for social acceptance; it is the lack of Theory of

Mind, however, that makes an individual with AS more vulnerable to believing that stealing on behalf of someone else will ultimately be beneficial to them.

# Social Understanding

People with AS lack the ability to develop an innate understanding of how to behave appropriately in social situations compared to their NT peers. This means that individuals will not necessarily understand the 'unwritten rules' of social engagement, nor have the ability to respond to social contact in what could be seen as an acceptable manner.

# Examples:

# Harassment / Stalking

If an individual has mis-read the social cues pertaining to possible relationship development then it may be that the individual has a genuine belief that a relationship (either a friendship or a closer relationship) has been formed, irrespective of whether any advances are reciprocated or not. This may lead to high levels of confusion for the individual with AS who may insist that the person is a friend / boyfriend / girlfriend, and may seek to fulfil the relationship in a manner that may be construed as harassment or stalking. It may also be that the longer the 'relationship' is not reciprocated, the more forceful or determined the individual becomes in trying to bring it to fruition.

### Sexual Assault

It is possible that an individual may misread a situation to such a degree that, with no sexual intent, an offence may take place. This may be the result of extreme lack of social understanding and circumstance. However, it is also possible that the offence may take place with sexual intent but with no malice or recognition that the behaviour is inappropriate. If an individual is severely lacking in their understanding of what the boundaries are around socially acceptable behaviour (including sexualized behaviour) then there are possibilities that this will translate into sexually inappropriate – and naïve – behaviour.

#### Theft

Similarly to Theory of Mind a poor understanding of social behaviour may lead an individual with AS to be more exposed to coercion leading to offending conduct such as stealing – on behalf of others, for example. In such an incident it is the overwhelming belief by the person with AS that the action will be socially beneficial to them that determines the behaviour.

# Rigidity of Thought / Literality / Repetitive Behaviour

#### Harassment / Stalking

Once an individual is convinced that a legitimate relationship has been developed (even though this may not be the case) then it may be excessively difficult for that person to think in any other way, irrespective of the evidence to the contrary. This is an important point because it means that rather than seemingly deliberately ignoring evidence suggesting that a relationship has not been developed, the individual with AS is behaving in a highly rigid fashion, a clear characteristic of AS.

It may also be that the original reason for the individual believing that a relationship was developed or could be developed stemmed from a rigid and literal interpretation of language or behaviour. For example, if a person fulfilled the 'criteria' for being a friend then a logical (but literal) assumption may be made by the person with AS that this was indeed the case. The problem then lies with what the criteria actually is. If, for example, the criteria is 'someone who shows an interest in you, who smiles at you, who spends time with you' – then it is feasible for an individual to expect friendship from a host of people, for example, teachers.

### Executive Functioning

Executive functioning allows people to sequence events appropriately, understand how to plan events and organize time. It relies on the ability to remember past events and recognize how these can be used to understand current situations. People with AS often lack executive functioning abilities which can lead to changes in their behaviour.

It is not possible to list specific offences in this instance as executive dysfunction could influence behaviour in such a variety of different ways. However, any offence where it appears that the individual was in a high state of anxiety or stress as a result of unstructured time or when a planned activity was changed in some way then it is possible that this is as a direct result of executive dysfunction.

#### Central Coherence

Central coherence allows people to understand the macro as well as the micro in any given situation. It allows people to understand cause and effect and potential consequences to their actions. Not having a fully working central coherence can mean that individuals are either unclear as to what the consequences of their actions might be, either to themselves or to others, or that they have a naïve or immature perspective of consequences.

In a similar vein as executive functioning it is not possible to list specific offences. In cases that involve central coherence it appears likely that rather than being a causal factor for offending, weak central coherence is a key factor giving rise to an individual not understanding why not to offend. Thus, rather than there being a 'natural' barrier to not offending for individuals with an acute sense of cause and consequence, people with AS may have a limited barrier – or no barrier at all. In addition, weak central coherence may explain why an individual might reoffend, despite having had negative experiences in the past; if they do not use this information to inform them of current behaviour then those experiences will not be taken into account.

