Inclusion of Students with Autism Spectrum Disorder (ASD) in Mainstream Primary Schools in Saudi Arabia: A Case Study of Two Girls' Schools

Submitted by Maha Binhayyan to the University of Exeter as a thesis for the degree of Doctor of Philosophy in Education

In August 2017

Acknowledgements

I would like to dedicate my thesis to my mother who had passed away in the final year of my study; she was my greatest supporter. I would like to thank King Abdullah Bin Abdulaziz Al Saud of Saudi Arabia for giving me this opportunity to study this course and to return home equipped with the tools and knowledge to build the Kingdom of Saudi Arabia. I would like first to thank my daughter Arwa and my sons, Yasser, Mansour, Abdulaziz, and Abdulhakeem for their great support whilst I was learning and spare sufficient time to study and to help me reach my goal. I want to especially thank my husband Abdulelah in particular for his unlimited support and encouragement to overcome the difficulties and deal with situations with wisdom and rational and to reach the required targets. I would also like to thank him for being patient with me whilst I have had to sacrifice many hours of fun working towards my educational goal. I would like to thank my colleagues at university for supporting me during my studies. I would like to thank my thesis advisors Professor Hazel Lawson and Doctor Christopher Boyle for the guidance they had given me to complete this study. This study would not have been completed without their patience, assistance, encouragement and guidance.

Abstract

The research described in this thesis considers the inclusion of children with Autism Spectrum Disorder (ASD) in mainstream primary school education in Saudi Arabia. Inclusion is a term used here to describe the practice of educating disabled pupils in mainstream schools alongside their non-disabled peers. Although the inclusion of disabled pupils in mainstream schools has increased in Saudi Arabia in recent years, the policy is in its infancy and, as of yet, many teachers are unsure about implementing inclusive educational practice. The study focuses on ASD, a developmental disorder that affects social perception and development, and the efforts made by the educational system in Saudi Arabia to introduce an inclusive educational programme to educate pupils with ASD in mainstream schools. This research focuses on the methods used to educate children with ASD in a mainstream environment, and how successful the uptake and application of inclusion has been. The research considers several aspects within the topic of the inclusion of children with ASD in Saudi Arabian mainstream primary schools: the extent to which these children are currently included; the main factors that encourage or discourage the adoption of inclusive practices in these schools; the perspectives of parents, teachers, non-SEN children, and staff regarding inclusion; and the lessons that can be learned from those schools that have adopted inclusive practices. The research takes the form of a qualitative study involving the case studies of two primary mainstream schools in Saudi Arabia (one public and one private), incorporating interviews and classroom observations.

The main findings of this research are that teachers at both the public and the private schools made an effort to treat pupils with ASD equally in the mainstream classroom,

and non-SEN pupils at both schools made a considerable effort to welcome and include pupils with ASD in scheduled and unscheduled activities. Also, the parents of pupils with ASD noticed that their child's social skills improved after spending time at a mainstream school. However, several problems were found concerning the implementation of inclusive practice at both schools. It seems that teachers lacked an understanding of the needs of pupils with ASD, and auxiliary staff was not available to assist beyond the resources room. There was a lack of communication between staff and parents. Members of staff were not available to help pupils with ASD interact during unscheduled periods of the school day; as a result, the non-SEN peers of pupils with ASD, especially at the public school, felt overly responsible for the care of pupils with ASD in their class.

The research contributes to current knowledge on the inclusion of pupils with ASD in mainstream primary schools by exploring how inclusive practice relating to pupils with ASD has been implemented in Saudi Arabia, the importance of staff assistance for some pupils with ASD, and by exploring how inclusion of pupils with ASD is implemented and what works in an all-female environment. The research also explores the differences between the inclusion of pupils with ASD and the integration of their needs in school life. What we now know about inclusion is that it brings out the caring side of non-SEN pupils, and through this extensive study of how the inclusion of pupils with ASD affects all participants in the school community, we are now aware that inclusion, with extra support and involvement of teaching staff, can be effectively implemented in Saudi Arabian primary schools.

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List of Abbreviations

ABA: Applied Behaviour Analysis

ASD: Autism Spectrum Disorder

DofE: Department of Education

DSM: Diagnostic and Statistical Manual of Mental Disorder

GCC: Gulf Cooperation Council

GCSE: General Certificate of Secondary Education

IEP: Individual Education Plan

ICD: International Statistical Clarification of Diseases and Related Health Problems

KSA: Kingdom of Saudi Arabia

LD: Legislation of Disability

MofE: Ministry of Education

Non-SEN: Non-Special Needs Pupil

PDD-NOS: Pervasive Developmental Disorder-Not Otherwise Specified

PhD: Doctor of Philosophy

Project PEOPEL: Physical Education Opportunities Program for Exceptional Learners

RSEPI: Regulation of Special Educational Programs and Institutions

SEN: Special Educational Needs

SpLD: Specific Learning Disability

TEACCH: Training and Education of Autistic and Related Handicapped Children

UAE: United Arab Emirates

UK: United Kingdom

UNESCO: United Nations Educational, Scientific, and Cultural Organisation

UN: United Nations

Chapter 1: Introduction

1.1 Background

The aim of the research reported in this thesis is to study the inclusion of pupils with ASD (Autism Spectrum Disorder) in two mainstream primary schools in Saudi Arabia. Although the Saudi Ministry of Education has made provision for the education of pupils with special educational needs (SEN) since 1958, it has only been since the 2000s that pupils with ASD have been educated alongside their non-SEN peers in mainstream classrooms (Aldabas, 2015).

The purpose behind this research is to examine the relationship between the traditional approach to education; that is, mainstream schooling which is only accessible to non-Special Education Needs (SEN) pupils, and emerging alternative educational practices, in particular, inclusion. The research focuses on the Kingdom of Saudi Arabia and the extent to which children diagnosed with ASD spectrum disorder (ASD) are included in mainstream primary schools. Because inclusion has only been introduced to Saudi Arabia relatively recently, according to Aldabas (2015), in around the year 2000, it is important to evaluate how educators address and cope with the inclusion of children with SEN, particularly ASD, in mainstream schools. ASD is a condition which presents along a spectrum and is notoriously difficult to diagnose (Almasoud, 2010). As Brown (2005) observes, there is no precise or exact schedule on the presentation of symptoms for the condition that can lead to misdiagnosis and mismanagement of the education of individuals with autism. As such, it is important to explore whether the education system of mainstream schools in Saudi Arabia is dealing with the problem effectively.

The following paragraphs will explore what ASD is, what inclusion means, and how inclusion has been implemented in Saudi Arabia. The introductory chapter will also present the rationale behind this study and how it relates to gaps in the existing research. The aims, objectives, and questions answered by this research will then be presented, and the reasons for the importance of the research will be explored, along with the contribution the research makes to the current knowledge. The chapter will close with a presentation of the structure of the entire thesis.

1.1.1 Autism and ASD

According to the *Diagnostic and Statistical Manual* of the American Psychiatric Association in 2000, autism is not one but a range of conditions that are understood to be linked to one another in some way (Bowler, 2007). The 2000 DSM-IV referenced five separate diagnoses that are commonly referred to as autism. These were autistic disorder, childhood disintegrative disorder, pervasive development disorder not otherwise specified (PDD-NOS), Asperger's disorder and Rett's disorder. Similarly, the International Statistical Classification of Diseases and Related Health Problems (ICD-10) relates the following conditions to autism: childhood autism, atypical autism, pervasive development disorder, unspecified, Asperger syndrome, childhood disintegrative disorder and Rett Syndrome (Reber, 2012). Acknowledging the wide range of diagnoses linked to autism, the DSM-5 has subsumed the separate categories under one single diagnosis: autism spectrum disorder (ASD). Building on this evidence base, when the DSM-V was published in 2013 autism and related conditions were reconceptualised into a single diagnosis of ASD defined by two rather than three dimensions and classifications judged by functional severity based on levels of support needed (Zwaigenbaum, 2012). This

meant that the subcategories of Asperger's syndrome, PDD-NOS, Rett's disorder, and CDD were no longer included in the DSM-V (King et al., 2014). These diagnostic subcategories were eliminated from the DSM-V as research indicated that they were unreliable (Harker and Stone, 2014).

Throughout the thesis, the term autism spectrum disorder (ASD) has been used to describe the participants in this study who have been diagnosed with any condition on the autism spectrum. Due to changes in understandings of what autism is in recent years, efforts have been made to develop a more empirically influenced model of the autism phenotype (Zwaigenbaum, 2012). The criteria and terminology used to describe and diagnose autism have changed a great deal over the last three decades. Today, the term 'autism spectrum disorder' (ASD) is widely used to refer to autistic disorder, atypical autism, Asperger's syndrome and pervasive development disorder—not otherwise specified (PDD-NOS) (Harris, 2011). Before the 1990s, the concept of 'autism' only represented a small proportion of the conditions currently understood as meeting the criteria for ASD (Wolraich et al., 2008: 520). For example, Autism was first described in the third edition of the DSM-III in 1980 as 'infantile autism' and was replaced by the terminology 'autism disorder' in 1987 (Wolraich et al., 2008, p. 520). These understandings of autism did not include Asperger's syndrome or PDD-NOS. When the DSM-IV-TR was published in 2000, it included five separate diagnoses in its category pervasive developmental disorders, which it understood as autism spectrum disorder(s). These were autistic disorder, Asperger's disorder, PDD-NOS, Rett's disorder and childhood disintegrative disorder (CDD) (Harker and Stone, 2014). However, even experienced diagnosticians were unable to distinguish between the DSM-IV-TR subtypes of autism (Zwaigenbaum, 2012).

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Simultaneously, understandings of autism developed, beginning to acknowledge whilst the primary cause of the condition was unknown; genetics played a strong role (Wolraich et al., 2008). Thus, the term ASD is a more current and appropriate criteria for understanding autistic disorders than any other terminology based on current understandings of the condition and the DSM-5's reliance on behavioural rather than theoretical criteria. The terminology used in this thesis thus acknowledges that autism is only one of a range of conditions, and that ASD is the term most commonly used.

ASD is a developmental disorder which is more common in males than females. Estimates indicate that ASD affects one in four or three males to every one female, to a 2.6 to 1 ratio in favour of males (Lathe, 2006; Newschaffer et al., 2007; Werling and Geschwind, 2013). A study into the global prevalence of ASD undertaken in 2012 found that ASD affected 62 people out of a group of 10,000 people (Elsabbagh et al., 2012). Although the condition presents along a spectrum ranging from low to high, it is a lifelong disability that presents moderate to severe difficulties in communication and interpersonal and social interaction (Almasoud, 2010). An American study notes that the numbers of individuals being diagnosed with the syndrome increased between the 1990s and 2000s (Leblance et al., 2009). It is true that diagnoses of ASD have risen dramatically from the 1980s onwards; however, it is considered that this is due to changes in diagnostic practice rather than because more cases of ASD have developed (Newschaffer et al., 2007). The exact causes of ASD remain unidentified, and no two individuals with ASD present the same symptoms—each child with ASD faces different difficulties and has different abilities.

Wing (1993) identified three main areas of difficulties for children with ASD, referred to as the triad of impairment: social interaction, communication and limited interests, and/or repetitive behaviour (Wing, 1993). However, it is important to note that this understanding of ASD is no longer current in the UK. This is because ASD is a complicated condition in that the individual's intelligence level does not necessarily reflect the severity of his/her ASD. One child may have an average IQ level but severe ASD; another, a significant cognitive disability but only mild ASD. Children with ASD have strong visual recognition skills and therefore process visual information more easily than written or spoken instructions (Catts and Kamhi, 2005). Furthermore, the range of intellectual ability of children with ASD is wide. Scott et al. (2000) estimate that 10 per cent of children with ASD have extraordinary abilities, particularly in the domain of mathematics, 20 per cent of children demonstrate 'normal' or superior intelligence levels, whilst the remaining 70 per cent register scores at the level of intellectual disability on traditional IQ tests.

Children with ASD may also have difficulty in understanding non-verbal communication such as facial expressions, eye contact, body language, and gestures, which may exacerbate their difficulty in engaging in social relationships, and they have problems with sharing objects or participating in activities (Scott et al., 2000). Children with ASD have some kind of difficulty with communication (Edwards, 2008). Pupils with ASD generally struggle to comprehend social interactions, social communication, and social imagination (Glasper et al., 2015). All individuals with ASD experience difficulty relating to others (Knott and Dunlop, 2007). Thus, social relations for children and adults with ASD are challenging, causing them to often develop impairments in this area (Dodd, 2005). However, different individuals with

ASD will experience varying levels of social impairment, from profound difficulties to difficulties that are barely noticeable to the untrained observer.

Some individuals do not develop a recognisable form of spoken language, and those who do develop language may find it difficult to express themselves or participate in the complex turn-taking required of conversation (Scott et al., 2000). Some can be over-literal in their interpretation of language, which requires a great deal of attention and care on the part of their interlocutors; others have echolalia, which causes them to repeat incessantly what is said to them (Scott et al., 2000). As it is considered difficult for children with ASD to define their own emotions, it is therefore difficult for them to accurately interpret the emotions or feelings of those around them (Humphrey, 2008). Finally, some children with ASD are hypersensitive to sensory input, whether it is in the form of noise, light, touch, smell, or a particular sound. Hypersensitivity means that these children may experience physical and emotional distress; for them, the school environment may be painful and frightening. Others are hyposensitive and give no physical sign that they are in pain or distressed (Almasoud, 2010).

Pupils with ASD display a wide range of symptoms and levels of disability. Whilst some pupils diagnosed with ASD may be high functioning, excelling in class but struggling to socialise or interact with their non-SEN peers, and others may display more severe symptoms and struggle to keep up or relate to their same-age peers (Williams, 2006). Some pupils diagnosed with ASD may have a severe form of the disorder, and it may not be possible to educate such individuals in an inclusive setting (Wagner, 1999). Generally though, Aldabas (2015) observes that pupils with

mild to moderate disabilities in Saudi Arabia can expect to be educated in an inclusive mainstream school. However, pupils with ASD may find the activities and expectations of the mainstream classroom overwhelming. In the past, it has been thought that some pupils with ASD may gain more benefit from education in a small, highly structured learning environment than they would in a mainstream classroom (Al-Mousa, 2010). Some authorities suggest that all children and young people with ASD require careful, individualised attention and planning to achieve the best outcome from education (Simpson et al., 2003). Other authorities suggest that teachers of pupils with ASD should focus on improving social skills. For example, Guldberg (2008), Burns (2012), and Al-Wakeel et al. (2015) suggest that pupils with ASD can benefit from technology that encourages the development of social skills. Furthermore, studies undertaken in the United States have found that children with ASD benefit from a visual approach to teaching, and in the mainstream classroom, the focus is in many cases on making a task more abstract, reducing the visual support (Yenawine, 2013). Thus, the education of pupils with ASD in the mainstream classroom necessitates careful planning and execution.

Pupils with ASD benefit from specially-tailored education programmes as these emphasise communication and language, how to behave in social situations, and necessary self-help skills, all of which students with ASD need to work on to function well in society (Sansosti, 2008). For these reasons, inclusion in mainstream schools can be beneficial for pupils with ASD as it helps them to acquire such skills as part of their wider education, because pupils with ASD 'often need to be taught certain behaviours that typically developing children often learn without instruction' (Sansosti, 2008, p. 9). Also, it is argued that pupils with ASD often require both

general education in academic topics and a specially tailored education programme to help them develop adequate social skills (De Boer, 2009). This means that inclusion is perhaps the best way through which the needs of pupils with ASD can be met. Smith (2012) explains that supported inclusion programmes are often seen as the best way through which to educate pupils with ASD. This is because such educational programmes allow pupils with ASD to experience mainstream education and receive the support that they need. Such support can then encourage pupils with ASD to improve their social skills, to set and achieve educational goals, and to work out how to function in social situations (Smith, 2012). For these reasons, inclusion is an important and vital part of this research, and can be seen as one of the best ways through which pupils with ASD can be guided towards reaching their full potential.

1.1.2 Inclusion

According to Jha (2010), the term 'inclusion' was first used in Canada in the late 1980s, and the concept was rapidly taken up in developed countries, emerging as a widespread social practice in the 1990s. The World Conference on Special Educational Needs in Salamanca, Spain took place in 1994, following on from the Jomtien Conference about Education for All, and was attended by 92 government representatives and 25 international organisations (Jha, 2010). Although Saudi Arabia did not attend this conference, it has been influenced by its outcome, which led to the foundation of inclusive education across the globe (Oweini and El Zein, 2014). The conference resulted in the creation of the Salamanca Statement by the United Nation Educational, Scientific and Cultural Organisation (UNESCO). The Salamanca Statement has contributed towards the international agenda of Education for All and the goal of making schools more effective on an educational level. As well

as this, the Salamanca Statement decrees that the inclusion of children with special educational needs is an educational aim that should be adopted by all governments (Jha, 2010). The outcome of the Salamanca Conference led to the concept of the inclusive school; that is, a school where pupils with special educational needs are included in the classroom alongside non-SEN pupils (Jha, 2010). This development has been highly significant, as it represents a move away from the inclusion of pupils with SEN to the full integration of pupils with SEN in school life.

Inclusion is also considered to be about the right of the child to participate in mainstream society, regardless of ability or disability, and it makes it the duty of society to accept the child. 'Full inclusion' is the idea that pupils with SEN should be educated in the same environment as their typically developing peers, assisted by specialist support services (Mesibov and Shea, 1996). Definitions of inclusion in an educational context tend to indicate that inclusion is a principle, that it is a means of dealing with difference and diversity, or the juxtaposition between inclusion and exclusion in an educational setting (Gause, 2011; Florian et al., 2017). However, the definition of inclusion that best summarises the purpose of this research was put forward by Inclusion International in 1996. This conceptualisation of inclusion understands it in the following way:

> Inclusion refers to the opportunity for persons with a disability to participate fully in all of the educational, employment, consumer, recreational, community and domestic activities that typify everyday society (Florian, 2005, p. 32).

Inclusion relates to social as well as educational participation, including in regard to schools, as it is not just about pupils with SEN participating in learning activities, but about encouraging pupils with SEN to socialise, interact, and participate in all

aspects of school community activities with non-SEN pupils (Florian, 2005). Mesibov and Shea (1996), focusing on pupils with ASD, explain that the benefits of inclusion are: that it increases teachers' expectations of pupils with SEN; that pupils with SEN have the opportunity to model and improve their behaviour through emulating their typically-developing peers; that pupils with SEN can access more varied learning opportunities; and that inclusion increases the confidence and self-esteem of pupils with SEN.

It is important to understand the differences between the terms 'inclusion' and 'integration.' Although 'inclusion' and 'integration' are often used interchangeably, there are considered to be specific and significant differences between these terms (Hassanein, 2015). Barton (1987) argues that integration follows a 'deficit' medical and/or psychological model of disability. This is because integration focuses on placing the individual child in a system that assimilates the child without adapting to accommodate the child and their needs (Norwich, 2008). Therefore, integration is about placement, location, and assimilation (Hassanein, 2015). On the other hand, inclusion is about participation as well as placement and location, and follows a social model of disability to accommodate pupils with SEN (Norwich, 2008; Hassanein, 2015). The social model of disability argues that it is the barriers put in place and the negative attitudes of society as a whole that lead to an individual being perceived as disabled (Paley, 2002). The social model of disability thus challenges the medical model of disability by facilitating the inclusion rather than the exclusion of disabled people into mainstream society (Peterson, 2012). However, Norwich and Kelly (2004) argue that integration is not entirely negative and should not be completely divorced from understandings of inclusion. For example, in the UK in the

1980s, integration was used to refer to the social and functional aspects of bringing children with and without special needs together, as well as the functional aspects of educational integration (Norwich, 2008).

1.1.3 Inclusion and Saudi Arabia

Each of the 22 countries in the Arab League is a signatory to the United Nations' conventions on the importance of integrating disabled citizens into educational, vocational, social, and civic institutions, such as the Salamanca Statement. Whilst Saudi Arabia did not attend the 1994 conference, it has taken measures to restructure its educational system by adopting the UNESCO project, Education for All (Oweini and El Zein, 2014). However, as Brown (2005) notes, it is difficult to identify reputable and official statistics on the existence of inclusive practice. This remains the case today. Weber (2012) observes that the terms 'inclusive education' and 'inclusion' are used in different senses by individual members of the Gulf Cooperation Council (GCC), their policymakers, and their educators. 'Inclusion' can therefore be taken in its widest sense to mean 'education for all'; that is, as long as each child has access to a place in an educational institution, it does not matter if that place is integrated or segregated. Alternatively, 'inclusion' can be understood as the mainstreaming of disabled and/or handicapped children into the regular education system.

Brown (2005) also notes that it is important to separate 'inclusive thinking' from 'inclusive practices.' Inclusive thinking is the philosophical and internalised conviction that society will benefit from the removal of discriminatory barriers to the integration and participation of disabled citizens in the community; inclusive practices are the

individual activities that facilitate integration. In this sense, therefore, inclusive practices can include those in a special education institution as well as in a regular mainstream school. The fact that there is no common policy for children with special educational needs within the Gulf Cooperation Council means that individual member nations have adopted a range of theoretical and practical approaches, ranging from segregation, through to partial and (in theory) full inclusion (Weber, 2012).

Al-Mousa (2010) states that the Kingdom of Saudi Arabia was the first Arab country to implement 'mainstreaming,' which is the selective placement of children with special educational needs in regular schools. The Ministry of Education defines 'mainstreaming' as, 'operationally, educating children with special educational needs in regular education schools, and providing them with special services' (Ministry of Education, 2012, p. 18). Saudi policymakers and educators have two separate approaches to mainstreaming: partial mainstreaming involving the creation of separate and self-contained special needs classes in regular schools. Children with special needs are therefore educated apart from their typically developing peers, but have the opportunity to interact with their peers during extracurricular and leisure activities. On the other hand, full mainstreaming necessitates the creation of special education support programmes in regular schools. Children with special needs follow the general curriculum in the same class as their peers and are given special educational support only in the matters that are beyond the capacity of the regular teacher (Al-Mousa, 2010).

In practice, however, Al-Mousa (2010) suggests that Saudi Arabian children with special educational needs do not have equal access to mainstream or inclusive education, and it is this inequality which has given rise to the current research. Educators and policymakers in the Kingdom separate children with special needs into two groups. The first group comprises of gifted and talented, physically disabled, low-to-moderate learning disabled, and behaviourally/emotionally disturbed children. Al-Mousa (2010) claims that this group is already integrated into regular primary and middle schools. The second group, however, is still being taught in segregated special education units or separate classes and includes blind, deaf, multi-disabled, intellectually disabled, and children with ASD. The implications for the second group are that their particular needs will not be catered for in a classroom that includes children with a wide range of special educational needs, and that they will not be able to benefit from the social opportunities that arise in general education classrooms.

The inclusion of pupils with ASD in mainstream schools is a relatively recent development in Saudi Arabia. Aldabas (2015) reports that special education services have been available in Saudi Arabia since 1958. Saudi Arabia's special education services provided by the state began catering for pupils with 'intellectual disabilities' in 1971 through education in special day schools or residential institutions. The earliest provisions made by the Saudi Ministry of Education that specifically relate to pupils with ASD date back to 1990 when provision was made to educate pupils with ASD in full-time special education classrooms located in mainstream schools. It was not until 2000 that pupils with ASD were offered the option of participating in

educational programmes in mainstream classrooms alongside non-SEN pupils by the Ministry of Education (Aldabas, 2015).