### Verbal Communication

Many individuals with AS have excellent expressive language skills, but have differences in their interpretation of receptive language compared to their NT peers. Noticeably, individuals with AS may be very literal in their processing of language, often not taking into account the tone of voice of the speaker. In such cases communication could be totally misconstrued – for example, a sarcastic remark taken literally would be interpreted by the individual with AS as opposite to the original intention. This can raise any number of problems for the individual who may behave according to their understanding of the communication, rather than responding in a manner expected of an NT individual.

Many individuals with AS will have an inappropriate level of trust in their peers; in combination with a literal interpretation of language this can pose problems for people. For example, a simple statement such as 'if you do this for me I will be your friend' may be taken as a concrete truth, and acted upon with enthusiasm. This is irrespective of the consequences to self (for example getting arrested); the motivation for the individual is the friendship which s/he genuinely believe will be forthcoming. This is another example of the vulnerability of the individual with AS to coercion.

#### Non Verbal Communication

Many individuals with AS have major problems in interpreting non verbal communication, including facial expression, body language, and inference. While this may not necessarily increase the chances of an individual offending, it does interfere with an individual's ability to make an appropriate choice based on the non verbal performance of others. For example, if an individual with AS were to be in social contact with someone and wished to make a sexual advance, it may be extremely difficult for them to recognize or interpret the non verbal cues of the other party.

# **Pragmatics of Development**

There is no current electronic version of the database. It may appear that the vision of a National (or International) database stemming from a Doctorate of Education is grandiose to the point of delusional. However, the feasibility of the project is one which should not be dismissed too lightly. The Autism Centre at Sheffield Hallam University (SHU) is the only academic institution worldwide that runs a Post Graduate Certificate specific to Asperger syndrome; the Aspect consultancy report, at the time the widest ever consultation process with adults with AS was in part hosted by the Centre; the team at the Centre include Nationally and Internationally recognised individuals within the field of AS. SHU hosts a Forensic Psychology section as well as the Hallam Centre for Community Justice. The university is in a strong position to apply for funding to develop a pilot scheme to input data at a local level and work locally with the penal system to test the efficacy and benefits of using

the database. Should results from a pilot project prove to be positive the next stage would be to broaden the pilot out to be used Nationally.

In order that the database be beneficial it is crucial that the data recorded is in an accessible format and that it is inputted in the appropriate manner. This thesis has already provided a possible framework for the database; once research monies have been accessed the guidelines for gathering data and inputting onto the system can be compiled. SHU would ensure that all data were appropriate for the arena and that any confidential issues were addressed. Access to the database would be agreed at a local level for the pilot project, and lessons learned from the process taken forward for the National scheme.

#### **Outcomes of Database**

If the database is developed appropriately and its usage embraced by the CJS then the possible outcomes include:

- Increased understanding of AS related behaviour in the CJS
- More informed choice at key decision making times
- Greater pressure on services to provide appropriate support
- Closer working relationships between the CJS, Health, and Local Authorities
- ♦ Reduced overall costs per person
- Better outcomes for the individual with AS
- Reduction of discriminatory practice

Increased understanding of AS related behaviour in the CJS

By using the database on a regular basis (i.e. as standard procedure for every individual with a diagnosis entering the system) personnel within the CJS will soon develop a better understanding of why people with AS behave the ways in which they do. In developing knowledge and understanding the database will assist in the

whole process of identification of the most appropriate pathway. In addition to having a better understanding of behaviour, it may even be that members of the police and CJS develop an understanding of the positive qualities of people with AS.

More informed choice at key decision making times

One of the most critical decisions that can be made under certain circumstances is that regarding whether or not to prosecute an individual – and, if not, what should the most appropriate course of action be. For example, a recommendation of a caution along with a requirement to develop a better understanding of social situations may prove far more effective and appropriate than a sentence to a term in prison.

Greater pressure on services to provide appropriate support

If the CJS have a better understanding of what the needs of individuals with AS are it is possible that more appropriate courses of action are taken, such as the example given above. If a recommendation has been made for the development of social skills, it increases the pressure both on central government and local government to ensure that appropriate provision is in place.

Closer working relationships between the CJS, Health, and Local Authorities

With a clearer understanding of the needs of individuals with AS, the CJS will also have a better understanding of how to meet those needs – for example, specific communication skills development may be deemed more appropriate than sentencing. In such cases, it is important that the CJS works closely with statutory bodies to make sure that the relevant service provision exists in a suitable format. This would necessitate close working relationships between the CJS, Health, and Local Authorities.

#### Reduced overall costs per person

If an individual can avoid going to prison and increase their skills in areas that are likely to reduce the chances of offending conduct, it is possible that overall costs per person will be reduced. High cost secure placements (either prison or hospital) could be reduced.

Overall it is likely that a supportive alternative to a prison sentence would benefit the individual with AS. If an offence has been committed as a result of issues related to AS, then it would appear sensible to target those issues and provide resolution as far as possible. It is unlikely that the prison setting would be the most appropriate environment for this to happen. Currently there is very little support for adults with AS – which may be part of the reason why individual offend. If appropriate support was more available it is possible that offending will decrease in correlation with increased appropriate support for adults.

# **Possible Support Systems**

There is currently a paucity of services available for individuals with AS (Beardon and Edmonds, 2007); areas that are worthy of consideration, as recommended following analyses of the case studies, include support to develop specific skills such as:

- How to make an appropriate choice
- How to organize self and time manage
- Appropriate social boundaries, including friendships and intimate relationships
- Receptive verbal communication
- Non verbal communication
- Interpretation of NT behaviour

Clearly this list in not exhaustive; as noted above, the efficacy of the database is directly correlated with the numbers of individuals inputted into the database. Similarly, the more individuals analysed, the clearer the possible support mechanisms needed will become. However, it is possible even at this early stage to recognise the potential benefits that such supportive service provisions could be to individuals with AS should they prove to be effective. If it can be agreed that the analysis of the case studies is accurate, i.e. that the influencing factors over behaviour were, for many, related to AS, then it follows that for each individual with

AS a better understanding of their own neurology and how to react appropriately to it will reduce the potential for behaviour leading to arrest.

This chapter has introduced the possibilities following this research for future work to develop the concepts embedded within it to progress work in the field of AS and perceived criminal behaviour. In addition to the development of an understanding of the conceptual processes outlined in chapter 6, this chapter has a focus on the potential for pragmatic professional support in the form of a database or electronic database. The progression of the research culminating in an accessible and usable mechanism to be used within the judicial system is a bold suggestion but one, nonetheless, that holds sway as a reasonable step forward both for the population of people with AS and professionals who have contact with them once an individual has been arrested.

### Introduction

The first chapter in this thesis introduces the background to the study and the key issues that were addressed. I highlight the potential problems with my methodological choice, and note that there was no clear pathway to a single methodological framework that would suit the study. Indeed, I recognise that in order to justify the inherent principles that the work was framed upon, in essence that the perception of behaviour and judgements based on those perceptions can differ enormously dependent on the level of understanding of the individual, I was actually required to combine methodologies to elicit appropriate data. I introduce the concept that this juxtaposing of methodologies is a reflection of the research project itself; the use of naturalist and constructivist perspectives to reflect differing perceptions was a necessary and important part of the epistemological process and ultimately allowed me to be more flexible in my approach to the narrative data than had I chosen a simpler 'style' or methodology.