Gaad (2011) notes that the Saudi Arabian inclusion programme began in 1990, and official sources claim that by 2010, over 90 per cent of male pupils and 65 per cent of female pupils with special educational needs were successfully mainstreamed into regular schools (Al-Mousa, 2010). In 2011, the National Centre for Educational Statistics reported that 59 per cent of disabled pupils spending at least 80 per cent of the school day with their non-SEN peers (Alhossein, 2013). Considerable provisions have been made for the education of pupils with SEN in Saudi Arabia over the course of the last decade. For example, the Ministry of Education (2012) reported that 1,417 special education programmes existed where pupils were fully included in the general classrooms of public schools. Also, pupils with SEN had access to part-time special education services that were provided within the resource room as part of the school day (Aldabas, 2015). By 2015, 746 public schools across Saudi Arabia had special education classrooms set up to accommodate the needs of pupils with mild to moderate disabilities, including intellectual and multiple disabilities (Aldabas, 2015). As well as this, as of 2015, Saudi Arabian public schools had 47 programmes in place for pupils with mild to moderate ASD (Aldabas, 2015). These are programmes specifically aimed at pupils with ASD. The data from tables 1 and 2 for the academic year 2016–2017 shows that pupils with ASD can also participate in 298 general inclusion classes (male) or 111 inclusion classes (female).

Gaad (2011) acknowledges that over 230 separate programmes and institutes have been developed in response to a need to include pupils with SEN into the

mainstream Saudi Arabian educational system, but reveals that the Supervisor-General of the Special Education in the Kingdom of Saudi Arabia admits that the Kingdom's current programmes are not delivering appropriate or adequate services to the 5 per cent of Saudi Arabian schoolchildren who have special educational needs. These findings indicate that the Saudi Arabian Ministry of Education has put considerable time and effort into developing resources to provide for pupils with SEN (including ASD) in mainstream schools and classrooms in recent years.

The tables below (table 1 and table 2), present the most recent statistics on the number of pupils with ASD in inclusion programmes in Saudi Arabia.

Table 1. Total Number of Male Students with Autism Spectrum Disorder*(ASD) in Inclusion Programmes Academic Year 2016–2017*

Level	Inclusion Programmes (Number of Pupils)	Inclusion Programmes (Number of Classes)	Total Number of Inclusion Programmes
Preparatory	22	7	
Elementary	855	240	
Intermediate	107	37	
Secondary	34	14	
Total	1018	298	
			132

Source: Saudi Arabian Ministry of Education (2017)

Table 2: Total Number of Female Students with Autism Spectrum Disorder (ASD) in Inclusion Programmes Academic Year 2016–2017

Level	Inclusion Programmes (Number of Pupils)	Inclusion Programmes (Number of Classes)	Total Number of Inclusion Programmes
Preparatory	163	50	
Elementary	157	57	
Intermediate	6	4	
Secondary	0	0	
Total	326	111	
			728

Source: Saudi Arabian Ministry of Education (2017)

These statistics indicate that large numbers of male and female pupils with ASD are being educated in mainstream classrooms across Saudi Arabia, and at all stages of education, from kindergarten to secondary school. I was unable to find statistics on the total number of children with ASD in Saudi Arabia as the government does not keep records. Statistics concerning the number of pupils with ASD in inclusive schools are presented in tables 1 and 2 (above), although no data exist regarding the number of pupils educated in special centres, which are not mainstream schools but centres for pupils with ASD. The latter are the other option for educating students with SEN in Saudi Arabia (Gaad, 2011). Furthermore, there are no statistics available on the services/diagnostic tools available to pupils with ASD in Saudi Arabian public schools or special classrooms. An attempt was made to obtain this information from the Ministry of Education in 2017, but they said that the data were

unavailable as they do not keep records. Thus, a full conclusion cannot be made on the basis of the data presented in tables 1 and 2 because the real number of pupils with ASD in the Saudi Arabian education system is not known.

Evidence presented in the literature review indicates that the inclusion of pupils with ASD in mainstream schools in Saudi Arabia continues to rise, and that inclusion has become increasingly prevalent and commonplace in the country in recent years. This is a significant development, but whilst the statistics demonstrate that the inclusion of pupils with ASD is taking place, they do not explore how teachers have adapted to inclusion; whether pupils with ASD are receiving support from auxiliary staff, or how non-SEN pupils are coping with the development.

But Feinstein (2010) explains that there are few appropriate resources available to Saudi pupils with ASD who fall in the middle of the ASD spectrum; that is, are not high academic achievers or in need of 24-hour care. Until relatively recently, specialist education for pupils with ASD was considered to be the responsibility of parents or charitable institutions (Al-Saad, 2006). Saudi Arabian parents of children with ASD continue to feel under pressure to finance their child's education and cannot rely on the state to provide support (Saudi Gazette, 2014). Furthermore, the results of the research undertaken for this thesis found that parents must often pay for any additional support staff or resources their child requires at school. This means that if parents of pupils with ASD lack the necessary resources to fund their child's education, it is likely that the child may struggle to reach their full potential in the current Saudi mainstream education system.

1.2 Rationale

The purpose of this interpretivist research is to consider how pupils with ASD currently being included in mainstream Saudi primary schools. The researcher has chosen to focus on ASD, rather than other disabilities, as this condition is under-researched in Saudi Arabia. In addition, the researcher's previous small-scale research into the inclusion of children with special educational needs in Saudi Arabia's mainstream primary schools, as part of their master's thesis, found that despite the fact that children with a wide range of disabilities and special needs are being included in mainstream elementary schools, children with ASD do not form part of this group. Therefore, this research seeks to address the preventing factors and barriers to implementing an inclusive approach to education in Saudi Arabia, particularly in regard to pupils with ASD, given that the education of pupils with ASD has traditionally been neglected by the mainstream education system, instead being seen as the responsibility of parents and charitable organisations. Today, there continue to be various understandings of ASD in Saudi society. For example, the Saudi Gazette (2014) reported that people will actively avoid individuals with ASD, believing them to be contagious. Alqahtani (2012) found that many parents of children diagnosed with ASD in Saudi Arabia believe that medical treatment such as vaccines had caused their child's condition, or that ASD could be attributed to a superstitious or supernatural cause such as the evil eye or black magic.

1.2.1 Research Gap

To date, there has been little or no research undertaken into how pupils with ASD are currently being educated in Saudi Arabian mainstream primary schools, although studies have been conducted elsewhere in the world (see Barnard et al. (2000) for

the UK, for example). However, the outcome of such studies may not translate to Saudi Arabia's social and cultural context. Research has been undertaken into the perceptions and attitudes of educators towards inclusion in Saudi Arabia (see Al-Abduljabber, 1994; Al-Gain and Al-Abudulwahab, 2002; Al-Jadid, 2013; and Alqahtani, 2012), and into the contents of inclusive programmes for pupils with SEN and pupils with ASD (see Aldabas, 2015; Al-Herz, 2008; and Almasoud, 2010; 2011). But as of yet, there has been no practical study into the actual implementation of educational programmes designed for the education of pupils with ASD in Saudi Arabia, or data collected concerning how pupils with ASD and the individuals they come into contact with in school (teachers, auxiliary staff, non-SEN pupils, and parents) cope with inclusion. Hence, the research undertaken for this thesis aims to address this research gap.

1.2.2 Research Aims/Objectives and Questions

There seems to be a wide gulf between the understanding of inclusion, as adopted by the Kingdom's Ministry of Education, and current inclusive practices in regular primary schools. The following research questions have been designed to examine this:

1. How are pupils with ASD currently being included in mainstream Saudi primary schools?

2. What are the opinions and perspectives of parents, teachers, non-SEN pupils, and staff regarding the inclusion of pupils with ASD in Saudi Arabian primary schools?

3. What lessons can be learned from those schools which have adopted inclusive practices?

4. What are the preventing factors and barriers to implementing an inclusive approach to education in Saudi Arabia (particularly for pupils with ASD)?

The specific objectives are:

- To undertake a case study on how pupils with ASD are included in two mainstream primary schools in Saudi Arabia.

- To observe how pupils with ASD cope with inclusive practice in two mainstream primary schools in Saudi Arabia, including considering how pupils with ASD cope with a mainstream educational curriculum and interact with non-SEN pupils, teachers, and auxiliary staff during both scheduled and unscheduled times of the school day.

- To complete interviews with pupils with ASD at both the mainstream schools participating in the study, and others at these schools who interact with pupils with ASD, including teachers, auxiliary staff, parents of pupils with ASD, parents of non-SEN pupils, and non-SEN pupils, to examine how inclusion has been implemented in both schools.

1.2.3 Why this Research Is Important

This research is important because previous research into the inclusion of pupils with ASD in Saudi Arabia has failed to take the view of pupils with ASD into account when examining inclusive practice. It is important to address the view and coping mechanisms of pupils with ASD, as individuals with ASD often find changes in routine difficult and challenging. Topping and Hannah (2013) explain that these challenges can be moderated and mitigated through risk management and by a

positive family environment. As such, it is important to undertake a line of research that explores how pupils with ASD cope with inclusion, and interact with their environment and the other people in that environment. The research is also important as it compares the view of pupils with ASD to that of those who interact with pupils with ASD over the course of the school day, to understand how inclusion is implemented, and how the practice affects those involved in a mainstream inclusive school environment.

1.2.4 Contribution to Current Knowledge

The research contributes to current knowledge of the Saudi Arabia education system, inclusion in Saudi Arabia, and the education of pupils with ASD in Saudi Arabia in a variety of ways. The research adds to current knowledge by contributing towards understandings of how pupils with ASD are included in scheduled and unscheduled activities in mainstream primary schools. In addition, the research addresses how pupils with ASD view and cope with an inclusive school environment, and how non-SEN pupils, teachers, auxiliary staff, and parents of both pupils with ASD and non-SEN pupils view and cope with the inclusion of pupils with ASD. Finally, the research contributes towards current knowledge by considering whether the current approach to inclusion in Saudi Arabia provides support to pupils with ASD in mainstream classrooms throughout the school day.

1.3 Overview of the Thesis Structure

This thesis presents research into the inclusion of pupils with ASD in Saudi Arabia's mainstream education system. The literature review presents the results of a review of the academic literature concerning inclusive educational practices across the

globe, particularly in reference to ASD and the literature that addresses inclusive practice in Saudi Arabia, and how pupils with SEN and ASD are included in mainstream schools. The methodology chapter then presents the case study approach and describes the research methods used in the research to collect and analyse data. The results of the research, discussion of the results, and conclusions are then presented.

2   Chapter 2: Literature Review

2.1 Introduction

This literature review aims to consider and evaluate the academic material available on ASD and the inclusion of children with disabilities into Saudi Arabia's mainstream primary schools in order to address and understand how Saudi Arabia has adopted and is practising inclusive education policies in their education system. The literature review also considers the concept of inclusion and how it is employed in Saudi Arabia. Several factors may influence the inclusion of children with ASD, and the opinions and perspectives of parents, teachers, non-SEN children, and staff regarding inclusion will be explored. In addition, preventative factors and barriers to the implementation of an inclusive approach to education in Saudi Arabia will be discussed.

The Saudi Arabian educational integration programme began in 1990. However, Gaad (2011) claims that despite recent innovations, current educational provisions for the 5 per cent of pupils with special needs do not give these pupils proper or adequate support as of yet. This is due to evidence that suggests that, in practice, children with SEN in Saudi Arabia do not have access to mainstream or inclusive education (Gaad, 2011). Feinstein (2010) suggests that this is because the Saudi Arabian education system fails to provide for children with disabilities, such as ASD, who are either not highly intelligent or profoundly disabled. Saudi Arabian educators split children with educational needs into two groups, as explained in chapter 1. Therefore, the lack of inclusion of the latter group in the mainstream Saudi Arabian education system suggests that a gulf still exists between the ideal of inclusion of

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students with SEN in mainstream classrooms and current understandings of inclusion practices within the Saudi Arabian primary education system. This is despite the Regulations of Special Education Programs and Institutes (RSEPI), which was published in 2001, which sets out advice on education, therapeutic services, early intervention, and transition services, as well as requiring every disabled person to have an Individual Education Plan (IEP) (Ministry of Education, 2012). This suggests that despite legislation being issued, it is often not followed in Saudi Arabian schools.

Due to the above issues, it has been suggested that the inclusion of children with ASD into Saudi Arabia's mainstream education system is often limited. For this reason, the literature review will also consider how inclusion in mainstream education has been used as an effective educational strategy for children with ASD in other countries such as the United Kingdom.

2.2 Inclusion

Rollins (2007) states that inclusion in education raises two key questions. These are, firstly, the impact inclusive practice has on the academic ability of pupils with SEN, and secondly, how inclusion affects the self-concepts of pupils and whether they can establish relationships with their non-SEN peers. In the past, inclusion has been described as 'the practice of serving pupils with a full range of abilities and disabilities in the general education classroom with appropriate in-class support' (Winzer and Mazurek, 2005, p. 646). However, some examples could be said to dispute this definition, and leading researchers in the field, such as Booth and Ainscow, Nind, and Florian et al., all have a slightly different take on inclusion in

terms of whether it should focus on individual needs, educational attainment, or facilitate social interaction (Florian et al., 2017). For example, Booth and Ainscow (1998) explain that inclusion is not a narrow field and that schools should be open to the needs of all learners. This is because they state that educators should not streamline and categorise pupils. Florian et al. (2017) state that high levels of inclusion should not be a barrier to high levels of achievement; that is, inclusion should facilitate academic achievement instead of ignoring it (Black-Hawkins et al., 2007). On the other hand, Nind emphasises the importance of inclusion promoting social interaction through social activities such as organised play (Theodorou and Nind, 2010), rather than only concentrating on academic outcomes. This suggests that contention exists in this field between inclusion as a means of increasing academic achievement for pupils with SEN and inclusion as a means of social inclusion.

Whether inclusion in the UK focuses on individual needs, educational attainment, or social achievements, it takes place within the mainstream school system (Almasoud, 2010). The example of the UK shows how inclusion has been increasingly popular from the 1970s onwards. According to the literature, inclusion has been an important part of the UK's educational policy since 1978 when the Warnock Report recommended that all pupils, regardless of whether they had learning disabilities or special needs, should be educated in a mainstream environment with peers who are the same age as them (MacBeath et al., 2008). However, it is important to acknowledge that although the Warnock Report represented a landmark change in attitudes towards and provisions for pupils with SEN in schools, its recommendations were for the integration of disabled pupils, not inclusion (Murphy et al., 2009). Thus,

the Warnock Report recommends locational, functional, and social integration of students with SEN (Murphy et al., 2009). These proposals can be understood as representative of the current thinking of the 1980s, and since that date, inclusion rather than integration has come to be seen as the most effective means of educating students with SEN. The recommendations made by the Warnock Report were then fully endorsed by the 1981 Education Act, which inspired a move towards integrating pupils with SEN into the mainstream school system (MacBeath et al., 2008). These measures were further developed by proposals made by the UK government's Department for Education and Skills in 2004 *Removing the Barriers to Achievement,* which proposed that professional services should be used outside schools to implement early intervention programmes for pupils with learning disabilities, and that teachers should receive more support and training in order to help disabled pupils thrive within mainstream schools (DfES, 2004; MacBeath et al., 2008). Most recently, the Special Educational Needs and Disability Code of Practice confirmed that all young people have the right to be educated in a mainstream school (Department for Education and Department of Health, 2015).

In the UK, according to the Special Educational Needs and Disability Code of Practice (DfE/DoH, 2015), parents have the option of stating their preferences for educating their child, and that a range of mainstream and specialist settings can be provided for the education of pupils with SEN DfE/DoH, 2015). A case where this legislation has relevance is cited below. Alderson and Goodey (1998) document the case of Rehana, a pupil with severe brain damage who, nevertheless, according to her mother, benefitted from being educated in a mainstream school:

> *' . . . Rehana can't hear and she can't see, but she likes the children*
> *playing around her, so if she is in a special school everyone is quiet*
> *and doing same thing so Rehana will not be really happy there . . . '*
> (Alderson and Goodey, 1998, p. 51)

This example suggests that the inclusion of even severely disabled children within mainstream primary education can be both worthwhile and beneficial.

Whilst UK inclusion policy tends to focus upon the availability of educational opportunities, inclusion is defined in a different way in the Arab World. For example, Gaad (2004) notes that the majority of parents in the United Arab Emirates (UAE) feel that inclusion simply means that their child is educated in a mainstream school even if they are not in a mainstream classroom (Gaad, 2004). This indicates that inclusion in the UK includes integration, whilst in the Arab World inclusion means that SEN and non-SEN pupils are educated in the same school, although pupils with SEN are often not integrated into the school community. For parents of pupils with SEN, it is important that their children are at 'the same school [on] the same bus as [their] brothers, sisters, and neighbours' (Gaad, 2004, p. 317). In this case, inclusion is not just about having access to educational opportunities, but it is also about having the same socialisation experiences as regular peers, which may not be possible if SEN and non-SEN pupils are in separate classes. Therefore, some conflict exists between the definitions of inclusion relating to the UK and UAE examples in terms of inclusion as a means of giving pupils access to opportunities, versus inclusion as a means for pupils to share the same environment and experiences as their peers regardless of their intellectual capacities or attainments. Additionally, as previously noted, Weber (2012) explains that different members of the GCC interpret the idea of inclusion and inclusive education in various ways from

each child having access to a place in an educational institution to inclusion in the sense of receiving an education is ensured.

Inclusion is a democratic theory of education, as 'a particular form of democratic association is fundamental to considerations of the nature, indeed the very practice, of inclusive schooling' (Knight, 1999, p. 1). This is because the educational authority provided by the school environment gives pupils with SEN to learn in an egalitarian environment. Through adopting these attributes, the education system may make itself more inclusive, and therefore democratic (Knight, 1999). However, in chapter 13, Apple et al. (2009) argue that mainstream schools can be challenging for pupils with SEN as disabled children will almost certainly be bullied for being different. This problem may explain why Saudi Arabia has had difficulties adopting inclusive practice, as general attitudes towards disabilities may be having an impact, whether amongst pupils, teachers, or parents of non-disabled children. Moreover, it can be argued that unless the education system is a democratic, equal environment in practice, inclusion is unlikely to happen.

Slee (2011) observes that inclusion relates to the concept of 'substantive freedoms. This is because inclusion relates to the primary purpose of development and progress, which is to 'expand the real freedoms that people enjoy' (Slee, 2011, p. 39). It has been said that 'viewing development in terms of expanding substantive freedoms directs attention to the ends that make development important' (Slee, 2011, p. 39). In other words, inclusion serves as a means of facilitating development and expanding the horizons of disabled pupils. However, the meaning of inclusion varies between countries as 'differences in interpretation are derived from complex

interplay of historical, cultural, political and economic factors' (D'Alessio, 2011, xiii).
In other words, the purpose and meaning of inclusion vary.

2.3 Special Education, Inclusion, and Saudi Arabia

Special education was first introduced to Saudi Arabia in 1958. The first type of disability to be acknowledged by the Saudi education system as being in need of separate special provision was blindness in 1958, followed by deafness in 1964, and intellectual disabilities between 1971 and 1974 (Aldabas, 2015). Prior to 1958, those born with disabilities in the Kingdom of Saudi Arabia did not have access to any kind of special education. Saudi culture treated people with a disability according to the teachings of the Qu'ran and the Sunnah: a disabled person was a source of reward or punishment inflicted on his/her family, or his/her disability was a test and his/her stoicism would be rewarded in Paradise. Alquraini (2011) notes, however, that people with disabilities were often actively discriminated against and excluded by members of their communities.

The Ministry of Education established the Department of Special Education in 1962, but recognised only three types of disability: blindness, deafness, and mental retardation. The first legislation for the Kingdom's disabled citizens was not passed until 1987. The Legislation of Disability (LD) guarantees equal rights for disabled and able-bodied citizens; provides legal definitions of disability; procedures of assessment and diagnosis; and programmes for intervention. LD stipulates that public health and service agencies must promote rehabilitation services and vocational training programmes that will enable the disabled to live independently in the community (Ministry of Health Care, 2010). This legislation was taken further in

2000 when the Provision Code for Persons with Disabilities (the Disability Code) guaranteed the right of disabled persons to a free and 'appropriate' public education as well as free medical, social, and psychological services. The Disability Code also places a statutory duty on public agencies to offer disabled persons assistance with welfare issues, housing, and employment (Alquraini, 2011).

The first set of regulations for Saudi pupils, the Regulations of Special Education Programs and Institutes (RSEPI), was designed along similar lines to US regulations and was published in 2001. However, it should be noted that the context of the US and Saudi Arabia are very different culturally, so it is not always appropriate to take on board and implement policies and regulations in this way. Even so, importantly, the regulations define the main categories of disability; detail the main responsibilities of those educators and professionals working with the disabled; and state the necessity for each disabled pupil to have an Individual Education Plan (IEP). The regulations contain advice and formats on an IEP's essential elements, its planning, its preparation, and its assessment and evaluation. The RSEPI entitles each disabled child to an IEP, access to free and appropriate education, related therapeutic services, early intervention services, and transition services to facilitate his or her progression from elementary to middle school and/or further education. It was only in the 1990s/2000s that ASD was acknowledged as a disability for which special educational provision needed to be made in Saudi Arabia (Aldabas, 2015).

Despite the passing of this range of legislation, however, these laws do not seem to be implemented consistently in the everyday education of disabled children, particularly children with ASD, in the Kingdom of Saudi Arabia. Therefore, the

literature review will include related studies on the experiences of parents of children with ASD (Almasoud, 2011), disabled pupils (Al-Ajmi, 2006), educators and policymakers (Al-Faiz, 2006), and the teachers who are struggling to implement inclusive practices (Al-Faiz, 2006; Al-Ahmadi, 2009) in an attempt to provide an accurate overall picture of the extent to which inclusive practices are being implemented (or not) in the Kingdom of Saudi Arabia.

The literature suggests that inclusion of disabled pupils within mainstream education has been adopted as a viable policy by the educational and political authorities in Saudi Arabia. Provision of education for pupils with special educational needs (SEN) in Saudi Arabia is based on Islamic rules and cultural traditions that state that education should be for all children, regardless of ability, disability, or needs (Langdon and Saenz, 2016; Alanazi, 2012). In terms of the education of disabled pupils, Saudi Arabia has recently undergone a 'dramatic period of improvement' (Alquraini, 2011, p. 1). It is only in the last few years that children with mild disabilities have been educated in mainstream classrooms in government or public schools (Ennis, 2017). It has been claimed that Saudi Arabia was the first Arab country to introduce inclusion and mainstreaming into its education system (Al-Mousa, 2010).

Mainstreaming of disabled pupils in Saudi Arabia is implemented through two means: partial mainstreaming and full mainstreaming. Partial mainstreaming is where special needs pupils are educated in contained classrooms (a kind of classroom specifically designed for children with disabilities) within mainstream schools, but they mix with regular pupils from their peer group for some curricular

and non-curricular activities (Al-Mousa, 2010). Full mainstreaming is where disabled pupils are educated with the assistance of special education support programmes in regular schools. Such assistance is implemented through resource room programmes, itinerant teacher programmes, and teacher-consultant programmes (Al-Mousa, 2010). These pupils tend to be educated, for the most part, in regular classrooms, but will be taken out of certain lessons for special instruction in certain subjects when they are not at a similar level to the rest of the class (Al-Mousa, 2010).