# Homogeneity and Heterogeneity

I also raise the issue of homogeneity and argue that the group of people within the study form a heterogeneous population and thus should be recognised for their individuality and unique qualities. In the latter stages of the thesis, particularly in chapter seven regarding the development of the database, this issue is one that needs recognising and addressing. A critical question is how can a compilation of individual examples from a heterogeneous population be used to assist in the understanding of a single individual? In a sense this question reflects the nature of AS particularly well - in a similar manner one could argue that to group a heterogeneous population into a homogenous group is not possible, and yet this is exactly what the diagnostic process sets out to do. Despite a widely accepted view that individuals with AS are unique and individual (Jordan, 1999; Attwood, 2007; Lawrence, 2007) the population is grouped together under the term Asperger syndrome. Herein lies the answer to this seemingly paradoxical notion. Individual characteristics stemming from the developmental differences of people with AS can actually be very similar. This is not to suggest that all people with AS will share all characteristics - this is not the case at all; however, some individuals will share

some characteristics. Irrespective of characteristics - shared or otherwise - all individuals will have the same areas of developmental difference. It is the permutations (of which there are an infinite variety) of characteristics, alongside a person's own unique personality and the various influencing environmental conditions that lead to the individuality of the person. Thus, two individuals may share the same characteristic - for example a heightened awareness of the noise of a computer – but be totally different in their overall presentation. In this example, a practitioner supporting one such individual may find it of huge benefit to ascertain how another person might have coped with this characteristic. This is not to suggest that what 'works' for one person will automatically 'work' for another, but it is to argue that a greater awareness of shared characteristics could be of benefit to the practitioner. In a similar manner, the database is intended to raise awareness of specific characteristics noted in individuals who have been arrested. This is in order that it can be used by professionals to ascertain whether or not a person known to them might share similar influencing characteristics - and, if so, how best to make a judgement on how to respond to the individual situation. Having a database of individuals all diagnosed with the same neurological state (AS) who have been arrested, and can be cross-referenced by the CJS by nature of arrest, will allow professionals to access all those individuals in the past and relate similar offences to sets of characteristics. Thus the heterogeneous population can be seen to have a potential and beneficial impact on the individual by increasing the knowledge base of the professional and thus influencing the decision making process.

#### Research Question and Literature review

The research question presented in chapter one is that of 'does AS have any impact on the behaviour of individuals who are subsequently arrested (for that specific behaviour)?' A rationale is provided from a personal perspective, and the literature review in chapter two further substantiates this.

The literature review provides an overview of the literature relating to autism or AS and criminal behaviour as well as introducing legal concepts such as the *actus reus* and *mens rea*. I highlighted the need for community based studies and reflected on the paucity of enquiries into individual studies of people with AS who have been

arrested. I begin to explore potential characteristics, both AS specific and AS inferred that may lead an individual to breaking the law, an area that is more fully explored in the individual case studies in chapter four, and in the general discussion in chapter six. The methodology chapter explores the naturalist and constructivist traditions and conceptualises why both approaches to the qualitative data are beneficial to the study. Grounded theory is briefly noted as a research paradigm with similar constructs to the thesis, while not actually being represented as a research model. Interviews as method are explored with epistemological issues raised as part of the transparency of the thesis. Chapter five – triangulation – attempts to alleviate potential issues of validity by demonstrating the accuracy not only of the findings but the process I undertook to help me understand the narratives. In doing so the chapter allows a level of transparency that is aimed to reassure the reader of the rigour of the processes undertaken and, therefore, the reliability of the conclusions drawn from the data.