Overall, Al-Mousa (2010) suggests that the inclusion programme for special needs pupils implemented in Saudi Arabia has been a success. For example, he notes that the number of mainstreaming programmes in Saudi Arabia increased from 12 in the academic year of 1994 to 1995, to 3,171 as of the academic year of 2006 to 2007 (Al-Mousa, 2010). Due to this change, the number of disabled pupils being educated in mainstream schools has increased significantly. In addition, according to Al-Mousa (2010), provisions for the education of pupils with special needs have improved in general. For example, provision of special needs education is now no longer limited to larger cities, but has been introduced to rural areas in Saudi Arabia. Also, specific special education programmes have been developed to meet the needs of children with less well-known or more complex forms of learning disabilities, such as ASD (Al-Mousa, 2010). However, Al-Mousa also acknowledges that the majority of pupils with ASD in Saudi Arabia continue to be taught in special education institutions or in specially contained classes, concluding that 'they need to be educated in more inclusive settings' (Al-Mousa, 2010, p. 25). This would suggest that Al-Mousa has

perhaps overestimated recent progress in this area; therefore, this issue needs to be corroborated by further study.

There have been some suggestions that the Saudi education system continues to discriminate against female pupils, as, until recently, more male pupils with SEN were educated in mainstream inclusive programmes than female pupils (Alsuwaida, 2016). This is because, as stated earlier, although 93 per cent of male disabled pupils are in mainstream education, only 73 per cent of female disabled pupils are educated in a mainstream environment (Al-Mousa, 2010). Also, it has been noted that most of the 14 special education institutes for pupils with disabilities that opened between 1994 and 2007 were established especially for girls (Al-Mousa, 2010). This suggests that it was not until recently that the Saudi Arabian education system began to incorporate the inclusive education of female pupils with SEN into its mainstream system.

One of the reasons for the discrepancies in the provision for disabled male and female pupils, according to Hamdan (2005), is that, until 2002, women's education was the responsibility of the Department of Religious Education, whilst the education of male pupils was overseen by the Ministry of Education. Making the education of women the responsibility of the religious authorities, Hamdan argues, meant that female pupils would inevitably be treated differently to male pupils, particularly as the Saudi Department of Religious Education is heavily influenced by conservative Islamic religious scholars (Hamdan, 2005). This would have affected how female disabled pupils were treated as the teachings of the Quran and Sunnah might be

perceived in such a way as to encourage people to treat disabled females in a different manner (Alquraini, 2011). In addition, according to some Muslims:

> *A disability may be perceived as a punishment for someone because he or she was disrespectful toward a family with a child with a disability. It also may be a test, and the patience of those who are tested will not go unrewarded by Allah, who has prepared a place for the patient in Paradise.* (Alquraini, 2011, p. 4)

Discrimination is the likely result of viewing a disabled child as a punishment, and dwelling on the pupil's difficulties is unlikely to encourage that child to reach their full potential. As women's education was until recently undertaken by the religious authorities, this may have affected how pupils with SEN were treated under a system that saw disabled children as a punishment from God (Alquraini, 2011). This meant that because religious authorities viewed disability differently to the secular ones, education of male and female pupils with SEN was, up until recently, treated differently in Saudi Arabia. The education of women was moved from the responsibility of the Department of Religious Education (which generally monitored public education in Saudi Arabia) to the General Presidency of Girls' Education (the body responsible for providing education for girls in Saudi Arabia) in 2002, meaning that one specific and focused department was now in charge of girls' education. However, women's education in general, Hamdan (2005) suggests, continue to be neglected in Saudi Arabia. This issue needs to be considered when looking at how the Saudi education system handles the inclusion of female pupils with disabilities.

As well as unequal provisions for male and female pupils, there appear to be further specific problems with the current programme regarding the inclusion of disabled pupils within the mainstream education system in Saudi Arabia. According to Alquraini (2011), Saudi Arabian schools could benefit from improving the IEPs they

offer for disabled pupils. IEPs are considered to be a particularly important part of educating a disabled child as they cater for the specific, individual needs of the child in question and are intended to ensure that the child is educated to reach their full potential (Al-Alkahtani and Mahmoud, 2016). The understanding of IEPs in Saudi Arabia is described in the RSPEI, which considers the elements that should be in an IEP and which individuals should participate in the planning and provision of an IEP (Alquraini, 2011). IEPs are issued by the Saudi Ministry of Education (Al-Alkahtani and Mahmoud, 2016).

Although Saudi Arabian schools are supposed to provide an IEP for each pupil they have with a disability, problems have been found with how these IEPs are designed and implemented (Alquraini, 2011). For example, Al-Herz (2008) considered the implementation of IEPs in programmes and special education schools in Riyadh, Saudi Arabia. Through a questionnaire distributed to 133 teachers and special education specialists, he discovered that special educational needs teachers were able to effectively evaluate the strengths and weaknesses of individual pupils, achieve both short-term objectives and annual long-term goals, and identify where such pupils required special instruction (Al-Herz, 2008). However, the study also noted that various obstacles existed, which affected the effectiveness of the IEPs, which were that Saudi Arabian schools lacked multidisciplinary teams required to effectively evaluate pupils, meaning that a lack of coordination exists between the special education teacher, those who had previously taught the child, the parents of the child, and anyone else involved in the education of the pupil in question (Al-Herz, 2008). This may be problematic as it could mean that families and education

professionals are not cooperating effectively with the school in helping them to determine the specific needs of various pupils, which also compromises continuity.

Thus, according to Alquraini (2011), the provision of education for disabled pupils in a mainstream environment may be hampered by because the IEPs of these pupils are not being effectively implemented. In order for IEPs to be effective, Alquraini (2011) proposes that it needs to be acknowledged that they are not only the responsibility of the special education teacher, but also the responsibility of the families of disabled pupils, as well as other education staff involved with the pupil.

A further reason why the implementation of inclusion in Saudi Arabia remains a problem may be due to teacher shortages, which are a major problem in GCC countries. The shortage of teacher from GCC countries means that a significant proportion of teaching staff in Saudi Arabia and other GCC countries are ex-pats (Arabian Business, 2016). Teacher shortages in Saudi Arabia have been linked to an increase in pupils and an increase in classroom size, and a correlating decline in the quality of education (Osman and Anouze, 2014; Jensen, 2015). This could impact on inclusion as pupils with SEN require individual attention for teachers and auxiliary staff to keep up with other students (Sabapathy, 2014). In addition, lack of teacher training on how to cater for pupils with SEN seems to affect the implementation of inclusion in Saudi Arabia (Alquraini, 2011), as well as the use of old-fashioned rote and memory-based education (Alhudaithi, 2015; Alwasal and AlHadlaq, 2012).

In terms of solutions, Alanazi (2012) suggests that the adoption of a capability approach would improve inclusion in Saudi Arabian classrooms. The capability

approach focuses on what the pupil can actually do, as opposed to what they cannot do, and emphasises the importance of treating all pupils equally (Boardman, 2010). The evidence presented in this section, therefore, suggests that inclusion of disabled pupils needs to be improved within the mainstream Saudi education system.

2.4   Inclusion and Pupils with ASD

In order to consider the Saudi Arabian education system in depth when it comes to including pupils with ASD in mainstream education, it is important to consider how the inclusion of these pupils in mainstream education has been undertaken elsewhere. For this reason, the implementation of inclusive educational policies with regard to pupils with ASD in other countries such as the UK will be considered in the following paragraphs.

Although such legislation makes provision for pupils with mild or moderate ASD, it continues to be the case that those with severe forms of ASD 'cannot normally receive adequate attention in mainstream school life and require special provision in units or separate schools' (Hayes, 2010, p. 25). Due to government policies, Hayes (2010) notes that most educational provision for children with ASD in the UK is now based within the mainstream schools system The Department for Education statistics indicate that two-thirds of children diagnosed with ASD in England are being educated in mainstream schools (Department for Education, 2017). This is confirmed by the Special Educational Needs and Disability Code of Practice (DfE/DoH, 2015). When it comes to meeting the needs of pupils with ASD within the mainstream education system in the UK, how a pupil is placed depends on the severity of their condition, the individual needs of the pupil in question, the placement

preference of the child's parents, and those of the local authority (Almasoud, 2010; Boyle and Topping, 2012). Furthermore, it is important to be mindful that the behavioural challenges sometimes presented by pupils with ASD are often situational in nature (Kaweski, 2011). This means that creating low-stress situations and encouraging pupils with ASD to develop positive coping strategies for dealing with stressful situations can help pupils with ASD with their learning (Friedman and Gee, 2017).

It has been found that there are various materials and techniques that can be used to ensure that all the children in a classroom are supported, for example, using visual materials may help a teacher to communicate with pupils with ASD (Bernard-Opitz, and Häußler, 2011). The grade level may also influence the willingness to engage and the opinions towards the inclusion of children with ASD. For example, during the lower grades, the main concern may be socialisation, whilst academic achievement may be regarded as more vital for higher grades (Al-Mousa, 2010). It has been found that pupils with ASD require both general education and focused instruction in social skills (Sansosti, 2008; De Boer, 2009). Supported education programmes are one way of helping pupils with ASD to cope in social situations (Smith, 2012).

In relation to how the Saudi Arabian education system has managed to include and cater for the needs of pupils with ASD in mainstream education, it seems that provisions for these pupils remain lacking. This may be because current educational provision for pupils with ASD in Saudi Arabia fails to meet the requirements of pupils with moderate forms of ASD (Feinstein, 2010). For example, in comparison to the provisions for pupils with ASD in the UK, Almasoud (2010, p.4) argues that, 'there is

a significant need for increased training of teachers in Saudi Arabia, along with the need for increasing government initiatives.' According to Simpson (2005), teaching pupils with ASD requires knowledge, awareness, and understanding of the condition. In Jeddah, Saudi Arabia, Haimour and Obaidat (2013) used a questionnaire to measure 391 general and special education teachers' knowledge about ASD. They found that the teachers' position, education level, teaching experience, and contact with pupils with ASD influenced the level of understanding. More advanced levels of education, longer teaching experience, as well as contact with pupils with ASD were linked to a higher level of knowledge. In Saudi Arabia, there is a lack of professional development courses that specialise in providing teachers with understanding and training to support pupils with ASD (Haimour and Obaidat, 2013). Thus, lack of professional development and higher education courses are possible barriers towards the inclusion of children with ASD. From this evidence, I suggest that this lack creates a vicious circle whereby the lack of education, awareness, and knowledge may lead not only to resistance towards inclusion, but also less effective inclusion of children with ASD.

It seems that pupils with ASD in Saudi Arabia, despite the inclusion of up to 93 per cent of disabled pupils in a mainstream environment, as previously referenced in the introductory chapter (Al-Mousa, 2010), may still be denied the chance of being educated in mainstream schools. Almasoud (2010) observes that although such segregation of pupils with ASD is not acceptable, it still occurs due to an ongoing lack of understanding of ASD; in addition, teachers find it difficult to adjust their classrooms and teaching styles to meet the needs of these pupils. These problems may have arisen due to problems with creating and implementing IEPs for disabled

pupils, as discussed in the previous section and described by Al-Herz (2008) and Alquraini (2011). A survey undertaken by parents of children with ASD being educated in Saudi Arabia suggests that the majority of parents are dissatisfied by the way in which their children are being educated (Almasoud, 2011). Significantly, only 3 per cent of the parents of children with ASD surveyed felt that their children were being properly educated and included in the Saudi mainstream education system (Almasoud, 2011). Despite the explicit wishes of parents, the Saudi Ministry of Education is apparently unwilling to increase provisions made for the education of children with ASD in mainstream schools. Instead, in 2011, the Saudi Arabian Education ministry gave permission for more special schools to be built to cater to the needs of pupils with ASD (Almasoud, 2011). This is also becoming a trend in Australia and the UK (Almasoud, 2011).

The views of non-SEN pupils are of crucial importance for the inclusion of children with ASD. There is a lack of research related to non-SEN pupils' perspectives and opinions towards the inclusion of children with ASD into the classroom in Saudi Arabia. Research conducted in the US suggests that young children benefit from the inclusion of children with disabilities (Gupta et al., 2014). Children in preschool settings are in a period characterised by growth and development, and they are acquiring a range of skills and knowledge (Sheridan et al., 2009). Non-SEN pupils learn several important life skills from being surrounded with children with a range of different types of disabilities, both physical and mental (Gupta et al., 2014). The children may become more understanding and they may develop positive opinions towards diversity in society. They learn to initiate interactions with a range of different people, learn to negotiate sharing, and explain things in different ways. Children may

also learn to adjust their communication to ensure that they can communicate with children with various types of disabilities (Guralnick and Paul-Brown, 1977). Although the work to make pupils with SEN feel welcome and appreciated in society can start in school, the opinions of society also influence the inclusion process. This is because educational frameworks reflect the ideals of the society in which they are situated (O'Hanlon, 2003). Thus, children need to feel welcomed outside the school as well, and there is a lack of research related to, for example, the extent that children invite children with ASD to activities outside school hours in Saudi Arabia.

Almasoud (2010) argues that it is important to create a supportive school environment, and rather than seeing ASD as a disability, it is more fruitful to describe it as a child that has characteristics that are different. Jones (2002) suggests that a structured teaching environment could be used to support pupils' cognitive ability, needs, and interests. This structured environment could be created by making the teaching methods and environment ASD-friendly. Arranging the furniture and materials in a certain way can support children with ASD, and it may help to reduce their anxiety (Mesibov and Howley, 2003). Thus, the way a classroom is organised can help children to focus and decrease distraction. The knowledge and understanding of these aspects are often limited in Saudi Arabia, and, as mentioned previously, a major problem is the lack of professional courses wherein these ideas can be shown and demonstrated. In addition, in a mainstream classroom, children are often expected to work independently; this aspect may be particularly difficult for pupils with ASD.

2.4.1 Sociocultural Context

Using education as a platform to develop the individual, as well as providing them with knowledge, is one way forward for helping all students, including pupils with ASD. In Australia, the national curriculum provides for the development of pupils' general capacities in order to create 'confident and creative individuals, and active and informed citizens' (Webster et al., 2016, p. 44). This research suggests that there is a wider range of educational options for pupils with ASD in the UK, United States, and Australia than in Saudi Arabia.

Attitudes towards ASD in Saudi Arabia remain mixed. For example, al-Wazna, the secretary-general of the Saudi ASD society, notes that there is still a stigma associated with the diagnosis of ASD in Saudi Arabia, as many still see ASD as a mental illness as opposed to a disability (Feinstein, 2010). Similarly, in the UK it has been found that many individuals surveyed by Simons (2008) were unaware of what it meant to live with ASD. For example, two out of five of the samples were unaware that ASD cannot be cured and 23 per cent did not realise that Asperger Syndrome is a form of ASD (Simons, 2008). ASD includes a difference in how individuals experience and process the world around them, due to differences in sensory processing. As such, it should be understood as a disability, not a mental health issue. Present understandings of ASD classify it as a developmental/intellectual disability characterised by the risk of impairment in intellectual functioning and a decreased ability to care for oneself and to communicate with others (Parry, 2010). ASD is a spectrum disorder (Almasoud, 2010). Whilst ASD is commonly seen as a developmental disability, it is now listed under the DSM V as Autism Spectrum

Disorder and covers the previously separate diagnoses of ASD disorder, Asperger syndrome, childhood disintegrative disorder and PDD-NOS (Carrington, 2016).

In Saudi Arabia, it appears that understandings of ASD remain confused, due to misunderstandings concerning whether it is classified as a mental illness or disability (Feinstein, 2010), perhaps due to superstitious attitudes towards disability remaining commonplace in Islamic culture (Almasoud, 2011). Alqahtani (2012) found that Saudi healthcare providers have a formal understanding of the causes and treatment of ASD, whereas parents of children with ASD have been informed about their child's condition through a wide variety of formal and informal sources. The aim of Alqahtani's (2012) study was to assess what parents of children with ASD believe about their child's condition in Saudi Arabia. Through purposive sampling, 85 parents of children with ASD were invited from King Fahad Medical City to participate in semi-structured interviews, and 47 parents participated. Alqahtani (2012) found that some parents blamed themselves for their child's learning disability. He also found that most parents chose to treat their child's ASD through cultural and informal interventions, such as prayer and discipline, rather than alternative medical interventions such as hyperbaric oxygen therapy or diet programmes (Alqahtani, 2012). This also highlights the contrast in attitudes and spiritual approaches towards disability between Arab countries such as Saudi Arabia and Western countries such as the UK, and hence the need for culturally relevant approaches.

This evidence indicates that parents of children with ASD may continue to hold some outdated beliefs about the causes of ASD and how it should be approached. These beliefs may affect how parents choose to educate a child with ASD. Furthermore,

Alnemary et al. (2016) found that little information is available about services for people with ASD in Saudi Arabia. To assess the availability of information about ASD spectrum disorder services in Saudi Arabia, Alnemary et al. (2016) used an online survey to find out how 205 parents had made use of autism spectrum disorder services for their children. It was found that, on average, children began involvement with ASD spectrum disorder services by 3.3 years of age, with parents reporting first using non-medical treatment, such as dietary changes and social and educational interventions, then moving to biomedical treatments and, finally, cultural and religious treatments as a last resort (Alnemary et al., 2016). Hence, this study suggests that whilst cultural and religious beliefs about the cause and treatment of ASD persist, they tend to be utilised after non-medical and medical interventions are perceived to have not met the desired goal of the parents or caregivers. Furthermore, Alnemary et al. (2016) found that parental income, educational attainment, geographic location, and extent of knowledge about ASD affected the age at which the child became involved with ASD spectrum disorder services and the kinds of treatments used. Also, the characteristics of the child in question impacted on how parents used ASD spectrum services (Alnemary et al., 2016). It was found that:

> *The disparities in service utilization in Saudi Arabia point to the need to develop policy and interventions that can mitigate the paucity of services for children with ASD spectrum disorders. More research is needed to better understand service use and the decision-making processes that underlie treatment selection by parents of children with ASD spectrum disorders in the Kingdom of Saudi Arabia (Alnemary et al., 2016, p. 1).*

The studies undertaken by Alnemary et al. (2016) and Alqahtani (2012) indicate that understandings of ASD and access to specific ASD-related public services remain disparate and limited in Saudi Arabia.

In terms of awareness, ASD has come into the public eye in Saudi Arabia in recent years because a prominent member of the Saudi royal family has been diagnosed with the condition. Because of this, the King has been supportive of the efforts of charities which specialise in ASD, such as the Saudi ASD Society (Feinstein, 2010), and this may lead to a cultural shift as well as additional investment. As well as this, Feinstein explains that progress is being made in this area:

> *[The Saudi ASD Society] . . . have been placing information in the print and electronic media- and religious leaders have even been persuaded to talk about ASD during Friday prayer meetings* (Feinstein, 2010, p. 250)

Although ASD is now recognised as a legitimate medical condition in Saudi Arabia, and progress is being made in terms of raising awareness of the condition, opinions towards inclusion may vary depending upon the severity of the child's condition (Al-Mousa, 2010). Feinstein claims that there is still a lack of services providing education for those children:

> *. . . In the middle [of the ASD spectrum] who do not achieve higher education but do not need 24-hour residential care either [i.e., are not either profoundly disabled or have savant-like abilities]. There are very few services for adults with ASD . . .* (Feinstein, 2010, p. 249).

This evidence suggests that provision, education, and care programmes for older children and adults with ASD in Saudi Arabia are very much in their infancy. Further literature suggests that provision for pupils with ASD, in certain cases, continues to be the responsibility of the parents, some of whom are paying for educational

services. An interesting case is that of Al-Saad (2006), who when living in Kuwait and Saudi Arabia, took responsibility for the education of her daughter who has ASD. Whilst living in Saudi Arabia, she took the initiative and began a special class for children with ASD at home in Jeddah. Then, through the support of a charity, these classes were moved to the Al-Faisalyah Women Society with the support of its patron, Princess Fahda Bint-Soud (Al-Saad, 2006). Therefore, Al-Saad's efforts to educate her daughter resulted in the creation of the Jeddah ASD Centre of Saudi Arabia (Al-Saad, 2006). The Saudi Gazette (2014) has also reported that parents of children with ASD have complained that they are not receiving enough moral or financial support from educational institutions and authorities. Parents have reported spending between SR27,000 and SR12,000 on dedicated education centres, with centres charging more to accommodate children with severe cases of ASD, but seeing no improvement in their child's condition (Saudi Gazette, 2014). This suggests that provision of education for children with ASD tends to continue to be the preserve of charitable organisations rather than the mainstream education system.

2.4.2 Teaching Approaches for Pupils with ASD

A number of teaching approaches for pupils with ASD have been adopted including Applied Behavioural Analysis (ABA), the Training and Education of Autistic and Related Communication Handicapped Children (TEACCH) and the development of technology-based teaching aids. TEACCH was developed by Dr Eric Schopler at the University of North Carolina in the United States in 1972 and is one of the oldest and most established teaching models for children with ASD (LePage and Courey, 2014). It is based at the university where it was originally founded and aims to 'enable

individuals with ASD to function meaningfully and independently as possible in their community by providing exemplary services' (Van Bourgodien and Coonrod, 2013, p. 75). TEACCH is based on a respect for the culture of autism and aims to appreciate the unique way of thinking and patterns of behaviour displayed by people with ASD (LePage and Courey, 2014). TEACCH uses an intervention called structured teaching that is based on an understanding of the learning characteristics of individuals with ASD alongside visual supports to promote independence and encourage pupils with ASD to gain meaning from what they are being taught (LePage and Courey, 2014).

The TEACCH programme aims to spread the latest research into ASD both internationally and throughout the United States, establishing the highest possible standards across the globe as well as encouraging early intervention for individual with ASD as well as support in adult life including adult treatment programmes and living facilities (Van Bourgodien and Coonrod, 2013). Mesibov (1997) acknowledges that there are drawbacks to the TEACCH programme. This is because TEACCH relies on adapting the behaviour of children with ASD in such a way as to benefit them throughout their lives. However, longitudinal data regarding the long-term impact of TEACCH is difficult to find (Mesibov, 1997). Thus, it is difficult to assess the long-term effectiveness of TEACCH.

Evidence concerning educational programmes for the education of pupils with ASD in Saudi Arabia has been recorded by Alotaibi (2015), who explored the use of ABA techniques for reducing disruptive behaviours amongst pupils with ASD. Lindgren and Doobay (2011) explain that ABA is an effective and comprehensive approach for

improving the lives of children with ASD and their families. According to Boutot and Hume (2012), ABA aims to establish a connection between innovation and outcomes by heavily focusing on the social skills that will most help the child in their everyday environment. ABA works through teaching pupils with ASD alternative socially-friendly behaviours designed to manage problematic behaviours such as self-harm, ritual and repetitive movements or tics, and disruptive behaviour (Alotaibi, 2015). Whilst such behaviours may be socially desirable, it has been suggested that ABA relies on creating adversities to gain compliance, and it has been compared by individuals with high-functioning ASD who have received ABA to 'animal training' (Waltz, 1999, p. 111). A more recent report by Devita-Raeburn (2016) criticised ABA on the basis that its routines are cruel and that its aim, which is to make individuals with ASD 'normal,' fails to embrace neurodiversity. Furthermore, there is little knowledge base concerning the effectiveness of ABA, although general observations have suggested that it can address the problematic behaviours associated with ASD (Waltz, 1999; Matson et al. 2012).

Despite the critical perspectives presented in the previous paragraph, ABA is one of the most widely used innovations for ASD as it can effectively address problematic behaviours associated with the disorder to date (Matson et al., 2012). Alotaibi (2015) noted that ABA has no serious major side effects. Steege et al. (2007) found that ABA has been proven to improve the social and communication skills of adolescents and adults with ASD. The study by Alotaibi (2015) surveyed 158 male and female teachers of pupils with ASD from various ASD programmes in Saudi Arabian public schools and institutes in Riyadh, Makkah, Jeddah, Al-Madinah, Al-Demmam, Abha, and Hail about their knowledge and frequency of use of ABA with pupils with ASD in

Saudi Arabia (Alotaibi, 2015). It was found that female teachers reported a higher level of knowledge and usage of 16 ABA strategies than male teachers assessed as part of this study (Alotaibi, 2015). The study also found that teachers who had either previously taken part in a behaviour management course or received ABA training tended to report higher levels of usage and knowledge of ABA strategies compared to those with no such training (Alotaibi, 2015).

ABA also has a number of limitations in terms of how it is taught and applied in a Saudi Arabian educational environment. It has been found that there are barriers preventing teachers from employing certain teaching strategies. These factors are support from administration (89.3 per cent), knowledge or skill of participants (86.1 per cent), feedback or guidance (85.5 per cent), supplies (84.8 per cent), and support from colleagues (82.3 per cent) (Alotaibi, 2015). This result indicates that teachers in Saudi Arabia have been prevented from using ABA due to lack of training or knowledge of the educational tool. Hence, Alotaibi (2015) concludes that the findings of the study should be used to help improve training programmes for teaching pupils with ASD in Saudi Arabia.

Another innovation for pupils with ASD in Saudi Arabia has been the development of new technologies, as emerging technologies are being developed to support the education of children with ASD and are beginning to be used in Saudi Arabian classrooms. Al-Wakeel et al. (2015) compared the usability of two Arabic mobile applications available in the Apple Store (iPad) to support children diagnosed with ASD and improve their social skills. This research expanded on previous research into the feasibility of using electronic games to educate children with special needs

by Barry et al. (2008), and specifically for pupils with ASD, by Khan et al. (2013). Usability was assessed using eye tracking, and participants' satisfaction with the products 'Tap to Talk' and 'Touch to Speak' was explored through observations and questionnaires (Al-Wakeel et al., 2015). 14 Saudi Arabian schoolchildren were sampled, eight of whom were diagnosed with ASD, and 6 non-SEN pupils. The 6 non-SEN participants consisted of three children aged between three and 6, and three children aged between 7 and 12. The ASD participants were aged between five and 12 years (Al-Wakeel et al., 2015). The study found that the use of iPad applications was generally straightforward; however, it was found that children with ASD were distracted when the application used too many pictures, or when it was impossible to predict the presence of other pages (Al-Wakeel et al., 2015). Hence, the researchers conclude that iPad applications need to be clearer and more streamlined to be effective education tools for pupils with ASD.

Guldberg (2008) and Burns (2012) explain that, in their view, new divergent and revolutionary teaching practices have been developed to teach children with ASD in the UK. Parents are also able to study on the WebASD course set up by the University of Birmingham (Plimley et al., 2007). The WebASD project brought together parents and carers of children with ASD who then shared their experiences and received reports via specially set-up web forums, which then led to participants experiencing deeper appreciation and empathy for what it is like to live with ASD (Pilkington, 2016). Through the WebASD forums, it was possible to identify which teaching and lifestyle choices were most likely to benefit children with ASD. For example, parents reported experiencing varying degrees of success regarding different food regimes and professional advice (Plimley et al., 2007). Such methods

have been developed in order to allow pupils with ASD to either start or return to formal study at a university level. However, for younger learners, Burns (2012) reports that Guldberg and others have developed humanoid robots to help teach pupils with ASD at primary level. As the robots have no emotions, pupils with ASD find them easier to engage with (Burns, 2012).

Other studies suggest that utilising technology-based education aids can improve the social and coping skills of pupils with ASD. For example, Robins et al. (2005) undertook a longitudinal study with four children with ASD and studied how exposure to a humanoid robot over a period of several months affected their social interactions. The study found that the stimulated social interactions the children with ASD experienced with the humanoid robots improved their social interaction skills in terms of imitation, turn-taking, and role-switch as well as improving their ability to communicate effectively with others (Robins et al., 2005). Similarly, McMahon et al. (2015) found that the use of an augmented reality navigation system by college students with ASD compared to Google maps or paper maps resulted in more successful travel and navigation of unknown places by this segment of the student population. The results of Robins et al. (2005) and McMahon et al. (2015) studies indicate that the use of technology can help pupils with ASD improve skills, reduce barriers to employment, and help them develop skills that will be helpful in adult life. This evidence suggests that investment in technology can facilitate the education of pupils with ASD. However, in Saudi Arabia, Al-Wakeel et al. (2015), as reported earlier, found that iPad applications need some development if they are to effectively improve the social skills of pupils with ASD. This is because, at present, they have

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too many distractions for children with ASD. This indicates that technology needs to address the specific needs of pupils with ASD to be effective.

In terms of teaching approaches and type of education available to pupils with ASD in mainstream schools in the UK, Hampshire County Council (2010) identified several aspects of learning that may need to be specifically tailored to the needs of pupils with ASD in mainstream schools in the UK. These aspects include learning styles, language and communication, dealing with the social aspects of learning, the emotional aspects of learning, and how to work as part of the team—issues which pupils with ASD can sometimes struggle with (Hampshire County Council, 2010). The type of education on offer for pupils with ASD in mainstream schools may include a number of different approaches, such as daily life therapy and music therapy (Jordan et al., 1998). Music therapy is often used in the education of pupils with autism to improve social interaction and communication, although it has been found to lead to no long-term improvement (Gold et al., 2006). Daily Life Therapy was developed by Dr Kiyo Kithara in Japan during the 1990s to educate pupils with ASD and focuses on three key principles: (1) physical exercise, (2) emotional stability, and (3) intellectual stimulation (Roberts, 2007; Van Bourgodien and Reiche, 2001). These three principles are applied to encourage pupils to control and regulate their own biological rhythms with the aim of improving mood and stamina and reducing anxiety levels (Roberts, 2007). This is achieved through engaging in scheduled activities, group-orientated instruction, and a curriculum focused on movement, music, and art (Quill et al., 1989). In theory, this should then lead pupils with ASD to improve their interpersonal relationships and display an increased willingness to explore their own surroundings (Roberts, 2007). But whilst Daily Life

Therapy has been found to increase obedience and reduce inappropriate behaviours amongst pupils with ASD, it has been found that Daily Life Therapy does not improve pupils with ASD's ability to follow direction or understand what they are being asked to do in the classroom (Roberts, 2007).

Jordan et al. (1998) explain that, depending on the availability and selection of staff, pupils with ASD may also benefit from the services of occupational therapists, physiotherapists, and speech and language therapists. Another factor that affects teaching practices towards pupils with ASD in the UK is that UK-based educators tend to recommend a whole school approach to educating pupils with autism spectrum disorders. This means that all staff working with pupils with ASD on a personal level should communicate with each other in regard to the pupil(s) needs and the need to receive specific training (Jordan et al., 1998). As well as this, Hampshire County Council (2010) note that individual curriculum aims need to be designed for the pupil, and their social communication, behavioural, and personal development targets need to be defined. Also, Hampshire County Council (2010) recommends that the entire school be made aware of the specific needs of pupils with ASD and stick to a specific policy when educating and addressing the needs of pupils with ASD. Such methods, it is suggested, create a calm, predictable environment in which pupils with ASD can be educated in a way that meets their specific needs.

2.5   Attitudes towards the Inclusion of Pupils with ASD

2.5.1 Teachers

Barnard et al. (2000) note that training and expertise are vital for teachers who come into contact with pupils with ASD in order to address their specific needs in an appropriate manner. For example, in Attwood's work, a parent of a number of children with ASD explained that teachers can sometimes be an issue as they reported that:

> *. . . I have spent…many frustrating hours speaking to teachers in Schools who not only do not 'get it' but do not even want to try . . .*
> (Attwood, 2006, p. 9)

Nicol (2008) explains that problems between teachers and pupils on the ASD spectrum may be because teachers in general have been found to favour compliant, well-behaved pupils. This may raise problems for pupils with ASD as they may lack social skills and may become disruptive in a classroom environment as a result. However, Nicol attributes these problems to teachers having had little previous contact with pupils with ASD. This is because it has been noted that when teachers have increased contact with pupils with ASD, they come to view these pupils in a more positive light. Through contact, they then come to realise that their behaviour stems from their disability rather than a negative attitude (Nichol, 2008). A lack of training for teachers in the UK concerning teaching pupils with ASD was addressed in May 2016 when it was announced that training to cover the specific needs of pupils with ASD would be a mandatory part of the training of all teachers in the UK (Espinoza, 2016). For example, Barnard et al. (2002) note that 72 per cent of UK schools surveyed felt that their teachers had not received enough training in ASD;

also, 32 per cent of schools who felt that their staff had insufficient training were negative about inclusion (Barnard et al., 2002). In addition, out of mainstream schools that had pupils with ASD, only 22 per cent of the teachers had received some kind of training in ASD, whilst 21 per cent of schools with pupils with ASD did not have a single teacher who had received any kind of training in ASD and how to cater for the needs of pupils with ASD (Barnard et al., 2002).

A study undertaken in Egypt by Hassanein (2015) of Egyptian teachers' attitudes towards inclusion found that teachers expressed fears that the parents of non-special educational needs (SEN) pupils may oppose inclusion because they believe that teachers will need to cater for the needs of SEN children, and it will affect the learning of non-SEN pupils (Hassanein, 2015). However, Farrell et al. (2007) found that inclusion does not negatively impact on the academic attainment of non-SEN pupils in England. Furthermore, Black-Hawkins et al. (2007) state that inclusion should encourage academic achievement, not ignore it. According to Grove and Fisher (1999), it has been found that parents of SEN children perceive that teachers and staff are unaware and unfamiliar with the specific needs of their children. Also, Hassanein (2015) reports that teachers are concerned that non-SEN pupils might have already developed negative attitudes towards disabled people, which could prevent full inclusion of pupils with SEN, and encourage parental perceptions that teachers are unable to handle the needs of their children. As well as this, special education teachers expressed fears that non-SEN pupils might bully pupils with SEN (Hassanein, 2015). This evidence indicates that there is potentially some resistance to inclusion in Middle-Eastern countries on the grounds that the learning of non-SEN

pupils might be affected, and due to existing ongoing prejudices against the disabled.

Although Theodorou and Nind (2010) observed that pupils with ASD benefit from positive interactions with their teachers in a nursery school setting, Almasoud (2010, 2011) has expressed concerns that teachers lack the training to work with children with ASD, and that parents feel that not enough is being done to implement inclusion of children with ASD in Saudi Arabia's mainstream education system. Furthermore, Al-Faiz (2006) and Al-Ahmadi (2009) found that teachers struggled to implement inclusive practices. However, the studies undertaken by Al-Wakeel et al. (2015) and Alotaibi (2015) show that a number of innovations have been tried out in mainstream Saudi Arabian schools in recent years to improve inclusion, and effectively teach and enhance the social skills of children with ASD.

Finally, a study by Al-Abduljabber (1994) found that female teachers and administrators have a positive attitude towards inclusive education. In addition, the experience of children with ASD also influenced the opinions of the administrators. This result highlights the importance of the experience of children with ASD. Moreover, the result is in itself not surprising if a teacher or administrator has had previous contact with pupils with ASD, either through training or experiences in the school, it is more likely that they have understanding and knowledge of different approaches that can be used to support and help a pupil. It also helps to reduce the stigma and to reduce anxiety over dealing with children with ASD. Thus, barriers towards the inclusion of children with ASD in Saudi Arabia may be lack of education and professional development of teachers and staff, as elsewhere it has been found

that lack of knowledge and understanding of the condition in society, lack of teaching materials, as well as suitable facilities, all have an impact (Almasoud, 2010, Bernard-Opitz, and Häußler, 2011; Mesibov and Howley, 2003).

2.5.2 Non-SEN Pupils

When examining the attitudes of non-disabled pupils to their disabled peers, DeBoer (2012) found that they improved as a result of inclusion. When investigating the attitudes of non-disabled pupils towards pupils with developmental disabilities such as ASD, through a literature search of 20 studies from seven different countries regarding inclusion, DeBoer (2012) identified five types of attitudes and changes in opinion that came about due to the inclusion of special needs pupils in mainstream schools. These attitude types developed by DeBoer (2012) have been cited by Chaaya (2012) as: (1) that non-disabled pupils showed reduced fear of differences in other children and felt more comfortable about such differences, (2) that social cognition increased and positive social development took place, (3) the self-concept of non-SEN pupils improved, (4) that non-SEN pupils developed personal principles when learning about classmates with special needs and their ability which challenged ingrained stereotypes, and (5) that warm and caring friendships formed between special needs pupils and their non-SEN peers when teachers created play opportunities to facilitate social interactions. As such, DeBoer (2012) shows that inclusion in school can encourage pupils to appreciate and respect difference and diversity. The outcomes of these 20 studies were rated negative, neutral, or positive according to cognitive, affective, and behavioural outcomes reported. Overall, the results of DeBoer's study show that pupils generally hold neutral attitudes toward disabled pupils. Attitudes varied according to age, gender, parental influence, and

experience and knowledge about disabilities. Furthermore, the attitudes of their peers affected the extent to which disabled pupils integrated socially in inclusive schools (DeBoer, 2012).

Chaaya (2012) interviewed two teachers, 'Vanessa' and 'Lydia,' at an inclusive Catholic Elementary School in greater Toronto, Canada to evaluate the impact of inclusion on other pupils. These open-ended interviews identified several ways in which inclusion impacts on pupils with ASD and other pupils in a classroom environment. Vanessa observed that inclusion led to non-SEN pupils becoming more sensitive to the needs of others. She explained that, 'typical pupils become humbled and realise that everyone is different with different needs and this is okay' (Chaaya, 2012, p. 9). Also, an accepting classroom community led to pupils with ASD experiencing an increased sense of belonging. In addition, Vanessa discussed how inclusion allowed pupils with ASD to experience and benefit from collaborative learning that gave them a voice and an opportunity to share their opinions.

She explained that:

> *'I think Peter [a pupil with ASD in Vanessa's class] benefits socially a lot more being in my classroom as opposed to a segregated classroom. The friendships he has developed [with the other pupils] mean a lot to him'* (Chaaya, 2012, p. 9).

The other teacher interviewed, Lydia, agreed with Vanessa. She observed that all the children loved it when a dance instructor was brought in for the grades seven and eight pupils, and that there is no way of telling which of the pupils had ASD, providing that pupils with ASD can be included in non-curricular social activities at school and benefit from them (Chaaya, 2012).

These examples indicate that inclusion helps pupils with ASD to improve their social skills, as well as improving how non-SEN pupils perceive a difference in their attitudes towards children with disabilities. Furthermore, Mundy and Mastergeorge (2012) found that the inclusion of pupils with ASD encourages them to model and improve social behaviours by imitating their non-SEN peers, and Owen-DeSchryver et al. (2008) found that increased initiations by trained non-SEN peers prompted increased initiations and responses by pupils with ASD. What Owen-DeSchryver et al. (2008) recommend is an informal kind of peer tutoring.

Inclusion can impact on non-SEN pupils both academically and socially. Dyson et al. (2004) suggest that inclusion can impact on the educational attainment of both pupils with ASD and non-SEN pupils, whilst Humphrey and Lewis (2008) argue that the difficulties pupils with ASD experience at school are attributable to their problems forming friendships with their non-SEN peers, as individuals with ASD often struggle to socialise with others. Studies such as the one by Block and Zeman (1996) and Dyson et al. (2004) have revealed that learning alongside pupils with SEN does not affect the educational attainment of their non-SEN peers. However, research into inclusion has also found that learning alongside pupils with SEN affects the ability of non-SEN pupils to remain on task (Dyson et al., 2004). This indicates that the educational attainment of non-SEN pupils is unaffected by the presence of pupils with SEN, but that the presence of pupils with SEN may affect the ability of non-SEN pupils to concentrate and commit to classroom tasks. However, it is important to note that Dyson et al. (2004) and Block and Zeman (1996) study pupils with SEN rather than pupils with ASD in particular, indicating that the results of a study focused on the relationship between non-SEN pupils and pupils with SEN could be different.

These conclusions led Dyson et al. (2004) to suggest that it is important for non-SEN pupils at inclusive schools to learn how to interact with their SEN peers.

Humphrey and Lewis (2008) found that pupils with ASD studying at secondary schools in the north-west of England had a tendency to view themselves negatively, reporting that they were 'retarded' or had a 'bad brain.' The researchers attributed these problems to the difficulty pupils with ASD experienced trying to 'fit in' in a mainstream school environment. The reason why pupils with ASD experienced social difficulties in the mainstream secondary schools was that ASD affects the ability of those affected to understand others' point of view (Humphrey and Lewis, 2008). Because pupils with ASD struggle to understand how others think and different motivations, Humphrey and Lewis found that pupils with ASD were often exploited by their non-SEN peers. Social naivety amongst pupils with ASD was widely reported in the study. This was because their keenness to seek friendships and failure to understand the nuances of social interaction led to pupils with ASD to become easy targets for ridicule, teasing, and bullying (Humphrey and Lewis, 2008). For example, one member of staff reported an incident where a group of girls had announced to a pupil with ASD that one of them wanted to be his girlfriend, which was not true. Instead, this was a deliberate attempt to tease the pupil with ASD. Due to social naivety, the pupil with ASD took their statement seriously, proudly announcing the 'relationship' to other pupils in the class (Humphrey and Lewis, 2008). The incident concluded in the following manner:

> *. . . He actively and repeatedly sought her attention until, frustrated that the joke had backfired, the girl verbally abused him. This greatly upset the pupil in question, who struggled to understand why he was being treated this way . . . (Humphrey and Lewis, 2008, p. 33).*

Hence, it is clear that non-SEN pupils may take advantage of the social difficulties and naivety of pupils with ASD for their own amusement. Despite this, on occasion, the particular social characteristics of those with ASD may help them interact in a mainstream school environment. For example, one pupil with ASD had a special interest which fascinated his peers, increasing his social confidence. The pupil with ASD reported that his non-SEN peers often asked him 'how do you know all this, how do you know that? . . . I often feel proud of myself' (Humphrey and Lewis, 2008, pp. 32–33). Thus, it seems that that the particular social characteristics of ASD can lead to both positive and negative social interactions between pupils with ASD and non-SEN pupils.

Generally, studies into non-SEN pupils' attitudes towards pupils with SEN at inclusive schools have generated positive results. For example, when conducting focus group interviews with 46 middle school pupils in the US at an inclusive school, and another 46 pupils at a traditionally structured school, Capper and Pickett (1994) report that pupils attending the inclusive school demonstrated increased acceptance, tolerance, and understanding of individual differences. On the other hand, Capper and Pickett (1994) note that pupils at the non-inclusion school had a greater tendency to stereotype and hold negative perceptions of individuals with disabilities. Similarly, York et al. (1992) found that inclusion was a positive development. York et al. (1992) carried out a survey of 181 non-SEN middle school pupils concerning their reactions to learning alongside with pupils with serve disabilities, and found that these pupils generally felt that inclusion was a good idea; that positive outcomes resulted from inclusive education, such as improved social and interpersonal skills, and that non-SEN pupils developed more realistic and positive perspectives of

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individuals with disabilities. Hence, whilst pupils with ASD educated in an inclusive environment seem to be at greater risk of experiencing social ridicule, the general attitude of non-SEN pupils towards their ASD and SEN peers tends to be generally positive and beneficial for all pupils.

2.5.3 Parents

Studies have found that parents of pupils with ASD display a positive attitude towards inclusion. For example, in a study on the perspectives towards inclusion of 354 Australian parents who had a child with a disability, the majority of which had been diagnosed with ASD, it was found that most parents favoured inclusion (Elkins et al., 2003, p. 122). However, some parents reported feeling that more resources needed to be provided for their children, whilst a small group of the sample favoured special placement as a means of educating children with ASD (Elkins et al., 2003, p. 122). Overall, the study suggests that parents of pupils with ASD tend to view inclusion as a positive innovation and the best way of educating their children. One area highlighted by the study is that more resources are needed for educating pupils with SEN in an inclusive setting, which reflects the findings in other studies that parents of pupils with SEN often report having difficult relationships with their children's teachers and support staff due to a lack of awareness of the perceived complexity of their child's specific needs. For example, Grove and Fisher (1999) claim that the parents of children with SEN they surveyed reported that they found that the staff lacked knowledge about their children, and that it was difficult to access teachers or other members of staff that were willing to provide and receive information on the needs of their children. Furthermore, Lake and Billingsley (2000) found that even when relationships between parents and staff are good, conflict can

arise due to their different perspectives about the particular needs of the pupils with SEN concerned.

Similarly, a study by Dimitrios et al. (2008) into inclusion in Greece found that whilst parents of children with SEN supported the idea of inclusion, it did raise concerns about the welfare of their child. The study sample consisted of parents (51 mothers, 68 fathers) of pupils with SEN from the Thessaly region of Greece who completed the Attitude toward Inclusion/Mainstreaming Scale (Dimitrios et al., 2008). The 18 items on the scale have been designed to assess what parents feel the benefits of inclusion are, how satisfied they are, whether inclusion increases the right of their child, and the ability of teachers to support inclusion (Dimitrios et al., 2008). The findings reveal that parents were not particularly concerned about the emotional welfare of their children in an inclusive setting, but were concerned as to whether their child would be accepted by their non-SEN peers (Dimitrios et al., 2008). Also, parents were concerned about the quality of instruction offered to their children and the services available to support them. Despite this, the parents surveyed strongly felt that their children should be educated in a mainstream environment (Dimitrios et al., 2008). Another finding was that parents of pupils with SEN were confident that their children would be treated equally by teachers and accepted by their non-SEN peers (Dimitrios et al., 2008). These results indicate that these parents had some concerns about SEN practices but were, overall, positive about inclusion. Similarly, parents of pupils with ASD, in a study carried out in Sweden, saw inclusion as a positive thing, as did parents of pupils with ASD surveyed in Zimbabwe (Falkmer et al., 2015; Majoko, 2017). It is apparent that parents believe that the school

environment could enable inclusion through encouraging positive peer relations, help from support staff, and prevention of bullying (Falkmer et al., 2015).

However, Glazzard (2011) found that negative perspectives concerning inclusion in an inclusive school came from both teachers and parents. In a study concerning the barriers towards inclusion in a primary school in the north of England, qualitative data were collected from teachers and auxiliary staff on the subject through a focus group (Glazzard, 2011). The results of the study were mixed. On the one hand, some practices at the primary school were judged to be highly inclusive, whilst others were felt to be highly exclusive (Glazzard, 2011).

It was found that:

> *Some teachers worked in good faith to develop effective inclusion for learners with special educational needs . . . [But] other teachers displayed negative attitudes towards these pupils and this impacted negatively on the school's commitment to inclusion* (Glazzard, 2011, p. 56).

The problems with implementing inclusion at the school were attributed to lack of resources, training, and funding. Furthermore, it was found parents at the school also opposed inclusion on the basis that it was felt to negatively affect educational standards (Glazzard, 2011). Similarly, a study by Majoko (2017) found that parents of pupils of ASD expressed some concerns over the inclusion of their children in the mainstream school system. These were that inclusion would increase child-care responsibilities, that inclusion would be difficult as many pupils with ASD struggle with transitions or changes in routine, and that teachers might struggle with inclusion as they would need to address the needs of pupils with ASD as well as their non-SEN peers simultaneously (Majoko, 2017). A study by Kasari et al. (1999) found

that, when comparing the views of parents with pupils with Downs syndrome to parents of pupils with ASD on inclusion, parents of pupils with Downs syndrome were more likely to endorse full inclusion, whilst parents of pupils with ASD were more likely to endorse mainstreaming due to the complex social needs of pupils with ASD. Thus, these findings indicate that although most parents and staff are supportive of inclusive practice, in some cases, due to lack of training, resources, and funding, inclusion can be viewed in a negative light and as something that is likely to negatively impact on the educational attainment of non-SEN pupils.