# **Data and Validity**

Chapter four outlines each interview as a case study and allows for some preliminary analysis of the data. Each narrative was individually addressed and critical elements entered into a matrix. The matrices grouped elements in four specific categories to assist in the general analysis. One of the most important issues in this process was to ensure that I as the analyser did not interpret the narrative; rather, my role was one of identification. I was required to identify specific elements, using my knowledge and understanding of AS; I needed to avoid interpreting data - I was investigating the perception of the individual, not creating a personal perspective. Clearly there was potential for me to either misunderstand data or to incorrectly identify elements (or miss relevant elements); in order to make the process and the data analysis as transparent and robust as possible I triangulated data in two ways. Firstly, participants themselves approved the case study that they had been involved in, including the case study background and the matrices; secondly the external expert went through the same process as I had done (without any prior knowledge of my matrix) and her 'results' were compared to mine. One could also argue that a third possible level of triangulation and transparency lies in the appendices of videoed

interviews available to restricted audiences (i.e. my supervisors and the examining team). From the triangulation process it appears that the process – and, thus the data – was robust.

# **Discussion Synopsis**

Chapter six focused on a discussion of the data generated and the key legalities involved in the case studies examined. I put forward an argument for further research and debate in the legal arena, particularly concerning actus reus and mens rea taking individual circumstances (including AS) into account. I propound the notion that the law, when measuring activity or behaviour against 'a reasonable man' may be discriminatory against an individual with AS. If accepted, this argument could have far reaching legal implications. I suggest that if this is the case, then the law could be seen as contravening public sector duty as set out by the DED of 2006. My argument in chapter six clearly outlines what should be taken into account by the CJS when presented with an individual with AS – it also notes that the argument does not suggest in any way that people with AS are exempt from the law. It must be absolutely clear that I am not proposing that AS is an excuse for criminal activity. I am suggesting that in some cases AS may account in part or in whole for the behaviour of an individual - and, as such, should be taken into account when decision making processes take place. This thesis does not reduce the rights individuals have to break the law, nor does it suggest that individuals with AS are unable to control their own behaviour; it does not suggest that all people with AS have problems with understanding behaviour and ways in which it may affect them; however, I am arguing that some individuals who break the law appear to do so without any criminal intent, and that at present the law appears to be unjust in the treatment of those individuals.

I outline some recommendations in the latter part of chapter six aimed at reducing the possibilities of individuals with AS being treated unjustly, and to better support individuals at an appropriate age in terms of their teaching and learning. The Aspect consultancy report (Beardon and Edmonds, 2007) demonstrates the need for individuals with AS to have access to appropriate education of areas that are not included in the National Curriculum. It was not the intention at the outset of the

research to develop a series of recommendations, but they have been included as part of what felt like a natural conduit between data analysis and conclusions. The recommendations add to the development of a database in chapter seven as forming part of the professional Doctorate's requirement to impact on the community population. The database itself is outlined and a demonstration of its format presented. While embryonic in development the demonstration provides an indication of how it may benefit those within the CJS who may not have prior experience or understanding of AS. In promoting the use of the database I hope to be able to make good use of those who have a good understanding of AS (i.e. those who input the data in an appropriate format) and provide an arena within which that expertise can be accessed by professionals in the CJS encountering individuals with AS. It is critical that the next stages of research including the expansion of, formatting of, and testing of the database are undertaken. The recommendations in chapter six, in particular application for funding and publication of research papers, seek to enable progression as far as possible.

#### **Final Comments**

The research question that asks whether the nature of AS influences behaviours that are subsequently deemed to be criminal has been examined to the fullness the limitations this study has allowed. Rigorous identification processes of AS specific and AS inferred characteristics demonstrate that many individuals in this study were influenced by their AS in their behaviour leading to arrest. In addition to the research question there have been other questions raised, with recommendations as to how to pursue knowledge in order to work towards seeking answers. Of critical importance is the question raised over the legal framework and whether it is, in fact, unlawful in potentially discriminating against individuals with AS by not taking their AS into account. The development of the database and subsequent use could potentially decrease discriminatory practice, but further investigation into the intricacies of the law and its legal framework should be run in parallel with the use of the database. The question of PTSD as an influential factor in behaviour is another question that requires close attention. Overall the research has raised as many, if not more, questions than it has answered; what has been accomplished is setting a

pathway of further development and research that could ultimately benefit people with AS and reduce discriminatory practice and ill advised decision making following an arrest.

The richness of the narratives from those contributing to the study has been deep. The analyses of the narratives provided insights that I had not anticipated but that have added immeasurably to this study. My heartfelt thanks to the participants who shared their perceptions with me.

# References

Allen, M. (2007). Textbook on Criminal law 9th Ed. Oxford University Press. Oxford.

Anckarsater, H. (2006). Central nervous changes in social dysfunction: Autism, aggression, and Psychopathy. *Brain Research Bulletin*, 69, 259 - 265

Ashworth, A. (2003). Principles of Criminal Law, 4th Ed. Oxford University Press.

Attwood, T. (1997). Asperger Syndrome: A Guide for Parents and Professionals. Jessica Kingsley Publishers.

Attwood, T. (2006). The Complete Guide to Asperger Syndrome. Jessica Kingsley Publishers.

Baron-Cohen, S. (1988). An assessment of violence in a young man with Asperger's Syndrome. *Journal of child Psychology and Psychiatry*, 29, 3512 – 360.

Baron-Cohen, S. (1995). *Mindblindness: an Essay on Autism and Theory of Mind.* MIT. London. Cambridge, Massachusetts.

Baron-Cohen, S. (2000). Is Asperger Syndrome / High Functioning Autism Necessarily a Disability? *Development and Psychopathology.* 12:489 -500. Cambridge University Press.

Barry-Walsh, J. and Mullen, P. (2004). Forensic Aspects of Asperger's Syndrome. Journal of Forensic Psychiatry and Psychology, 15, 96 – 107.

Beardon, L. (2007). Is Autism a Disorder? <u>www.shu.ac.uk/theautismcentre</u>, last accessed 03.04.08.

Beardon and Edmonds (Eds) (2007). *Aspect Consultancy Report*. www.shu.ac.uk/theautismcentre, last accessed 03.04.08.

Breakwell, G., Hammond, S. and Fife-Schaw, C. (Eds) (2000). *Research Methods in Psychology.* Sage. London.

Brewer, D. And Muller, R. (Eds) (2003). The A-Z of Social Research. Sage. London, Thousand Oaks, New Dehli.

Carr, D. (1997). 'Narrative and the Real World: an Argument for Continuity' in Hinchman, L. And Hinchman, S. (Eds). *Memory, Identity, Community:the Idea of Narrative in the Human Sciences*. State University of New York. New York.

Debbault, D. (2005). Beyond Guilt or Innocence. *Autism and Asperger's Digest, 26 – 29,* www.autismdigest.com last accessed 03.04.08

Diagnostic and Statistical Manual for Psychiatric Disorders: DSM IV-TR. 4<sup>th</sup> ED, Text Revision (2000). American Psychiatric Association. Washington, DC.

Disability Discrimination Act (2001). www.direct.gov.uk, last accessed 03.04.08

Disability Equality Duty (2006). www.direct.gov.uk, last accessed 03.04.08.

Duff, R. A. (Ed) (1998). Philosophy and the Criminal law

Edmonds, G. And Beardon, L. (Eds) (2008). *Asperger Syndrome and Social Relationships*. Jessica Kingsley Publishers.

Elliot, J. (2006). *Using Narrative in Social Research*. Sage. London. Thousand Oaks. New Dehli.

Everall, I. and LeCouteur, A. (1990). Fire setting in an Adolescent Boy with Asperger's Syndrome. *British Journal of Psychiatry*, 157, 284 - 287

Famularo, R., Kinscherrf, R. and Fenton, T. (1992). Psychiatric diagnoses of maltreated children: preliminary findings. *Journal of the American Academy of Child and Adolescent Psychiatry*, 31, 863 – 867.

Flick, U. (1998). An Introduction to Qualitative Research. Sage.

Frith, U. (1991). *Autism and Asperger Syndrome*. Cambridge University Press. Cambride.