2.6   Problems and Issues with Inclusion

This section explores the problems and issues with inclusion as an educational practice. Such problems include the level of assistance offered to pupils with SEN in mainstream schools, the potential for bullying, and the increase in pupils with SEN attending specialist schools in recent years. Studies have expressed the concerns that exist with regard to the amount of assistance that should be offered to pupils with SEN. This is because too much assistance can make pupils with SEN over-reliant on it and alienate them from their non-SEN peers (Bottcher and Dammeyer, 2016). Snow (2015) states that overdependence on auxiliary staff assistance can prevent pupils with ASD from developing a strong personal identity.

Despite the positive aspects of inclusion, it has been noted that there have been problems with how inclusion has been implemented in the UK. Armstrong and Squires (2012) note that between 1997 and 2010, inclusion was referenced to by the UK government in entirely positive terms, with no quarter allowed for any criticism of current inclusive practice. However, some backlash against inclusion did occur

based upon teaching provisions and the risk that disabled pupils in mainstream schools were more likely to be bullied. One critic of inclusion policy is Baroness Warnock, the author of the 1978, *Report of the Committee of Enquiry into the Education of Handicapped Children and Young People,* which first argued for inclusion, as by 2005, she had come to the conclusion that special schools may be the best place for disabled pupils (Apple et al., 2009). She argues that disabled pupils, particularly those with disabilities like ASD that are not instantly obvious, should be in an environment where they can trust their teachers and carers and be free of teasing and bullying (Warnock, 2005).

Corresponding to Baroness Warnock's change of opinion on the topic of inclusion, there was a slight increase in disabled pupils attending special schools between 2006 and 2010, with special schools in the UK educating 89,390 pupils in 2006 to 90,760 pupils in special schools in 2010 (Armstrong and Squires, 2012). This pattern is backed up by the most recent data on the topic, as a May 2017 report states that the number of pupils with SEN in the education system in England and Wales had fallen from 1,301,445 in 2015 to 1,228,785 in 2016 (Department of Education, 2017). This means that in 2016, 14.4 per cent of pupils in the education system in England and Wales had special needs—a decrease from 15.4 per cent in 2015 (Department of Education, 2017). These figures show that there has been a decrease in the number of children attending inclusive schools. This suggests that whilst inclusion is still seen as an effective approach to the education of pupils with SEN, it has become more acceptable in recent years to elect to educate children in special schools if it is felt that such an environment is most beneficial to their individual needs.

The statistics presented above suggest that provisions for disabled pupils in mainstream schools are far from universal. Part of the reason for this is due to the problems with provisions for pupils with special educational needs in mainstream schools in the UK, as identified by a government green paper in 2010. The findings from the Department of Education (DfE) acknowledge that disabled children are more likely to be bullied than their non-disabled peers, and that teaching standards and awareness of special needs need to be improved (Department of Education, 2011). The reason why teaching standards need to be improved is that:

> *. . . At present teachers' initial training does not always equip them with the tools to identify and meet a broad range of needs. Children and young people have told us that they find it frustrating when those who help them in school or college have an insufficient understanding of their conditions or needs* (Department of Education, 2011, p. 62).

These UK government findings suggest that in order for inclusion to work best, teachers require better training to meet and identify special educational needs without being required to meet any 'perverse incentives' or fulfil a standard quota (Department of Education, 2011, p. 60). Also, staff needed to be better trained to pick up on signs of bullying (Department of Education, 2011). Finally, mainstream schools with disabled pupils need additional flexibility and funding in order to adequately support special needs pupils. This evidence, therefore, suggests that improvements need to be made in order for mainstream schools to include disabled children, protect their interests, and meet their teaching needs to the highest standard.

2.7 Summary

There is clearly a wide range of literature available relating to provisions made for the inclusion of disabled pupils in mainstream schools in Saudi Arabia, and examples of how pupils with ASD can be educated in a mainstream environment. It is clear from exploring how inclusion has been implemented in other countries that it is generally a beneficial approach to educating pupils with ASD, improving their social skills, and challenging their intellectual abilities. Non-SEN pupils also benefit from inclusion as it encourages understanding towards individuals with disabilities and SEN. However, the literature also indicates that the Saudi education authorities have failed to provide the option of mainstream education for all pupils with ASD despite the recent improvements in this area. It can be suggested that the problem with provision for the education of disabled pupils in the mainstream education system in Saudi Arabia is partly due to the failure of that system to account for the needs of mild or moderately disabled pupils. Whilst the system does assist those who have both ASD and high intellectual abilities, it does not take into account the benefits for pupils with mild or moderate ASD being included in mainstream education. This is partly because there have been problems in Saudi Arabia in implementing individual IEPs due to lack of coordination between schools, staff and parents, and staff shortages. Also, for cultural reasons, there is a disparity between how male and female pupils are educated and treated, meaning that female disabled pupils seem to be less likely to have the opportunity of being educated in mainstream schools.

ASD is a highly complex disability, which may present in a number of ways, and every child diagnosed with ASD will be unique and will need to be educated in a way

that best suits their own individual needs. The comparison between the Saudi Arabian and other education systems shows that it is possible to educate pupils with ASD in mainstream schools; however, in Saudi Arabia, Almasoud (2010; 2011) has shown that the needs of pupils with ASD are not being met by mainstream education system. Instead, the education of children with ASD is still often being organised by charities, which sometimes encourage parents to institutionalise their children. Lack of knowledge and awareness of ASD and teaching methods, lack of practical experiences of pupils with ASD, as well as a lack of suitable teaching materials and facilities are factors that may negatively influence the inclusion of children with ASD. Due to these issues, the subsequent chapters of this thesis will explore the current approach to educating pupils with ASD in mainstream schools, and what can be done to encourage, improve, and facilitate the inclusion of pupils with ASD in primary schools in Saudi Arabia.

3   Chapter 3: Methodology

3.1   Introduction

This chapter explores how a case study approach was used to consider the implementation of inclusion in two Saudi Arabian primary schools, one public and one private, through the collection and analysis of interview and observation data. Through these means, it will be possible to consider how pupils with ASD are currently being included in mainstream Saudi primary schools. This section presents the research design and philosophy behind the research, and how the material was collected. Completing an investigative study over a three-month period has allowed the researcher to become more familiar with the subjects of that study, in particular, the pupils with ASD under observation. As Burgess (1989) explains that trust is won, not assumed in educational research, by conducting the study over the course of three months, spending one month setting it up and one month each in each school involved in the study, it has been possible to facilitate a trust-based relationship between the researcher and the participants. The researcher has observed interactions between teachers and pupils in and outside the classroom at each of these schools, and has interviewed the teachers of each classroom to assess this. Also, the parents of children with ASD, pupils with ASD, and pupils working alongside them have been interviewed to assess the impact of these policies in the classroom. These methods aim to assess the extent to which inclusion has been adopted, the success of inclusion in mainstream schools, and any lessons that may be learnt as a result of this research.

3.1.1 Research Questions

1. How are pupils with ASD currently being included in mainstream Saudi primary schools?

2. What are the opinions and perspectives of parents, teachers, non-SEN pupils, and staff regarding the inclusion of pupils with ASD in Saudi Arabian primary schools?

3. What lessons can be learned from those schools which have adopted inclusive practices?

4. What are the preventing factors and barriers to implementing an inclusive approach to education in Saudi Arabia (particularly for pupils with ASD)?

3.2 Research Philosophy and Methodological Approach

3.2.1 Research Philosophy: Interpretivism

The main research philosophy underlying this research is the interpretivist paradigm. Interpretivism emphasises the ability of the individual to construct meaning in the world around them. This research philosophy is based on hermeneutics, the process of studying meaning in texts, which then leads to a process known as meaning-making (Mack, 2010). Also, interpretivism is heavily based on phenology, which is the consideration of human beings and their interpretations and perceptions of the world around them (Mack, 2010). For these reasons, the research philosophy will allow the researcher to analyse the research topic in an interpretive manner. However, interpretivism has some disadvantages. For example, it has been noted that this research philosophy 'abandons the scientific procedures of verification, and therefore, results cannot be generalised to other subjects' (Mack, 2010, p. 8). Also,

interpretivism is subjective rather than objective, meaning it is based on feelings and perceptions rather than fact.

In contrast to the interpretivist approach is the positivism paradigm, which is associated with collecting quantitative, in other words, numerical data. It is based on the approach to research used in the natural sciences, and so according to positivist researchers, reality is static and can be assessed objectively and independent of social actors (Mack 2010). A positivist approach is one that uses scientific tools to test theory and particular phenomenon; however, unlike the interpretivist approach, it does not allow for an in-depth understanding to be obtained and the data obtained may be viewed as being superficial.

The reasons why an interpretivist paradigm has been selected for this research is that it focuses on certain elements and enables them to be explored in detail, which will help the researcher answer the research questions; in particular, the role of human nature in shaping the adoption of approaches and philosophies such as inclusion in the mainstream education system. Interpretivism considers the question of the nature of reality, the relationship between researcher and participant, and the techniques applied in order to understand the research question (Eloff and Ebersohn, 2004). These vital elements of the interpretivist paradigm have allowed the researcher to build up relationships with the parents, teachers, and pupils involved in this study in order to consider how inclusion has been integrated (if at all) into the Saudi Arabian school system, and how this has affected those in the two schools involved in this study.

3.2.2 Qualitative Research

One of the advantages of qualitative study is that it can be used to successfully engage participants and get them involved in the issues at hand in order to find out their opinions about the change process taking place (Hatch, 2002). Also, a qualitative study provides a good framework for documenting social changes, such as educational inclusion. This is because qualitative research offers the researcher the opportunity to study people in their natural setting or environment in order to gain knowledge of their everyday lives. This means that qualitative study offers the advantage of being outside a 'controlled or contrived' research setting (Hatch, 2002, p. 7). Therefore, qualitative research methods allow the researcher to gain the individual perspectives of participants.

3.2.3 Methods

Multiple methods have been used to complete this research; therefore, it is important to reflect on the usefulness of using all these methods together. Qualitative research is useful for this project as it has been noted that a qualitative approach relies on perception (Sherman and Webb, 1988). Qualitative research addresses how the scenario being studied came about, the attitudes of participants, and the present state of affairs. Also, natural settings are an important part of qualitative and historical forms of research, as they allow the researcher to study the participants within the context of their own environment (Sherman and Webb, 1988). Finally, qualitative research originates from the 'need for understanding the wholeness of experience' (Sherman and Webb, 1988, p. 48). In the context of this study, qualitative research will therefore allow the researcher to explore how the research

participants function in their own environment, and create an immersive research experience.

An important qualitative research method that will benefit this research is classroom observations; observations:

> *. . . Are made in an attempt to obtain a comprehensive picture of a situation, and the product of these observations is notes or narratives [this makes] the research . . . qualitative* (Ary et al., 2010, p. 216).

This kind of observation has its strengths, as it is a useful method that can be used to determine the extent to which a particular behaviour occurs (Ary et al., 2010). For these reasons, it can be shown that despite its drawbacks, qualitative research methods are the best way of undertaking this study.

Green et al. (2006) explain that case studies are an important part of qualitative research, as they allow the researcher to discuss and study individual cases in considerable depth and detail within their real life context. Thomas (2011) explains that a case study can be described as a qualitative research method that aims to look at one thing and consider that thing in detail with no room for generalisations. This is because case studies aim to consider the situation they have set out to research in minute detail (Thomas, 2011). Although such a singular approach can be seen as narrow in terms of the scope of the research, this is not a disadvantage. In fact, with case studies: 'Potential problems arise . . . when a global approach allows an investigator to avoid examining any specific phenomenon in operational detail' (Yin, 2009, p. 50). Therefore, case study research has allowed the researcher to

focus on the issue of the inclusion of children with ASD in mainstream schools in Saudi Arabia.

The case study approach is a useful means of processing and recording research into the development of individuals and a situation over a set period of time, as took place in this research. In short, case studies are a specific, focused, in-depth study of a person, event, or group (Brain and Mukherji, 2005, p. 6); they can also be used to explore the implementation of a particular thesis or principle. In this study, a case study format has been used to achieve the latter goal. The case study paradigm has been useful for the study of the implementation of inclusion in two Saudi Arabian primary schools as it has been applied to explore the implementation of the principle of inclusion and to evaluate its impact on the main actors involved. The research consists of two case studies of an inclusive private school and an inclusive public school in Riyadh, Saudi Arabia.

Case studies are considered to be a useful research method as they have the potential to study human interactions in a simple way. They are particularly accessible to readers as they undertake research through the study of personal experience (Stake, 2000). The case study uses a mixture of interviews and observations to further explore the topic. This is because, in general, case studies frequently use several research methods as 'it is desirable to use a variety of methods to help obtain a clearer image of what is happening' (Brain and Mukherji, 2005, p. 6).

Case studies are a useful means of observing and identifying the behavioural traits and characteristics of individuals who may struggle to communicate their views in a direct manner (such as individuals with ASD), as methods such as observations and interviews provide opportunities to directly interact with the study participants (Diel et al., 2010; Williams et al., 2013). Another advantage of case studies is that they take place over an extended time period rather than being based on general impressions or isolated incidents. In this case, the researcher has spent one month at each school observing and assessing how inclusion is implemented at each school through carrying out interviews and observations. For this reason, case studies provide a more accurate impression of the subject than one that is gleaned purely from an interview or through an evaluation of the available literature.

However, there are drawbacks to using a case study approach. Both Yin (2014) and Stake (2000) note that case studies are useful for exploring individual experiences, but that they tend to arrive at broad generalisations. Therefore, case studies are not the ideal means of analysing research, which requires explanations or propositional knowledge. Despite such disadvantages, Stake (2000) explains that case studies are a good means of gaining an understanding of human experiences. For this reason, a case study works well in the context of this study. For Nind et al. (2002), case studies are an ideal way of understanding what primary school pupils, teachers, and other adults feel about inclusive cultures and what they should look like; therefore, Nind et al. (2002) highlight how a case study can be used to explore how a Western concept (inclusion) is integrated into the Saudi school system. Case studies are the ideal means of evaluating inclusion policy, as Ainscow has pointed out, as there is no clear-cut way of assessing its implementation in schools. The implementation of

inclusion can be judged by assessing whether there has been a reduction in barriers to learning and participation, or whether values of inclusion have been put into action in school and society (Ainscow et al., 2006). As the implementation of inclusion is not clear-cut, it makes sense to use a case study approach to explore how it is applied in relation to pupils with ASD in Saudi Arabia.

3.3   Research Design

The research design aims to address the philosophical nature of education and to consider the various qualitative research techniques that could be utilised to answer the fundamental questions raised by this study. A qualitative approach is useful here to answer and address how exactly the inclusion of pupils with ASD is being addressed in mainstream schools in Saudi Arabia. A qualitative approach will allow the researcher to examine these issues in greater detail than is possible if the research was analysed through the use of a quantitative survey.

The three stages of the research design are illustrated below. As Figure 1 shows, the study was completed in three stages. In the first stage of the study, the literature on the topic of the education of pupils with ASD in mainstream schools was evaluated, and an appropriate methodology was selected. The study into research design by Creswell (2009) emphasises the importance of the first stage of research, as this is where research is structured; preliminary considerations are taken into account, and the research design is selected. Preliminary considerations include selecting a research approach, reviewing the literature, exploring how to use theory, selecting strategies, and taking ethical considerations into account. Also, the first stage is when the research design is selected, taking the purpose of the study into account,

developing research questions, and selecting methods (Creswell, 2009). Following this, for the primary research to be conducted, permission had to be obtained from the Saudi Ministry of Education, and a pilot of the instruments used in the study needed to be completed. Finally, the primary research was undertaken over the course of a two-month period.
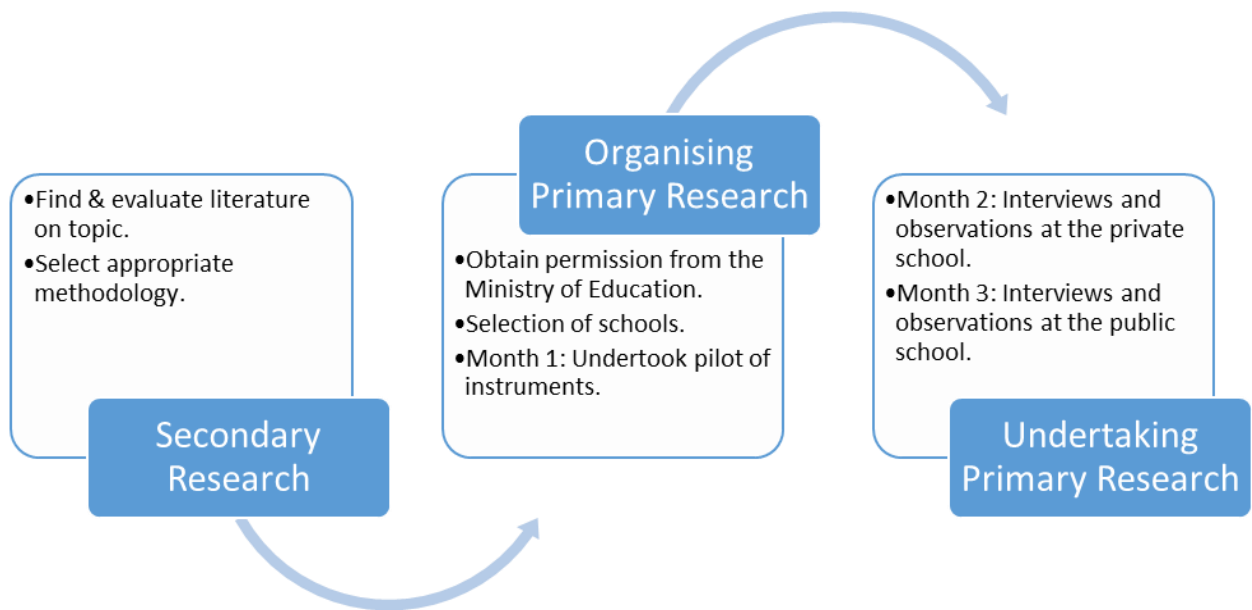
Fig. 1: Research Design in Three Stages

To clarify, the research that has been undertaken has taken the form of a qualitative study involving case studies in two mainstream schools in Riyadh, Saudi Arabia.

3.4 Case Study School and Participants

3.4.1 Selection of Schools

The data were collected from two mainstream inclusive schools in Riyadh, the capital city of Saudi Arabia. This city was chosen for the sake of convenience, and as it is

the capital, it was seen as most likely being the most progressive area in Saudi Arabia. However, whilst the experience of pupils in Riyadh is relevant, it may not be reflective of the experience of pupils with ASD in other parts of Saudi Arabia, although the programmes initiated in the city are likely to be imported to other parts of the country in the future. Ultimately, two mainstream inclusive schools were chosen (a public and a private school) to participate in the study. At first, it was thought that it would be possible to evaluate three schools as part of the study; however, the research sponsor had only allowed three months to complete the research.

It was decided not to include a non-inclusive school as whilst studying practice at non-inclusive schools would show how inclusive and non-inclusive schools differ from one another, as inclusion of pupils with ASD is the main focus of the study, it was more relevant to study educational practices in the so-called inclusive schools. Only two inclusive schools have been used as case study schools because not many inclusive schools take in pupils with ASD in Saudi Arabia.

It took one month to seek permission to complete the study from the Ministry of Education, and that time was used to translate all the tools from English to Arabic. This setback meant that there were only two months left to complete the study, which was not enough time to carry out research within three schools; therefore, a study involving only two schools was completed. The schools that participated in the study were chosen on through purposive sampling strategies in order to generate the most valuable data (Denscombe, 2007). Convenience sampling strategies were also used. Purposeful sampling is the sampling technique most often used in qualitative

or multi-method research as it allows the researcher to select information-rich cases for in-depth study (Lodico et al., 2010). With purposeful sampling, the goal is not to obtain a large or representative sample but to select persons, places, or things that can provide the researcher with the most detailed understanding of their research questions (Lodico et al., 2010). Convenience sampling was also applied in this context as the schools were chosen to make the study easier for the researcher to implement (McCormack and Hill, 1997).

This study employed both purposive and convenience strategies in order to select schools. As one aim was to study both a public and a private school in order to explore the implementation of inclusion in the public versus the private education sector in Saudi Arabia, there needed to be one public and one private school. A purposive strategy was used to ensure that the selected schools met specific criteria: 1) the school was in Riyadh as explained above, and 2) the school needed to be an inclusive school, meaning that the pupils with SEN specifically ASD were educated alongside their non-SEN peers. As explained by Aldabas (2015), in Saudi Arabia, a child with SEN is provided with a place at an educational institution, or within the regular mainstream education system, and 3) the school needed to have pupils with ASD on its role. The number of schools to choose from was, however, also limited as they needed to be on the Ministry of Education list of inclusive schools—private and public—who were willing to participate in the study. A convenience strategy was also applied as the schools needed to be geographically accessible to the researcher.

The Ministry of Education provided a list of schools that it was allowed to work with. From this list, one public school chosen as part of the sample as this school was the only official inclusive school for children with ASD in Riyadh. The Ministry of

Education offered the researcher three private inclusive schools. Each of these met the purposive sampling criteria above. The researcher purposively chose one private inclusive school in the vicinity of her house. The other school is a private inclusive school.

3.4.2 Description of Schools

The private school that took part in this study is partially funded by the state to pay for the teachers, and is located in one of the most affluent areas of Riyadh. The school has 53 pupils, seven of whom have an ASD. Each class has about four to seven children. The school has 15 general teachers; four teachers of pupils with special needs; one teacher for behaviour management; two admin staff who provide general teaching and have no particular expertise in SEN; two speech and language therapists; and one counsellor.

The school building is a rented villa with two floors. The first floor houses the administration department, the nursery, the canteen, and play area. Although the play area is not very big, it has a range of playtime resources for pupils, including a small football pitch. The second floor is allocated to primary school children. On the second floor, there is a staff room, classrooms, and a resource room. The resource room is separated by a partition in four corners. Each corner has different learning materials; for example, one corner has educational posters. There are 6 classrooms, and each one is allocated to a specific age group, from 6 to 11. Classrooms for years one to three are mixed (girls and boys). The number of teachers for each classroom varies, and this is also the case for the number of pupils in each class. Additionally, three classes out of 6 are inclusive of pupils with ASD.

The public school that took part in the study is the first officially recognised inclusive school for children with ASD in Saudi Arabia. The school consists of 12 (years one to six) fully equipped classrooms, a playground, staff room, and so on. The school has three floors. The ground floor is where the playground and canteen are located. The ground floor also hosts the year five classroom, mainly to meet the needs of one disabled pupil in a wheelchair. Additionally, the first and second floors host all classes, and this is where the administration resides. The school has an overall number of 216 pupils, with 36 teachers; out of the 36 teachers, there is one speech and language therapist, and one special needs teacher. Additionally, the school has 15 staff members. The school supports seven children with ASD of different ages, and it welcomes new pupils with ASD, whether from the Ministry of Education or King Faisal's research centre. The number of pupils in classrooms to which pupils with SEN have been assigned averages 10 to 15, the same as in mainstream classrooms at the school.

In terms of the inclusion policy of each school, both schools did not provide any documents regarding their inclusion policies; the private school head teacher said that there is no inclusion policy—the head teacher decides who to accept. The Ministry of Education occasionally sends invigilators to monitor and check if ministry set inclusion policies are adhered to at both schools. Sending invigilators to schools is standard procedure, but these invigilators have no power. They provide recommendations and reports, but they have no say over inclusion policies; this is the choice of the head teacher, who decides whether to implement inclusion or not. However, whilst the public school promised to provide documents regarding their inclusion policies, at the time of writing, they had yet to provide anything.

3.4.3 Selection of Participants

So far, the focus has been on presenting the selection process and description of the two aforementioned inclusive schools, one public and the other private. Participants within each school were selected initially through purposive and convenience sampling: for children, because they were in an inclusive class; for adults, on the basis of their personal involvement in the inclusion process.

This research aimed to examine how these two schools implemented the inclusion of pupils with ASD, highlighting the ways in which these pupils are included or not, and the challenges in implementing inclusion policies in Saudi Arabia. To ascertain this, a number of participants were interviewed to understand how each school handles inclusion, and how those involved perceive it. Certain groups of the school population such as teachers and pupils and parents were targeted to gain a full picture of inclusion at the schools.

Each of the classes selected for study were chosen because they were inclusive classes in which pupils with ASD are taught alongside non-SEN pupils. At the private school, the year four class was chosen, as the other inclusive classes were below year four and the children in these classes were considered too young to participate in the interview part of the study. The classroom observed at the private school was a year 3 class for pupils aged 8 to 9 years, and was made up of seven pupils, including two children with ASD and one with a behaviour disorder. At the public school, the year five class was chosen to participate in the study for the same reasons. For pupils, those aged 10–11 years were included from only year three at the private school and year five at the public school. The year groups and ages of

the pupils are relative to the Saudi education system. This is because they were considered to be the pupils at each school most capable of answering the questions, despite inclusion being implemented at lower grade levels. All pupils selected to participate in this study were interviewed individually outside the classroom about their experience of inclusive classes and also observed during lesson time.

In terms of how participants were selected for both schools, teachers, auxiliary staff, and parents were approached on the basis of their involvement in inclusion, not because of age, experience, or position. The criteria for inclusion in the study followed the principles of purpose sampling and favoured personal involvement in the inclusion process.

3.4.4 Implementation of the Study

Table 3: Research Programme

Primary Research Period	Activity
First Month of Research	- Translated schedule for interviews and observation tool for approval from Saudi government - Selected schools to participate in study - Undertook pilot study
Second Month of Research	- Carried out data collection and observation at the private school - First week: introduced myself and carried out some observations

	• Second and third weeks: Completed interviews • Fourth week: observations carried out
Third Month of Research	• Carried out data collection and observations at the public school • First week: introduced myself and carried out some observations • Second and third weeks: completed interviews • Fourth week: observations carried out

Preparation and data collection took place over three months. The exact tasks carried out during each month of the research process are recorded in table 3. During the first month, the interview and observation schedule were translated from English into Arabic. Permission was obtained from the Ministry of Education, and they took copies of the schedules. The copies were then reviewed with language experts, and the copy in English was also reviewed by my mentor at university in UK.

In the last week of the first month, the private school was visited to implement a pilot study in order to review the proposed methods of investigation for the observations and interviews (for the schedules of the pilot, see appendix 4). The pilot consisted of an observation of pupils with ASD and non-SEN pupils during break time, and interviews with one non-SEN pupil and one teacher. It was decided to complete the preliminary observations in the playground because the pupils were not familiar with the researcher; however, it was felt that observations would need to be undertaken of pupils with ASD in a classroom environment to gain a full picture of the extent to

which they are included in the school. The pilot interviews indicated that there was a need to space out the questions to provide more room to contemplate the answers during the interview phase of the study. To rectify this issue, the interview format was amended, and participants were encouraged to provide more in-depth answers. In order to ensure that a full picture was presented in the full study, it was decided to conduct interviews with the auxiliary staff and parents of both ASD and non-SEN pupils, as well as pupils and teachers.

During the second and third months, the research was completed at each school, with one month designated to each school. Observations were used to analyse the behaviour of the teachers, auxiliary staff, and pupils with ASD and their non-SEN peers in classrooms, whilst interviews were used to explore the opinions and attitudes of all these individuals, as well as the parents. The first week was introductory. During this week, I familiarised myself with the teachers and the pupils to create a rapport, as, according to Cohen et al. (2011), the time spent in this way helps to establish more intimate and informal relationships between the observer and the participants. I also participated in activities during the first week in each school, playing with children and having breakfast with their teachers. The aim of doing so was to allow the participants to become familiar with me without gathering any data during this period. During the second and third week, interviews with teachers/pupils/other staff were carried out. In the fourth week, observations were carried out each day for five days; four lessons were observed, making a total of 20 lessons observed per school. In the fourth week, any further interviews were also completed.

3.5 Data Collection Methods

Yin (2014) explains that deploying multiple sources of data enables the researcher to cover a broader range of issues and to develop converging lines of inquiry through using two or more methods to check the results of the research. This research has used two methods of data collection—interviews and observations—and each of these methods has been used to examine different aspects of the situation. Because the study uses more than one analytical tool, the project is better described using multiple methods. In the context of this study, it is important to explore why the methods of data collection used (interviews and observations) were initially chosen. Interviews were used to gather the opinions of parents, teachers, staff, and pupils on inclusion. Observations then took place in order to explore how teachers, pupils with ASD and non-SEN pupils interact with one another in an inclusive environment. The results of the study was then analysed to gain a full picture of inclusive education of pupils with ASD in these two Saudi Arabian primary schools.

3.5.1 Interviews

It was decided to use semi-structured interviews in order to obtain deep and meaningful data. Although structured interviews may be easier to analyse as they have a more straightforward format such as 'yes' or 'no' answers, they are less useful in the long run as they fail to reveal complex details that might be beneficial to the study (Hitchcock and Hughes, 1995, p. 156). For this reason, more informal interview techniques, such as semi-structured interviews, can often be more revealing. For example, open-ended questions can reveal more about the topic in question, and allow any issues that the interviewee may raise to be explored. In addition, open-ended interview questions allow the researcher to 'understand the

informant on their own terms' and to make sense of 'how they make meaning of their own lives, experiences and cognitive processes' (Brenner, 2006, p. 357); even so, informal interviews can involve a much more laborious and time consuming process than structured ones. Consequently, due to the advantages of semi-structured interviews outweighing the disadvantages, they are the best way of probing for information in an educational setting as they allow the researcher to probe further and expand upon the responses of the participants, whilst at the same time keeping the interview within a plan or structure of some kind (Hitchcock and Hughes, 1995). The interview schedule was designed to explore how participants feel about inclusion and what benefits and drawbacks it has brought them (see appendices 2 and 5). The interviews were piloted at the private school the month before the study commenced (see appendix 4), and some changes were made to cover all aspects of the research aims and objectives, and to include the views of more participants, as it was felt that inclusion affected everyone at the schools involved—not just those directly interacting with the pupils with ASD. Appendix 2 presents the final interview schedule for the adult participants.

The adult groups interviewed included teachers, auxiliary staff, parents of non-SEN children, parents of pupils with ASD, and educational supervisors. A similar set of questions was used with each group that was tailored to their situation and professional expertise. The interviews with pupils were semi-structured in character in order to accommodate the age and (in some cases) disability of the pupils in question. Thus, the semi-structured interview schedule was designed to cover all the aims and objectives that the research set out to achieve (see appendix 5). The pupil group interviewed were pupils with ASD and pupils without ASD. A similar set of

questions was used with each group, and was tailored according to their ability and maturity.

3.5.1.1 Implementation of Interviews

Face-to-face interviews were undertaken with teachers, auxiliary staff, parents of non-SEN children, non-SEN pupils, parents of children with ASD, pupils with ASD, and educational supervisors (see appendix 2). The interviews with teachers took place in their own classrooms, staff in the staffroom, and parents in a classroom made available for that purpose. The interviews involved asking them about their opinions on inclusion and whether it would/does work in their classroom (see appendix 2 for interview schedule). Face-to-face interviews took place with pupils in their classrooms in order to explore their attitudes towards inclusion in schools (see appendix 2 for interview schedule).

Table 4 shows the study participants who took part in the interview aspect of the study.

Table 4: List of Interview Participants

Interview Participants	Private School	Public School
Head Teacher	1	1
General Teacher	7	8
Special Teacher	2	2
School Staff	2	2
Special Education Supervisor	1	1

Non-SEN Pupils	7	10
Pupils with ASD	1	1
Parents of non-SEN pupils	4	2
Parents of pupils with ASD	1	1

Table 4 shows that the groups interviewed for the research are teachers, auxiliary staff, and parents of non-SEN children, non-SEN pupils and parents of pupils with ASD, pupils with ASD, and educational supervisors. Each of these groups was given a similar set of questions that was tailored to either their maturity level or professional expertise.

Completing the interviews was challenging due to the difficulty experienced with persuading individuals to participate in this aspect of the study, and three weeks were spent completing them at each school. Sometimes, the interviews with teachers were interrupted, and sometimes the interview had to be finished off the next day. Interviews with teachers, parents, and auxiliary staff usually took 45 minutes to complete. As for pupils, it usually took about 20 minutes, and sometimes interviews would carry over to the next day. Finding the time to interview pupils was difficult because it was problematic withdrawing them from class. For this reason, checks were made to see if any teachers were absent, as this would mean that the pupils were free to be interviewed and it would be possible to interview as many pupils as possible. The interviews undertaken with pupils with ASD were straightforward, as there was no need to use visual aids and they were very cooperative and understanding. The interviews with pupils with ASD took place in

their classrooms in periods between lessons. One parent said they were busy and could not make it, but they suggested that doing the interview by phone, so this method was used to collect interview data for that parent.

3.5.2 Observations

The observations were undertaken in order to obtain a comprehensive picture of the situation and provide a narrative of what is going on in the environment(s) under investigation (in this case, two mainstream schools) (Ary et al., 2010). Observations of the learning environment were important in regard to this method to work out how the individuals under investigation (pupils with ASD) function in that environment (Siegel, 1996). Both Koul (2009) and Owen-Deschryver et al. (2008) acknowledge that unstructured observations are the most appropriate method for assessing general behaviour patterns. Unstructured observations are associated with the direct observation of participants, and are mainly used as an exploratory technique as the observer does not have to categorise the behaviours they will be observing in advance. Instead, the observer will consider aspects of the behaviour observed in terms of the context or the situation in which they arise (Koul, 2009). Unstructured observations are especially useful when investigating how a child might react to everyday situations, such as school. In the context of research into the inclusion of pupils with ASD in mainstream primary schools, observations can be applied to assess how the child copes with a mainstream school environment, and whether that environment is helping them to improve their social skills.

At each school, the observations took place over five days, and four lessons were observed each day. The lessons tackled a range of subjects including English,

Arabic, Science, and the Quran. 20 lessons were evaluated in total. On two occasions, teachers were absent from lessons, and so I interacted with the pupils and we played together (drama and role play). Observations also took place during unscheduled periods of the school day, such as lunchtime and at the end of school, in order to evaluate how pupils with ASD interacted during these times. This meant five lunchtimes and five end-of-school periods were observed.

People with ASD have significant difficulties not only in the domain of social interaction and communication, but also in accessing the general academic curriculum (Barnard et al., 2002). To find out how the two schools implemented inclusive practices for children with ASD, an ethogenic approach was used, which according to Cohen et al. (2011, p. 394), 'employs an ongoing observational approach that focuses upon processes rather than products.' Therefore, the focus was on the process of inclusion within the mainstream schools rather than the frequency of the behaviours of the participants.

The aim of conducting classroom observations was to find out whether and how the classrooms were designed to promote the inclusion of pupils with ASD, and whether the classrooms were organised and structured to create a learning atmosphere for learners with ASD. It was also possible to observe the interactions of the pupils with ASD in a mainstream classroom, and how they reacted to changes in routine. Also of interest here are the interactions between pupils with ASD and non-SEN pupils with their teachers and staff in general. The observations aimed to explore four key categories: (1) classroom environment, (2) teacher interactions with ASD and non-SEN pupils, (3) non-SEN pupil interaction with ASD peers, and (4) the involvement

of pupils with ASD with non-SEN peers in social settings. By splitting the observations and interactions into these categories, a full understanding of how pupils with ASD interact in a mainstream school environment could be achieved.

Category 1: The first aim of conducting classroom observations was to find out whether the classrooms are designed to promote the inclusion of pupils with ASD, and whether the classrooms are organised and structured to create a learning atmosphere that is appropriate for pupils with ASD.

Category 2: Interactions between teachers and both ASD and non-SEN pupils were explored as part of this research. The aim here was to observe how teachers interact academically with pupils with ASD and non-SEN pupils in class. To do this, the class was observed concerning this objective for four lessons per day for five days. The observations took place in the classroom, at lunchtime, break time, in the playground, and after school waiting for the bus.

Category 3: To determine the interaction between pupils with ASD and their non-SEN peers in the classroom, a make-believe game was organised in class when their teacher was absent, to observe the interactions between non-SEN pupils and pupils with ASD. This game is discussed further in the findings chapter.

Category 4: Finally, in order to assess how pupils with ASD coped with unstructured social settings, further observations were conducted during playtime, free time, lunchtime, and at the end of the day when they were getting ready to leave.

The observation tool is as follows and is referred to in appendix 3 (semi-structured observation criteria) and appendix 6 (the observation rationale table). The objective of the first category was to observe the classroom routine and how pupils with ASD coped with changes in routine; interactions between pupils with ASD and other members of staff; interactions between non-SEN pupils and teachers; and interactions between non-SEN pupils and other members of staff. All these objectives were considered during the observation of 20 lessons. It was important to consider how pupils with ASD cope with changes in routine, as Siegel (1996) observed that children with ASD do not cope well with unexpected change. Also, it was important to observe the behaviour of non-SEN pupils as a means of establishing a normative pattern of behaviour which could be compared to the behaviour and interactions of pupils with ASD in the classroom.

The second category looked at how teachers interact with pupils; interaction between pupils with ASD and their teachers; academic interactions between teachers and pupils with ASD; and academic interactions between teachers and non-SEN pupils. Because of the nature of the learning difficulties experienced by pupils with ASD, it has been found that teachers often have to 'set up' situations to encourage pupils with ASD to engage in classroom and social activities in an appropriate manner (Wagner, 1999, p. 54).

The third category looked at how non-SEN pupils interact with pupils with ASD in the classroom, with the aim of observing pupil interactions in a mainstream classroom. This technique has been used in previous studies of the experiences of pupils with ASD in mainstream inclusive schools, such as Theodorou and Nind (2010), to examine

whether pupils with ASD can benefit from interactions with teachers and non-SEN peers. Once again, the observations made relating to both these categories took place on four occasions over four separate lessons.

The fourth category explored how pupils with ASD interact with non-SEN pupils in social settings. This observation was made on eight occasions during break time and lunchtime, and on two further occasions when the teacher was absent from the classroom. The aim of this observation was to observe how pupils with ASD behave in a social setting; to observe interactions between pupils with ASD and their non-SEN peers; and to observe the interactions of pupils with ASD, non-SEN pupils, and teaching staff during unstructured periods of the school day. It was interesting to discover whether pupils with ASD are more sociable in the classroom or during unstructured periods of the school day, as Field (1981) observed that studies of interaction between children with ASD and non-SEN children indicate that children with ASD interact more with their peers when there is less teacher-structured activity.

Concerning reliability, the researcher opted to create her own original observation schedule which has, as yet, not been made public or shared with other researchers; although it will be available once the PhD has been replaced in the repository. The reliability of the observation data was addressed by observing the behaviour of pupils with ASD and non-SEN peers on a number of different occasions, and observing the consistency of such patterns of behaviour. This is 'synchronic reliability' or similarity of observations during the same period of time (Kirk and Miller, 1986). Cohen et al. (2011) explain that triangulation also addresses reliability. They note that triangulation within methods as defined by Denzin (1970) indicates that

when a study is repeated, it acts as a check on reliability and confirms the facts of the case and the theory the researcher is trying to prove or disprove. My study addressed reliability according to the definition of reliability as triangulation within methods put forward by Cohen et al. (2011) as I involved a range of participants (i.e. different teachers and pupils) and spent a considerable amount of time at both schools. As such, I was repeating the principles of the study, thus proving its reliability.

Triangulation was used to achieve reliability in this research and evaluate how inclusion was implemented at both the private and public school as the primary research achieved reliability through submitting the same questions to the same groups of participants at both the private and the public school. This achieves reliability by applying Denzin's (1970) idea of person/group triangulation where data from different people and groups is used to analyse the situation the researcher is studying. Fitzgerald (2003) explains that person/group triangulation is achieved during fieldwork such as the kind undertaken at the private and public schools by the researcher. Reliability was also achieved in this study using between methods triangulation, where different methods are used to measure the same phenomenon (Stuart, 2013). In this case, reliability was addressed by assessing the practice of inclusion at the public and the private school through both researcher-led observations and interviews with various participants in the inclusion process.

3.5.2.1 Implementation of Observations

In the private school, the observations took place in a year four class with seven pupils; three of which had SEN (2 pupils with ASD and one pupil with a behavioural

disorder), one pupil with ASD and her friends, teacher, and staff members who supported her were focused on. At the public school, a year five class with 15 pupils was examined; one pupil was ASD, and one was physically disabled. The focus was on the pupil with ASD and her friends, teachers, and staff members who supported her.

The observation phase took place during the fourth and final week of my stay in each school and lasted exactly one week. Attempts were made to minimise the observer effect by spending time with the pupils and the staff in weeks 1–3 so that they could get used to me and not change how they normally conduct themselves due to my presence (Robson, 2002). The 20 lessons observed in each school covered a range of subjects including English, Arabic, Science, and the Quran. On two occasions, teachers were absent from lessons, so I interacted with the pupils and we played together (drama and role play). During the lessons, I would sit at the back of the classroom to avoid disrupting the lessons and the pupils, which meant I was not a participant in the classroom activities at the time of the observations. Observations also took place during unscheduled periods of the school day, such as lunchtime and at the end of school, in order to observe how pupils with ASD interacted during these times. This meant five lunchtimes and five end-of-school periods were also observed.

The observations usually started during the second period since I could not make it to the school during the first lesson due to living far away. Once at the school, four lessons per day were observed. Although it might be argued that it was necessary to start observations from the time the children arrived at school in order to take note of

how they started their day, starting the observations during the second lesson until the time pupils left for home seems to have had no significant effect on the data, as there was adequate time to collect reliable data to provide a general picture of inclusive practices within the school for data triangulation from other sources. In addition, it gave pupils the chance to settle down into their normal routines with no interruptions. Informal conversations were conducted alongside the observations in order to seek clarification from the teachers in case of observing something that seemed unusual.

3.6 Implementation of Study

3.6.1 Interviews

The rationale behind the interviews is explained in appendix 5, which shows that each of the participants included in the interviews were for a specific reason. Teachers were included in the study, as Al-Mousa (2010) claims that inclusion is a 'success story' in Saudi Arabia, hence it was important to check whether ordinary schoolteachers up to date on current practices in inclusion. Auxiliary staff were also included in the study, as Feinstein (2010) has pointed out that the Saudi education system fails to provide for children with disabilities unless they are either profoundly intelligent or highly disabled, and the purpose of auxiliary staff is to provide extra support.

Parents were included, as Almasoud (2011) found that 97 per cent of parents of children with ASD felt that those children were not being properly included in the Saudi Arabian mainstream education system; therefore, it was important to obtain

the parents' views to corroborate or contradict this. The parents of non-SEN children were also invited to take part in the study, as according to Almasoud (2011), who has undertaken extensive research on the experiences of parents of children with ASD in the Saudi education system, the perspective of parents of non-SEN children has not been sought on this issue.

The interview schedule and its implementation was undertaken in reference to the four main research questions in this thesis, and separately in reference to the individual perspectives and needs each of the groups participating in the interviews, namely teachers, auxiliary staff, educational supervisors, parents of non-SEN pupils, parents of pupils with ASD, non-SEN pupils, and pupils with ASD. Research into conducting effective interviews emphasises how important it is to open the interview with non-challenging and open-ended questions that will tell the interviewer as much as possible about the participants, and this was done for all the interviews undertaken at both the private and the public school.

The specific aims of the interviews with each group of participants were also designed to create an organised and coherent interview schedule. The aims of the interview process for teachers were to identify the extent to which teachers are informed about inclusion, or have sought to inform themselves about inclusion, and to discover the impact of inclusion as a policy on teachers in inclusive schools. The interview process was then intended to establish what, if any, additional training is being offered to teachers in inclusive schools, and the effect that changing a school's policy to one of inclusion would have on its teaching staff. In addition, it allowed whether teachers felt that the benefits of inclusion were greater than the

disadvantages to be considered. In regard to the interviews with auxiliary staff, it was felt that it was important to obtain this group's experiences of inclusive and non-inclusive education to establish the extent to which pupils with ASD are welcomed into mainstream schools, and the extent to which facilities are put in place for mainstream schools to employ auxiliary staff. The interviews then explored the challenges of recruiting auxiliary staff for inclusive schools, and whether difficulties with staff recruitment is a barrier to mainstream schools adopting an inclusive programme. The interviews with auxiliary staff also sought to establish the day-to-day practice of working with pupils with ASD, and whether enough has been done to make inclusion a genuinely beneficial experience for pupils with ASD. The aim of interviewing educational supervisors was to evaluate their understanding and experience of inclusion, and their attitudes towards government policies regarding inclusion, as well as if they believe these policies are working. The interviews with educational supervisors addressed whether staff find it easy to adapt to inclusion, and what impressions the school had obtained regarding how parents feel about it, to address whether educational supervisors see inclusion as beneficial, and whether they have much contact with pupils with ASD.

The aim of interviewing parents of non-SEN pupils was to identify the extent of parents' pre-existing knowledge or any judgements/bias they might hold about children with SEN/ASD, as well as whether parental attitudes are positively or negatively affecting the adoption of inclusion in mainstream schools (via parental lobbying). The interviews also sought parents' opinions and views on what they feel the impact of inclusion has on non-SEN pupils. Hence, the aim of interviewing parents of non-SEN pupils was to evaluate whether their experiences of inclusive

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education are sufficiently positive for children and their families to warrant an increase in inclusion, or if more needs to be done before inclusion is adopted as standard practice throughout the Kingdom of Saudi Arabia. The aim of interviewing parents of pupils with ASD was because it is important to understand the specific needs of the child, and to appreciate the barriers they have faced when it comes to educating their child. Parents of pupils with ASD also have knowledge about the attitudes and skills of the different people involved with the care and education of their child.

The aim of interviewing non-SEN pupils was to evaluate the extent to which mainstream primary school pupils come into regular contact with pupils with ASD, and the extent to which pupils with ASD are being included in the mainstream classroom and extracurricular activities. The interviews also aimed to discover whether inclusion was beneficial to non-SEN pupils, and how they and their parents reacted to the presence of pupils with ASD in the classroom, in order to evaluate the positive and negative effects of inclusion. The aim of interviewing pupils with ASD was to evaluate the extent to which pupils with ASD came into contact with their non-SEN peers during the learning process and the extent to which pupils with ASD are included in extracurricular activities. The interviews also explored whether pupils with ASD feel they are in any way 'different.' For example, the interviews explored how pupils with ASD feel in class. Although non-SEN pupils may see some behaviours of pupils with ASD as disruptive, it was important to explore whether pupils with ASD realised their behaviour was disruptive or not. Finally, the interviews explored whether pupils with ASD feel they have benefitted from inclusion, and if they feel

comfortable in an inclusive environment. These categories are presented in appendix 6.