Frith, U. and Happe, F. (1994) Autism: Beyond Theory of Mind. Cognition 50, 115 - 132

Frith, U. and Happe, F. (1994) The Acquisition and Dissolution of Language *Philosophical Transactions: Biological Sciences*, *346*, *1315*, *97-104*.

Frith, U. (2003) Autism: Explaining the Enigma (2<sup>nd</sup> Ed). Blackwell. Oxford.

Ghazuiddin, M., Tsai, L. And Ghazuiddin, N. (1991). Brief Report: Violence in Asperger Syndrome, a critique. *Journal of Autism and Developmental Disabilities*, 21, 3

Gilgun, J. (2005). The four cornerstones of evidence-based practice in social work. Research on Social Work Practice, 15(1).

Gillberg, C. (2002). A Guide to Asperger Syndrome. Cambridge University Press. Cambridge.

Glaser, B. And Strauss, A. (1967). *The Discovery of grounded Theory: Strategies for Qualitative research.* Aldine. Chicago.

Gubrium, J. and Holstein, J. (1997). *The New Language of Qualitative research*. Oxford University Press. Oxford.

Hare, D., Gould, J., Mills, R., and Wing, L. (1996). A Preliminary study of individuals with autistic disorders in the three special hospitals of England. <a href="https://www.nas.org.uk">www.nas.org.uk</a> last accessed 03.04.08

Harris, S. (2003). Studying equality/inequality: naturalist and constructionist approaches to equality in marriage. *Journal of Contemporary Ethnography*, 32, 200 – 232.

Happe, F. (1997). Central Coherence and Theory of Mind in Autism: Reading Homographs in Context. *British Journal of Developmental Psychology, 15 (part one),* 1 - 12.

Hayes, T. (2003). Persons with Autism and Criminal Justice: Core Concepts and Leading Cases. *Journal of Positive Behaviour Interventions*, *5*, *5*, 92 - 100

Hodge, N. (2006). *Disabling families: How Parents Experience the process of Diagnosing Autism Spectrum Disorders*. Doctorate in Education, Sheffield Hallam University.

Howlin, P. and Clements, J. (1995). Is it possible to assess the impact of abuse on children with Pervasive Developmental Disorders? *Journal of Autism and Developmental Disorders*, 25, 4, 337 - 354

Howlin, P. (1997). Autism: Preparing for Adulthood. Routledge.

International Statistical Classification for Diseases and Related Health Conditions 10th Edition (2007). World Health Organisation.

Jefferson, M. (2006). *Criminal Law 7th Edition*. Pearson Longman. London, New York, Boston, San Francisco, Toronto, Sydney, Tokyo, Singapore, Hong Kong, Seoul, Taipei, New Delhi, Cape Town, Madrid, Mexico City, Amsterdam, Munich, Paris, Milan.

Jordan, R. (1999). Autistic Spectrum Disorders. David Fulton Publishers.

Kohn, Y., Fahum, T., Ratzoni, G. And Apter, A. (1998). Aggression and Sexual Offence in Asperger Syndrome. *Isr J Psychiatry Relat Sci, 35, 4, 293 – 299.* 

Koning, C. and Magill-Evans, J. (2001). Social and Language Skills in Adolescent Boys with Asperger Syndrome. *Autism, Vol. 5, No. 1, 23-36* 

Lawrence, C. (2007). Finding Asperger Syndrome in the Family. Emerald Publishing.

Lawson, W. (2001). *Understanding and Working with the Spectrum of Autism: An Insiders View.* Jessica Kingsley Publishers.

Le-Compte, M., Millroy, W. And Preissle, J. (Eds) (1992). The Handbook of Qualitative Research in Education. Academic Press. New York.

Lieblich, A., Tuval-Mashiach, R. And Zilber, T. (1998). *Narrative Research: Reading, Analysis and Interpretation.* Sage. Thousand Oaks.