3.7 Data Analysis

The observation data have been analysed in a deductive fashion based on previously determined foci. The data analysis involved an inductive process for the interview data, and a deductive approach for the observation data.

3.7.1 Interviews

The interviews were analysed through coding and categorising, from which themes emerged; in other words, thematic analysis. Tavakoli (2012) explains that categorical analysis uses a common variable or specific value to define each part of the research findings. These values can either be qualitative or quantitative in nature. Once the categorical variables have been gathered during the course of the study, they are compared to one another or are extrapolated from the main data to enhance understanding of the research (Tavakoli, 2012). This happened over the course of the study. Each question was taken in turn and open coding was carried out.

It is important to explore the rationale behind the coding process used to examine the interview data gathered from the private and public schools. Thematic analysis and open coding were used to evaluate the results of the interviews. Open coding plays an important role in thematic analysis as it encourages the researcher to look for distinct concepts and categories in the data, which will form the basic units of the analysis. In other words, the data are broken down into first level concepts, or master headings, and second-level categories, or subheadings. Basically, it is up to the

researcher to read through the data several times and then start to create tentative labels for chunks of data that summarise what is happening. Data analysis for the interview process can be explored via the example of the first question submitted to teachers, and this is presented in appendix 1. The first question teachers at the private school were asked is: 'What do you understand by the term "special educational needs"?' First, the question was categorised under 'understandings of SEN.' The question was answered by seven teachers at the private school and their responses highlight that there are two different ways of understanding SEN. Participants either understood SEN as: (1) as the pupil having a behavioural problem or (2) as the pupil having either a mental problem, a functional disability or a physical disability. Each of these kinds of responses was then given its own code or a first level code. The code created for response (1) is specific learning difficulty/behavioural disorder. For response (2), the code created is mental retardation/deafness/visual impairment/physical disability. A second level code 'types of SEN' was then created to categorise the first level code.

These labels are not based on existing theory, but based on the meaning that emerges from the data. Open coding is the process of 'breaking down, examining, comparing, conceptualising, and categorising data' (Boeije, 2010, p. 96). All data that has been collected has been read very carefully and divided into fragments. These fragments have then been compared to one another, grouped into categories that deal with the same subject, and labelled with a code (Boeije, 2010). Little or no selection is made at this stage in terms of relevance of the research material, as the value cannot yet be predicted (Boeije, 2010). The code then goes through the

summarising phrase for a piece of text that expresses the meaning of the fragment.

It is through the analysis of codes that fragments can be compared and filed as:

> *Qualitative codes take segments of data apart, name them in concise terms, and propose an analytic handle to develop abstract ideas for interpreting each segment of data (Charmaz, 2014, p. 45).*

As such, codes provide analytic support to the data, and open coding encourages a thematic approach to data gathering as it guides the analyst to break up a text into pieces, compare them, and assign them to groups that address the same theme (Boeije, 2010). Applying open coding means that data can be discussed with an open, flexible approach, whilst being clearly organised, as has been attempted in this study.

The process of data analysis for the interview data in this study will be presented via the example of the first question asked with teachers (and presented in appendix 1). This question is: 'What do you understand by the term "special educational needs"?' First, the question was categorised as 'understandings of SEN.' The question was answered by seven teachers at the private school and their responses highlight that there are two different ways of understanding SEN. Participants either understood SEN as (1) as the pupil having a behavioural problem or (2) as the pupil having either a mental problem, a functional disability or a physical disability. Each of these kinds of responses was then given its own code or a first level code. The code created for response (1) was specific learning difficulty/behavioural disorder. For response (2), the code created was mental retardation/deafness/visual impairment/physical disability. A second level code 'types of SEN' was then created

to categorise the first level code. This code was then applied to the interview responses for this question by various groups of participants.

Concerning applying an open code to the interview data, appendix 1 sets out what participants said to establish the properties that belong to each code. One such example extracted from appendix 5, shows how each question was analysed, and is presented above. Categories allow the researcher to identify relationships between the open codes and what the connections are between them. This allows the researcher to identify the connections between codes. When open coding is used, the researcher uses the text to define concepts and categories. Categorical coding then involves the use of concepts and categories created from readings of the resulting data. This (1) confirms that these concepts and categories accurately represent interview responses and (2) allows the researcher to explore how these concepts and categories are related. To explore how the concepts and categories are created, the researcher needs to figure out the core variable that includes all of the data.

Applying thematic analysis and open codes grouped into categories to the interview data, has led to the identification of ten key themes. These are: (1) participants' understanding of SEN, (2) challenges of implementing an inclusive education policy, (3) teacher training and experience, (4) collaboration between teachers and parents, (5) participants' perceptions of inclusive practice, (6) programmes for pupils with ASD, (7) Advantages of inclusive practice, (8) disadvantages of inclusive education, (9) the national curriculum, and (10) suggestions on how to improve inclusive

education. The data will be presented in relation to each of these themes in the next chapter.

3.7.2 Observations

The two tables below explain the rationale in terms of how the observation data has been analysed using specific observation categories.

Table 5: Observation Analysis

Category	Objective
1. Classroom environment	To observe: 4. Classroom routine and the reaction of the pupils with ASD to any changes within it 7. Interactions between pupils with ASD and other members of staff 10. Interactions between non-SEN pupils and teachers 11. Interactions between non-SEN pupils and other members of staff
2. Teacher interactions with pupils (non-SEN pupils and pupils with ASD) in the classroom	6. Interactions between pupils with ASD and teachers (social interaction) 8. Academic interactions between the teacher and pupils with ASD 9. Academic interactions between the teacher and non-SEN pupils

3. Pupils' interactions with their peers with ASD in the classroom	1. To observe pupils with ASD interacting in mainstream classrooms
4. Involvement of pupils with ASD and other pupils in social settings	2. To observe pupils with ASD in a social setting 3. To observe interactions between pupils with ASD and their non-SEN peers 5. Interactions of pupils with ASD, non-SEN pupils and teaching staff during unstructured parts of the school day

As part of the observation analysis procedure (see table 5), firstly, the category/objective was applied. To undertake an analysis of what had been observed at both schools, the observation data were divided into categorical themes. The four themes identified are (1) classroom environment, (2) teacher interactions with ASD and non-SEN pupils, (3) interactions between non-SEN and pupils with ASD in the classroom, and (4) interactions between ASD and non-SEN pupils in social settings. Analysis of the classroom environment covered classroom routine, and observing the reactions of pupils with ASD to any changes within it; interactions between pupils with ASD and other members of staff; interactions between non-SEN pupils and teachers; and interactions between non-SEN pupils and other members of staff.

Table 6: Observation Codes, Categories, and Themes

Themes	Objective/Sub-Theme	Code	Sub-Code
4-Involvement of pupils with ASD and other pupils in social settings	2-To observe pupils with ASD in a social setting	Engagement by playing with others The pupils asking the child with ASD to join them to play.	The pupils were playing doctors and nurses. One of the non-SEN pupils had to explain to the pupil with ASD how to play the game. Gaida (pupil with ASD) shook her head and said, "Yes I can be the nurse."
4-Involvement of pupils with ASD and other pupils in social settings	3-To observe interactions between pupils with ASD and their non-SEN peers.	Making eye contact Tone of voice (shout up, quiet) The pupils' interactions with each other by discussing the task and guiding each other.	All pupils engaged in role play that was organised by the researcher. The pupils with ASD participated in the performance and they had a good role in it, but they withdrew prior to the end, children with ASD exchanged the

			roles; they were happy and enjoyed it. All of the pupils were discussing roles with the pupils with ASD.
4-Involvement of pupils with ASD and other pupils in social settings	5-Interactions of pupils with ASD, non-SEN pupils and teaching staff during unstructured parts of the school day	Guiding pupils with ASD at play and their reactions. Auxiliary staff and teachers' roles and responsibilities. Eye contact.	The non-SEN pupils participated with the pupils with ASD in dialogue and in playing (during assembly, in the queue in preparation to leave school, a class met with another class and the pupils said to another class teacher that one of their pupils hit and shouted in the face of my friend. Gaida (pupil with ASD), the pupils defended their ASD friends. Gaida is getting ready for prayer time and

			stands in the line to perform prayer.
			The staff and teachers give Gaida some attention but it does not affect the pupils.
			Gaida deals kindly with the staff and teachers, in a very respectful way, and complies with the orders.

Table 6 breaks down the analysis procedure used for one particular category: (4) involvement of pupils with ASD with non-SEN pupils in social settings. The interactions or behaviours looked for during this observation have been identified as the objective/sub-theme(s) of the observation. A code was created to identify what sort of behaviour meets this objective, that is, 'making eye contact' or 'engagement by playing with others,' and an example of behaviour observed which meets the objective has been noted. For example, a pupil with ASD may involve themselves with non-SEN pupils in a social setting. The objective here was to observe pupils with ASD in a social setting, which meant that the pupil(s) with ASD had to be seen playing with other children. In this case, the pupil with ASD was playing 'doctors and nurses' with some non-SEN peers, and some of the non-SEN pupils, had to explain to the pupil with ASD how to play the game. These codes were then used to explore interactions between pupils with ASD and their non-SEN peers, teachers and

auxiliary staff. Similar interactions between non-SEN pupils, teachers, auxiliary staff and pupils with ASD were also explored. Examples of other categories and the justification behind these can be found in appendix 6. Through making such observations, it has been possible to identify how and to what extent pupils with ASD interact with their non-SEN peers.

3.8   Ethical Considerations

This research was undertaken with permission from the government and with ethical approval from the university (see appendix 7). The research was completed in accordance with the BERA (2011) ethical guidelines on educational research. Of particular importance to this research is guideline 16, which emphasises the importance of exploring in relation to 'Children, Vulnerable Young People and Vulnerable Adults,' which means communication that is likely to generate authentic responses, and the need to collaborate and gain the approval of a guardian or 'responsible other' (BERA, 2011, p. 6). This notion suggests that the researcher has an obligation to protect the interests of the individuals they are researching, and not violate the trust the research subjects have placed in the researcher. This is because research is a shared process between the researcher and their subject(s) (Flewitt, 2005).

Examples of the kind of ethical issues which have arisen in this context have been explored by Cohen et al. (2011). These include the need to obtain informed consent in order to conduct the research from the Saudi government, teachers and parents. The reasons why gaining informed consent was problematic are numerous. For example, what the terms 'informed' and 'consent' mean may vary in relation to

different cultures and groups (Cohen et al., 2011). For example, it could be difficult to explain the nature of informed consent to young children or subjects with learning disabilities. As the interview structure presented in appendices 2 and five shows, the interview structures for pupils with ASD and non-SEN pupils took the young age of the subjects into account, asking basic prompt questions that the participant could respond to as they understood the question, or how they felt comfortable responding to the prompt. In the case of children participating in an academic study, the nature of the consent given needs to be less formal and restrictive and should take the form of 'provisional consent' (Flewitt, 2005, p. 556). Such an interpretation of the nature of consent is useful as it is both ongoing and can be backed up by the progression in the relationships developed between the researcher and their subject(s) (Flewitt, 2005). Thus, consent, whether informed or progressive, is not just an ethical issue but also an important element of the research process, as how relationships develop affects the outcome of the research. For this reason, this research has attempted to build upon both formal and informal opportunities in which all participants have the opportunity to say no to the research taking place if they feel uncomfortable, as advised by Flewitt (2005). This point leads on to the issue of child consent. In relation to this point, Article 12 of the United Nations Convention on the Rights of the Child states that children have the right to express their views on all matters which affect them directly (Flewitt, 2005).

To honour the ethical guidelines, the objectives of the research were outlined to the participants, including children, in the study during the interviews and observations through verbal communication. This step is important as it is vital to obtain the informed consent of participants before the research is undertaken (Blaikie, 2010).

The data collected as part of this study has only been used in this research and has been kept private. As such, the names of the participants in the interviews and observations will not be revealed. In cases where first names are used, a pseudonym has been adopted in place of the real name of the participant. It is often necessary for qualitative research to draw on the real life narratives and experiences of research participants. In order to use these real life experiences in primary research, it is important to ensure that the actual identities of participants remain anonymous (Hitchcock and Hughes, 1995). This is because institutions such as schools are full of values and perceived conflicts of interests. As such, the anonymity of research participants is important to protect the livelihoods of those whose opinions might negatively impact on their relationships with their superiors (teachers) or cause embarrassment (parents) (Hitchcock and Hughes, 1995). Thus, anonymity protects the interests of research participants (Blaikie, 2010). It was also made clear to participants that their participation in the study was not mandatory. This was important as there is a possibility that participants may display signs of emotional distress during the interview or observation process. Because of the potential for high emotional engagement in research, Gray (2009) emphasises that it is important that participants know they can withdraw from the study without giving any explanation for their decision. Permission was granted to complete the study from the Ministry of Education in Saudi Arabia, and ethical approval was obtained from the university. Gaining the permission of the institutions involved to undertake the research is vital in order to ensure that the research is undertaken with their full cooperation and consent, and the process of gathering primary material runs smoothly (Cohen et al., 2011).

3.9 Evaluation of Quality: Credibility and Trustworthiness

It is important that the quality of the research is evaluated and scrutinised. As such, the work must fulfil the conditions of credibility and trustworthiness. Rubin and Babbie (2010) explain that whilst credibility is a function of consistency, trustworthiness is less clear-cut. In fact, research can be valid without being credible. In terms of trustworthiness, this research offers some perspective on how the Saudi Arabian education system has handled the inclusion of children with ASD within mainstream schools, and whether inclusion works in this context. Credibility is guaranteed by involving as many participants, and offering as many perspectives as possible. Credibility and trustworthiness are the most appropriate tools for evaluating a qualitative study such as this one. A qualitative study can be considered to be credible and trustworthy when it is authentic and reflects the reality of the research participants (Brown, 2017). Credibility and trustworthiness can be supported by purposive sampling, which has been partially used to select both schools and participants in this study. The schools and participants have been selected to fulfil a specific purpose and to reflect the purpose of the study. Furthermore, the researcher should use methods that ensure an honest response from research participants (Brown, 2017), and credibility should be evaluated by considering whether the phenomenon being studied has been accurately represented from the perspective of the participant (Brown, 2017). As such, credibility can be evaluated through prolonged engagement with the study subjects, using open-ended interview techniques and a variety of methods and fact-checking, all of which form a part of this study. Furthermore, Freeth et al. (2005) explain that the trust and credibility of the study are solidified by a comprehensive and solid evaluation plan, which

indicates that there is a clear link between evaluation questions, the methodology, the methods of data collection, and methods used to analyse the results.

Credibility has been achieved in this study through recruiting a wide range of participants to take part in order to ascertain how inclusion is being implemented and experienced by the school community. The investigation was made as accurate as possible through comparing the results of the interviews and observations with each other.

3.10 Summary/Conclusion

This chapter has presented a detailed account of the methods that have been used to inform the primary research process undertaken at both the private and the public school. The process and methods of data analysis used to categorise and analyse the data from both the interview and the observation stages of the study were then explored and evaluated. These methods and forms of analysis have been applied to the data gathered for this study and are presented in the following chapters, which present the findings of this study and discuss the significance of these findings in detail.

4   Chapter 4: Findings

The following chapter presents the data and findings derived from the analysis of the data collected from one public school and one private school to investigate the inclusion of pupils with ASD in mainstream schools in Saudi Arabia. The data from observations and interviews have been coded and categorised to produce themes to provide responses to the research questions. The chapter contains three main sections: the first section contains data from the private school; this is followed by the data from the public school; and section three sets out a cross-school comparison. The data in these three main sections is systematically presented, starting with the observation data then the interview data. At the end of the chapter, there is a brief summary of the research findings from the two schools.

4.1   Data from the Private School

This section contains the data analysis from the private school. The data are presented in the order: observation data findings and interview data findings. The section concludes by providing a general summary of the findings for the private school with reference to the four research questions and objectives. The private school is partially funded by the state, which means the state only pays half of the staff's salaries; the rest of the costs for running the school are funded privately. It is one of the few private inclusive schools in Saudi Arabia. The school (a primary school for children aged six to 11 years) has 53 pupils, 10 of whom have special educational needs, seven with ASD and three who have 'behaviour disorders', one gifted pupil in the observed class and there more gifted in all other class but they are not diagnosed as a gifted. There are six levels, each level has on class, and each class has between four and seven pupils in

total. There are 15 teachers, including four SEN teachers, two speech and language therapists, and one teacher for guidance and counselling, and three auxiliary staff that they work with pupil except the administration staff.

The school building is a rented villa with two floors. The ground floor is where the administration offices and the nursery class are located. The school has no playground, and so the first floor is used as the playground, and that is where the canteen is also located. Although the indoor playground is not very big, it has all the resources (e.g., garden slides, toys, etc.) necessary for the pupils, including a small football pitch. Any sharp edges in the playground are covered in foam, including the doors, corners and even stairs. A staff member supervises the pupils during playtime.

The second floor is where the classrooms are located, including the resource room and the staff room. The resource room is partitioned into four sections; each section has different learning resources. For example, one corner has educational posters for particular subjects such as Science, English and Art. The school has six classrooms, and each class is allocated to a specific year group. The classrooms for grade one to grade three are mixed (girls and boys), and the rest, grades four to grade six are for girls only. The seven pupils in the school who have ASD are distributed amongst three different classes.

4.2 Observation Data from the Private School

In this section, the data from the observations conducted in the private school is presented. Table 7 (below) illustrates how the data were grouped into four categories: (1) general classroom environment, (2) teacher interaction with pupils (non-SEN pupils and pupil with ASD) in the classroom, (3) pupils' interactions with their peers with ASD

in the classroom, and (4) interaction of pupils with ASD in social settings. The aim of these observations and this categorisation to seek answers to research questions three and four: 3. "What lessons can be learned from those schools which have adopted inclusive practices?" and 4. "What are the factors that prevent, and barriers to implementing, an inclusive approach to education in Saudi Arabia (particularly for children with ASD?" The rationale behind this categorisation of the data is explained in section 1.3 of the methodology chapter.

Table 7: Observation categories

Category	Objective
5. Classroom environment	To observe: 4. Classroom routine and to observe the reaction of pupils with ASD to any changes within it 7. Interactions between pupils with ASD and members of auxiliary staff in the classroom 10. Interactions between non-SEN pupils and teachers 11. Interactions between non-SEN pupils and other members of staff
6. Teacher interaction with pupils (non-SEN pupils and pupils with ASD) in the classroom	6. Interactions between pupils with ASD and teachers (social interaction) 8. Academic interaction between the teacher and pupils with ASD.

	9. Academic interactions between the teacher and non-SEN pupils
7. Pupils' interactions with their peers with ASD in the classroom	1. To observe pupils with ASD interacting in mainstream classrooms
8. Involvement of pupils with ASD and other pupils in social settings	2. To observe pupils with ASD in a social setting 3. To observe interactions between pupils with ASD and their non-SEN peers 5. Interactions of pupils with ASD, non-SEN pupils and teaching staff during unstructured parts of the school day

4.2.1 Classroom environment

The aim of conducting classroom observations was to find out whether the classrooms were designed to promote the inclusion of pupils with ASD, and whether the classrooms were organised and structured to create a learning atmosphere for learners with ASD.

Six lessons per day were observed over three days. Each lesson is taught by one teacher without any assistance, and subjects are taught by different teachers. The grade three class observed had seven pupils in total, including two with ASD and one with behaviour disorders and one who was gifted. One child with ASD was focused on; she has been named Gaida to protect her privacy. The class was small, and the

seating arrangements have been designed for pupils to it in pairs; Gaida sat next to the gifted pupil. There were no specific guidelines found to support Gaida and other pupils with ASD.

It was noticed that most of the pupils, including the pupils with ASD, were quiet in the classroom, only speaking when they were asked to do so, except for the one pupil with a behaviour disorder, as, for example, her voice was quite loud when she spoke. The teacher's voice was at a normal speaking pitch. The teacher and the pupils made regular eye contact, including the pupils with ASD who made eye contact with the teacher and other pupils when they spoke. The teacher tended to pose questions to the whole class, and all pupils would raise their hands to answer, except for Gaida. There were two pupils with ASD in the classroom, including Gaida and I just focused on Gaida; although they would answer when asked directly. When they answered, both pupils with ASD did not answer correctly and so the teacher would try to simplify the question and accept nearly correct answers. The teacher would also praise for all pupils and ask the other pupils to applaud for the pupil for speaking in class. Gaida's peers appear to feel proud of her by applauding her more than other pupils when she answered correctly and she appeared happy with the support she received from other pupils in the classroom; for example, she would smile joyfully. Gaida appeared very attentive in class, for example, during the religious studies lesson, the teacher asked the pupils to recite from the Qur'an in order; Gaida was aware of this and recited accordingly. Changes in routine can be a problem for pupils with ASD. But when the teacher introduced new materials, the pupils with ASD were aware of this and had no problem with changes of routine, such as lessons being taught by different teachers. Gaida knew each teacher for each lesson and prepared accordingly, just like her

peers. She would sometimes ask her peers for help when she felt confused, and her peers would come to her aid when she asked. Between lessons, the pupils left the classroom and waited outside for the teacher to arrive. Gaida stood outside with her peers and followed them around. Sometimes, the pupil with a behavioural disorder was loud and disturbing, and Gaida would put her hands on her ears when she spoke. Gaida's peers noticed this and tried to calm down the situation.

During the day, the resources room staff, specialist teachers, and therapists withdrew pupils with ASD from lessons to the resources room. Both Gaida and the other pupil with ASD were aware of this and routinely withdrew from lessons. Pupils sometimes discussed why the pupils with ASD were withdrawn from lessons with staff members, but from a caring perspective, because they do not want them to miss their favourite lessons, and pupils with ASD agree with their peers (e.g., nodding their head yes); staff members were flexible in these cases. For example, during one English language lesson, when the special education teacher came to take Gaida to the resources room, her peers came to Gaida's defence and asked the special education teacher not to take her saying "please do not take her now, come back another lesson because Gaida likes the English language lesson." Also on another occasion, the teacher helped the pupil with ASD by tidying her hair for which the pupil was very cooperative. Gaida's peers asked her to say thank you to the teacher for helping her. That means during the daily pupils took care of Gaida and offered her help and advice when needed.

4.2.2 Teacher interaction with pupils (non-SEN pupils and pupils with ASD) in classroom

The sixth objective was to observe how teachers interacted academically and socially with pupils with ASD and non-SEN pupils in class. The researcher observed the class concerning this objective for six lessons per day for two days.

At the beginning of each lesson, the teacher would begin by asking about the homework. She would go around the class checking whether the homework was done or not. Gaida and most of the pupils had apparently completed their homework with good quality, and so the teacher praised them for doing so.

The teachers maintained eye contact when addressing pupils in general, and also with pupils with ASD to ensure that they were actively involved. The teachers also made efforts to balance the support given to all learners regardless of their individual differences. For example, pupils with ASD were given the opportunity to participate during lessons, and feedback was given equally to all learners regardless of their individual differences.