Lynch, A. C. E. (1982). The Mental Element in the Actus Reus. Law Quarterly Review, 109, 111

Mawson, A., Grounds, A. and Tantam, D. (1985). Violence and Asperger's Syndrome: A Case Study. *British Journal of Psychiatry*, 147, 566 – 569

Mayes, T. (2003). Persons with Autism and Criminal Justice: Core Concepts and Leading Cases. *Journal of Positive Behaviour Interventions*, *5*, *2*, 92 - 107

Mehler, J. And Franck, S. (1995) Cognition on Cognition. MIT Press.

Miles, M. And Huberman, M. (1994). Qualitative Data Analysis. Sage Publications. Thousand Oaks, London, New Dehli.

Miles and Huberman (2002). The Qualitative Researcher's Companion. Sage. UK, New Dehli.

Miscler, E. (1999). *Storylines: Craft Artists' Narratives of Identity*. Harvard University Press. Cambridge, Massachusetts.

Morse, J., Swanson, J., Kuzel, A. (Eds) (2001). The Nature of Qualitative Evidence. Sage. UK, New Dehli.

Mukaddes, N. And Topcu, Z. (2006) Case Report: Homicide by a 10-Year-Old Girl with Autistic Disorder. *Journal of Autism and Developmental Disorders*, *36*, *4* 

Murphy, D. (2002). Asperger's Syndrome: Forensic Considerations. *Forensic Update*, 68, 10 - 16.

Ozonoff, S., Pennington, B. And Rogers, S. (1991). Executive Function Deficits in High-Functioning Autistic Individuals: Relationship to Theory of Mind. *Journal of Child Psychology and Psychiatry 32, 1081-1105.* 

Payne, G. And Payne, J. (2004). Key Concepts in Social Research. Sage. Calafornia, UK, New Dehli.

Scragg, P. and Shah, A. (1994). Prevalence of Asperger's Syndrome in a Secure Hospital. *British Journal of Psychiatry*, 165, 679 - 682

Seale, C. (1998). Researching Society and Culture. Sage. London.

Shute, S., Gardner, J., and Horder, J. (Eds, 1993). *Action and Value in Criminal law.* Clarendon Press. Oxford

Soderstrom, H., Rastam, M., Gillberg, C. (2002). Temperament and character in adults with Asperger syndrome. *Autism, 6, 287 – 297*.

Soderstrom, H., Sjodin, A.K., Carlstedt, A., Forsman, A. (2004). Adult psychopathic personality with childhood-onset hyperactivity and conduct disorder: a central problem constellation in forensic psychiatry. *Psychiatry Res.*, 121, 271 – 280

Somers, M. And Gibson, G. (1994). Reclaiming the Epistemological "other": Narrative and the Social Construction of identity, in Calhoun, C. (Ed) *Social Theory and the Politics of Identity*. Blackwells. Cambridge, Massachusetts.

Szatmari, P., Archer, L., Fisman, S., Streiner, D., Wilson, F., (1995) Asperger's Syndrome and Autism: Differences in Behavior, Cognition, and Adaptive Functioning. *Journal of the American Academy of Child & Adolescent Psychiatry.* 34(12):1662-1671

Tantam, D. (1999). Malice and Asperger Syndrome. www.autismconnect.org.autism/99 last accessed 03.04.08

Tesch, R. (1990) *Qualitative Research: Analysis Types and Software Tools*. The Falmer Press.

Wing, L. (1981). Asperger's Syndrome: A Clinical Account. *Psychological Medicine*, 11, 115 – 129.

Wing, L. (1996). *The Autistic Spectrum*. Constable and Co.

Wing, L. (1997). Asperger's Syndrome: Management Requires Diagnosis. *Journal of Forensic Psychiatry* 

Woodbury-Smith, M.R., Clare, I.C.H., Holland, A.J., and Kearns, A. (2006). High functioning autistic spectrum disorders, offending and other law-breaking: findings from a community sample. *Journal of Forensic Psychiatry and Psychology, 17 (1), 108 - 120*