All learners were required to raise their hand whenever they wanted to respond to a question, to ask a question, or in case they needed something from the teacher. Pupils with ASD sometimes open her draw note and start drawing so the teachers kept prompting them to participate in class, for example, by posing a question and then asking them directly for the answer even when they had not raised their hands. The teachers often would not spend much time with pupils who do not know the answer; she would try to help, but then move on.

At the end of the lesson, the teacher would write down the homework on the board and all pupils except Gaida were required to write it down in their diaries; Gaida did not know what to do, but her peers helped her with this task as they usually do.

I asked all teachers involved with the class I observed the English, Arabic, religion and science teachers) about Gaida's individual education plan and all of them said that it was not their responsibility, but that it could be found in the resources room with the specialists. The main teacher went further to say that she does not teach specific curriculums for each pupil, but one curriculum for all pupils including pupils with SEN. The resources room staff showed me the individual educational plan for Gaida and added that that Gaida has the same curriculum as every other pupil, but they simplify the resources.

4.2.3 Pupils' interactions with their peers with ASD in the classroom

The aim was to observe the interaction between non-SEN pupils and their peers with ASD in the classroom. Pupils with ASD interacted actively with their peers during class time. In class, Gaida sat next to the gifted pupil during lessons so she can support and help her during the lesson, for example, in making sure that she had the right materials for the lesson and in identifying the correct page and line during reading lessons. Pupils with ASD in the school are accepting of other pupils sitting next to them and helping them during the lesson; they smile and appear confident to other pupils, she accepts them and did not confuse or scare. During the lesson, the pupils with ASD are confident enough to ask from their peers, for example, asking about the next lesson or homework. When Gaida ask her peers, they responded in a welcoming manner and smile.

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To explore the interaction between pupils with ASD and their peers without SEN, a game was organised in class when their teacher was absent, to observe the interactions between non-SEN pupils and pupils with ASD. The game was a role play activity with a supermarket theme; the researcher did not take part, but observed the play. The pupils themselves created a plan for the play and assigned different roles to each pupil; they assigned Gaida the customer role. She accepted the role and said she liked it. She played her role accordingly in a joyful manner, and she was smiling the whole time. At the end of the game, her peers asked if she wanted to switch roles and she said yes. The second game had a restaurant theme, and the pupils had a discussion about who should play what role, and Gaida took part in the discussion. Gaida was asked whether she wanted to play the customer role or the chef role, and she opted for the customer role again. Although she was quiet and a bit hesitant, she played along, but grew bored of the game and to her seat, saying "I don't want to play anymore." Her peers noticed that and quickly went to check on her and ask her whether she wanted to play a different role; she did not respond verbally, but shook her head no. The pupils went on with their game, and Gaida sat down at her desk and started drawing on paper.

4.2.4 Involvement of pupils with ASD and other pupils in social settings

The aim of the observation in this section was to observe the interactions between pupils with ASD and non-SEN pupils, and the interactions between staff members and ASD and pupils in a social setting outside the classroom. The observations were conducted during playtime, free time, lunchtime and at the end of the day when they were getting ready to leave. At lunchtime, pupils sit in groups; sometimes pupils from the same class sit together and sometimes they do not. Gaida, at lunchtime, sits with

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her classmates. After lunch, Gaida would stare and smile at pupils playing in the playground, and sometimes she would join them without an invitation. During playtime, Gaida would just sit and watch them playing or play alone. In the playground, there was always a staff member supervising the pupils and looking after them, but they did not organise activities or games. At the end of the day, Gaida would leave class with her peers together and go to the playground where they would wait for their parents to pick them up or the school bus. Gaida would wait for her mum just like the other pupils, but she would keep herself busy by playing games alone, whilst the other pupils played together. There was a staff member calling out the names of pupils when their parents arrived, and sometimes Gaida would hear her name through the speakers, but sometimes she would not, so the staff member had to come to tell her.

The auxiliary staff did not support pupils during playtime or during any other social activity, even in the classroom- just in the resources room.

Pupils with ASD were usually protected by their peers, especially those from the same class with them from being bullied by other pupils from other classes. For instance, there was a situation where a pupil from a different class accused Gaida of hitting and shouting at her, and the classmates of the pupil with ASD were quick to state that it was not true.

During social activities, the pupils with ASD were supported by one staff member. For example, during prayer time, Gaida was encouraged and supported to join the rest of her peers. The observations found that teachers lent less support and were more dismissive of pupils with ASD than was indicated in the interview data, which indicated

that they were supportive of the inclusive curriculum and the presence of pupils with ASD.

4.3 Interview data from the private school

In this section, the private school interview data (with teachers, non-SEN pupils, pupils with ASD parents of non-SEN pupils, parents of pupils with ASD, educational supervisors and auxiliary staff) is presented under the 10 generated themes as described in the methodology chapter: (1) Participants' understanding of SEN, (2) Challenges of implementing an inclusive education policy, (3) Teacher training and experience, (4) Collaboration between the teachers and parents, (5) Participants' perceptions of inclusive practice, (6) Programmes for pupils with ASD, (7) Advantages of inclusive practice, (8) Disadvantages of inclusive education, (9) The national Curriculum, and (10) Suggestions on how to improve inclusive education.

4.3.1 Understandings of SEN and ASD

Table 8: Participants' understanding of SEN

Open Codes	Categories	Theme
• Specific learning difficulty • Behavioural disorder • Mental retardation • Deafness • Visual impairment • Physical disability	Types of SEN	Understanding of SEN and ASD
• Have SpLD	Characteristic of	

• Need additional support • They are very sensitive • Are unsocial • Gifted.	ASD	

Table 8 shows how interview data with all the participants, except for Gaida, about their understanding of SEN and ASD was coded then grouped into two categorised: types of SEN and characteristics of ASD. The two categories emerged from the question, "What do you understand by the term 'special educational needs', 'types of SEN', and 'characteristics of pupils with ASD'?" With regard to the types of SEN, when asked how they understood the term SEN, some participants responded with specific types of SEN such as specific learning difficulty, behavioural disorder, 'mental retardation', deafness, visual impairment, and physical disability, whilst others understood it in more general terms.

For example:

"Pupils with disabilities, those who have mental problems, they are deaf or blind, or they have a physical disability which means they use a wheelchair." (T1)

"They need special care and a special environment; plus, they must adapt to their environment more than non-SEN pupils."

"*normal pupils with some disorders, but some of them are gifted"* (P2).

Other responses were in relation to the characteristics of learners with ASD such as the need for additional support; they are sensitive (S4), and they are unsocial (S5).

4.3.2 Challenges of implementing an inclusive education policy

Table 9: Challenges of implementing an inclusive education policy

Open Codes (from all participants)	Categories	Theme
- For learners with SpLD only - Not for mainstream schools - Just one pupil with ASD per class - No idea that inclusion does exist - Only for pupils with mild ASD - Only applied in private schools - Rights of pupils with SEN - Pupils with disabilities in one class - Treating pupils differently - All pupils learning together - Parents lack of awareness of inclusive practices	Level of insight into inclusive practices. Understandings of inclusion/inclusive practices.	Challenges of implementing an inclusive education policy
- Not aware of a SEN policy from MoE - Staff meetings to discuss inclusion - Inclusion policy at school level - Consideration of individual differences - Inclusion policy at head teachers' discretion	State of Saudi Arabian inclusive education policy	

• Inadequate time for pupils with SEN		
• Parents hardly involved in policy making		
• Inadequate resources		
• Inclusion policy not implemented in all schools		

To ascertain whether the school has an inclusive education policy from the MoE, and whether the policy was being implemented, the participants, except for the pupils with ASD, were asked about the current policy regarding inclusion in their school. The aim of this question was to establish whether there were any challenges in implementing an inclusive education policy. The responses to this question were categorised into two: (1) level of insight into inclusive practice and (2) state of national inclusive education policy. Table 10 presents the different codes upon responses from all the participants. The participants put forward different interpretations of inclusive education, and the data reveals the lack of a national inclusive education policy.

Most of the teachers are not aware of inclusive practice:

T1: "*I was thinking that inclusion applies only to specific learning difficulties; I did not know that there are mainstream schools that promote inclusion for pupils with ASD*"

Most of the teachers are not aware of an inclusion policy (that means there is not a formal policy document, but that informal policy operates in the school:

T1: "*I have no idea if there is any policy for inclusion, but when we hold meetings with the head teacher, she says that pupils with SEN have rights and we should look after*

them" (appendix 1).

In addition, an educational supervisor said that it was difficult to persuade head teachers and schools to accept the inclusion of pupils with ASD:

"Inclusion has been implemented, but not in all schools; only in some schools with the permission of the head teacher—if the head teacher refuses, it cannot be implemented. Also, the school must have the right resources in place. We can force head teachers to accept pupil with ASD, but we fear that she might cause problems for us this way"

Most of the non-SEN pupils and their parents are aware of inclusive practices, as their pupils are enrolled in this school, but they do not know about the education policy:

According to one pupil: "*our school contains different pupils, such as pupils with SEN, gifted pupils, and pupils who do not have SEN. Diverse pupils are included in one classroom"*

According to the education supervisor, although there is a policy on inclusive education from the MoE, it is difficult to implement due to the shortage of teachers:

> *"There is a policy, but it has not been implemented. We request resources from the Ministry of Education, for example, specialist teachers; we requested 2000 teachers but only got 100. Teachers are appointed randomly-not on the basis of need" (Education Supervisor).*

4.3.3   Teacher Training and Confidence

Table 10: Teacher training and confidence (teachers, staff, and parents)

Open Codes (for teachers and auxiliary staff)	Categories	Theme
- Lack of skills for teaching pupils with ASD - Private study to understand ASD - No training for supporting pupils with ASD - Lack of behaviour management skills - Shortage of trained teachers	Training to support pupils with ASD	Teacher Training and Confidence
- Confidence depends on teacher's experience - Challenging to deal with pupils with ASD - Uncertainty about teaching outcomes - Uncertainty about their performance - Lack of support by other professionals	Teachers' confidence in working with pupils with ASD	

Teacher training emerged as one of the challenges the participants in the Private school faced regarding the inclusion of pupils with ASD. To determine whether teachers had SEN training to be in a better position to support pupils with ASD, two questions were posed to the teachers and auxiliary staff during the interview:

1. Have you been offered or encouraged to take up additional vocational training on accommodating pupils with special educational needs?

2. How confident are you in your ability to deal with pupils with special educational needs—in particular, with pupils with ASD?

The data resulted in two categories: (1) Training to support pupils with ASD and (2) teachers' confidence in working with pupils with ASD. Table 3 illustrates the codes and categories emerging from the interviews with teachers and the auxiliary staff with regard to teacher training and confidence in supporting pupils with ASD in the mainstream school.

With regard to training, six out of the seven teachers that were interviewed expressed their concern about the lack of training on how to support learners with ASD in their classes. For example:

T5: *"Yes I have been offered compulsory training courses by the MoE, and all the training courses were designed for specific learning difficulties. I never received any training for ASD"*

Seven teachers said that there is a shortage of SEN teachers in the country. One stated that they usually studied privately concerning teaching strategies for pupils with ASD.

With regard to teachers' confidence in working with pupils with ASD, the teachers and auxiliary staff in the private school indicated that confidence is dependent on individual teachers' experience; teachers with many years of service expressed that they felt more confident compared to their colleagues with fewer years' experience. For example:

T7: "*the beginning was very difficult, but sometime after joining this mainstream school,*

I became very confident and I started to believe in myself."

The majority of the participants were either uncertain about their performance or the teaching outcomes due to the limited training and support they received. Teachers and auxiliary staff were all dissatisfied with the support they were getting from the MoE and from other professionals.

However, non-SEN teachers T1, 2, 3, 4, 5, 6, and 7 said that they do not face severe problems with the inclusion of pupils with ASD. They reported that there may have been a few cases at the beginning, but over time the situation for working with pupils with ASD had become manageable in the classroom they stated they all work with pupils with ASD just like other non-SEN pupils. It was observed that only the SEN teacher works with pupils with ASD special manner when she takes them to the resource room.

4.3.4 Staff and Parents' Collaboration

Table 11: Collaboration

Open Codes	Categories	Theme
• We interact with parents over the phone and through parents' meetings (Auxiliary staff) • We mainly communicate through phone calls (parent) • Parents of pupils with ASD have a WhatsApp group (parent of pupil with ASD)	Staff collaboration with parents	Collaboration
• We generally have discussions with the school, but	Parental	

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	involvement	
decisions are made without our consent		
• All decisions are made by the head teacher		
• Teachers are not welcoming, because they do not have the training or experience		

With regard to how the teachers and staff were collaborating to support the inclusion of pupils with ASD in the mainstream school, the data has revealed some conflicting findings. For example, whilst one of the auxiliary staff (speech therapist 1, appendix 2) stated that they usually interacted with parents over the phone and through meetings, the parent of the pupil with ASD said that they mainly communicate through phone calls (appendix 6). The parent stated that there is a WhatsApp group for parents of pupils with ASD which they use to support each other (appendix 6). The parent of the child with ASD said that in most cases decisions were made by the head teacher without involving the parents; she further stated that the teachers were not welcoming, which she attributed to a lack of training and experience.

However, the head teacher welcomes the inclusion, although it is a private school with high fees (appendix 6).

4.3.5 Perceptions of inclusive education

Table 12: Perceptions of inclusive practices (teachers, staff, parents, and pupils)

Open Codes	Categories	Theme
• Unwillingness to teach pupils with ASD	Teachers'	Perceptions of

	perceptions of the inclusion of pupils with ASD	inclusive practice
- Confusion - Problems with class control - Too many ASD and other pupils with SEN in the class - Extra workload - Lack of job satisfaction - Lack of incentives		
- Have friends with ASD - Happy to support peers with ASD - Socialise during play time - All pupils treated equally	Pupils' perceptions of inclusive education	
- Inclusion favours all pupils - Pupils are able to play together - Imitation of non-SEN pupils - Improvement socially and academically - Good in promoting tolerance and responsibility - Pupils are supported to be more social - Sharing of information amongst parents	Parents' perceptions of inclusive education	

The participants' perceptions of inclusive education emerged as one of the factors that seem to influence the implementation of inclusive practices in the private school. The data gathered from the interviews has been subdivided into three: (1) teachers' perceptions of the inclusion of pupils with ASD, (2) pupils' perceptions of inclusive

education, and (3) parents' perceptions of inclusive education. The questions asked during the interviews aimed at seeking responses to the research question: "What are the opinions and perspectives of parents, teachers, non-SEN pupils and staff regarding inclusion (particularly pupils with ASD) in Saudi primary schools?"

During the interviews, six out of the seven teachers stated that they face problems with the inclusion of pupils with SEN. They said that sometimes it is confusing to them concerning how to deal with pupils with ASD:

T7: "*Every day we see a new behaviour. Sometimes, pupils with SEN run suddenly, sometimes they throw themselves on the floor. I cannot accept all their behaviours.*"

Some of the teachers stated that they lack job satisfaction as a result of inclusion (T2, T4). Six teachers in the private school felt that having pupils with ASD in their classes meant additional work for them. Most of the teachers said that they need auxiliary staff in the classroom.

T4: "*I am a Maths teacher. I face difficulties in time management. It is supposed that I should rely on the SEN teacher's suggestions but I do not feel satisfied. If there was an auxiliary staff in the classroom, the satisfaction level would be increased*" (appendix 1).

The majority of teachers openly expressed their unwillingness to teach pupils with ASD due to factors such as lack of support by the MoE and training in SEN.

Pupils with and without ASD were asked about their opinions with regard to inclusive education. The interview data gathered from the pupils has not revealed any

differences in how they feel about learning together. They all stated that they usually made friends with their peers whether they have SEN or not. For example, when asked if she plays with pupils with SEN during break time, pupil 7 said:

"Even though they have specific learning difficulties, I still love them because they are my friends, even if they annoy me sometimes I still love them"

The majority of non-SEN pupils stated that they were happy to support their peers with ASD. Even pupils from non-inclusive classes expressed such sentiments:

"Sometimes pupils with ASD get very nervous and they refuse to sit. We try to help them until they are calm" (S5).

The resulting data from the parent interviews indicates that both the parents of pupils with ASD and non-SEN pupils stated that inclusive practices are beneficial to their children. For example, when asked whether they thought it was an advantage or a disadvantage to have their pupils attend an inclusive school, two parents of non-SEN pupils had this to say:

". . . they have developed socially and academically, and exchanged experiences with gifted pupils" (Parent 2, appendix 5: 397). Whilst another said: *"They have become more aware of pupils with SEN. . . My child's attainment has not been affected by inclusion, but he has learnt about inclusion and ASD"* (Parent 3).

P4: *"I am comfortable to some extent, but my children might be ignored by their teachers because they might pay more attention to pupils with SEN; sometimes my children feel envious of pupils with SEN when the teacher gives them more attention."*

One parent of a pupil with ASD said:

"This school understand my daughter's situation and they accept parents' recommendations. They also approve of having a shadow teacher—that I pay for personally—specifically for my daughter in school."

"My daughter is able to cope academically with support from the resources room—special teachers. From a social standpoint, there should be support from teachers and staff members; for example they need to encourage pupils with ASD and non-SEN pupils to socialise. For example, the teacher asked my daughter to play with non-SEN pupils she later joined them and enjoyed it."

4.3.6 Programmes for Pupils with ASD

Table 13: Programmes for Pupils with ASD (parents, teachers, and pupils)

Open Codes	Category	Theme
• All pupils treated the same • Withdrawal to the resources room for extra support with a special teacher • Auxiliary staff support pupils during play time	Support for pupils with ASD	Programmes for pupils with ASD

The teacher interviews for the private school reveal that they were making efforts to support pupils with ASD within the mainstream education system. For example, the teachers stated that they strive to treat all pupils the same regardless of their individual differences.

Most of the pupils said that their teachers focus more on pupils with ASD but it does not affect us. According to one non-SEN pupil: *"The teacher treats us equally,"* whilst a pupil with ASD reported that:

"Teachers treat me the same way they treat other pupils."

One parent of a pupil with ASD said:

"Teachers are very cooperative, but they need more support in terms of teaching, because they are dependent on specialist teachers in the resources room; they might need in-class assistance."

The teachers said that pupils with SEN, including those with ASD, are regularly withdrawn from the regular classroom for extra support in the resources room. They also said that the school has a group of auxiliary staff that supports them in managing pupils during social activities, including playtime.

4.3.7 Advantages of inclusive practice

Table 14: Advantages of inclusive practice (parents, teachers, and pupils)

Open Codes (from all participants)	Axial Coding	Selective coding
• Self confidence • Social inclusion • Social skills • Learn from their non-SEN peers • Learn positive behaviour from their peers	Advantages of inclusion for pupils with SEN	Advantages of inclusive practice

• Learn to compete with their peers • Supported by non-SEN peers • Promotes independence		
• Learn to accommodate pupils with SEN • Acceptance of ASD peers • Awareness about ASD • Change of attitude towards pupils with ASD • Promotes social inclusion • Promotes fair competition • Promotes a sense of responsibility • Gain benefits from gifted pupils	Advantages of inclusion for non-SEN pupils	
• The difference between ASD and other disabilities • Inclusive teaching • Skills improvement • Creating a favourable learning environment • More experience in teaching pupils with SEN	Advantages of inclusion for teachers	

The advantages of inclusive education emerged from the responses to the interview questions asked in relation to the research question: "What are the opinions and perspectives of parents, teachers, non-SEN pupils and staff regarding inclusion

(particularly pupils with ASD) in Saudi primary schools?" and "What lessons can be learned from those schools which have adopted inclusive practices?" For example, teachers were asked the questions: (1) Do the advantages of inclusion outweigh the disadvantages of inclusion?; (2) What have you gained from the inclusive teaching experience?; (3) What are the disadvantages, on a day-to-day basis, of inclusion?; and (4) What are the advantages, both for you as a teacher and for your pupils who do not have special educational needs?

Following the open coding process, the data has been divided into three categories: (1) advantages of inclusion for pupils with SEN, (2) advantages of inclusion for non-SEN pupils, and (3) advantages of inclusion for teachers. The table below provides the data generated from interviews with the teachers, pupils with SEN, and pupils without SEN, and parents

One non-SEN pupil said:

S5: *"Sometimes my friend Gaida (pupil with ASD) refuses to play with me. I try to invite her to play with me. Also, I help Rema (pupil with ASD) to eat a sandwich instead of eating chocolate."*

One pupil spoke for everyone when she reported that: "We love our friends. Rema and Gaidah. We love them and play with them" (appendix 3).

A parent of a non-SEN pupil said:

P3: "*My daughter has become more aware of pupils with SEN. My child's attainment has not been affected by inclusion, but she has learnt about inclusion and ASD*"

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(appendix 5).

S4: "I have benefited a lot. Also I learnt from Rema (pupil with ASD) the official Arabic language. But Meylda she is a naughty girl, she is very aggressive"

4.3.8 Disadvantages of inclusive education

Table 15: Disadvantages of inclusive education (parents, teachers, pupils)

Open Codes (from all participants)	Categories	Theme
• Difficulty in time management • Need for auxiliary staff • Unexpected challenging behaviours • Non-SEN pupils learn negative behaviour from their ASD peers • Poor class control • Difficulties in behaviour management during lessons • High number of pupils with SEN in the classroom • Difficulties in meeting the needs of non-SEN pupils • Parents withdrawing non-SEN pupils	Disadvantages of inclusion for teachers and non-SEN pupils	Disadvantages of inclusive education
• Sometimes isolated • Sometimes become victims of bullying • Described as disabled	Disadvantages of inclusion for pupils with SEN	

• Low self esteem • Frustration • Lack of resources in regular classrooms		

Following the open coding, the data has been grouped into two categories: (1) disadvantages of inclusion for teachers and non-SEN pupils and (2) disadvantages of inclusion for pupils with ASD (as shown in table 8).

In relation to the disadvantages for teachers and non-SEN pupils, it was indicated by T1, T2, T3, T4, T6, and T7 that regular classes would be difficult to manage without auxiliary staff. The teachers sometimes felt that with a high proportion of learners with SEN in a regular class, it would be difficult to meet the needs of all the learners. According to the school's head teacher, some of the parents who do not support the inclusion of pupils with ASD in the regular school would withdraw their pupils and transfer them to other schools which are not inclusive.

For the learners with SEN, some of the participants stated that they would be isolated and eventually neglected in the regular school due to lack of support. The pupils could also perhaps be bullied by their peers, leading to low self-esteem. According to the teachers, pupils with ASD were sometimes bullied by their non-SEN peers, especially during playtime, hence the reason why the support staff would always be with the pupils during social activities.

One disadvantage cited by the parents of non-SEN pupils was that pupils in the first

level imitate pupils with ASD. Another disadvantage cited by the participants was inadequate resources in regular classrooms for supporting learners with SEN.

4.3.9 The National Curriculum

Table 16: The national curriculum (parents, teachers)

Open Codes	Category	Theme
• Rigid national curriculum • Special curriculum at school level • Not meeting the needs of pupils with SEN • Too many subjects	Curriculum	The National Curriculum

During the coding process, teachers concerns were picked up with regard to the national curriculum. The majority of the teachers in the private school were of the opinion that the national curriculum is too rigid and does not meet the needs of pupils with ASD. They argued that the subjects covered in the syllabus are too many for learners with ASD. When asked whether they had made any modifications to the curriculum to accommodate learners with SEN, T1 had the following response:

"We have a special curriculum from the Head Teacher but we have flexibility; we can adjust the curricula to meet the pupils' needs. In some rare cases we ask the Head Teacher, but in general we are free to adjust the curricula ourselves" (T1).

According to the parents of a non-SEN pupil, special centres are more aware of ASD needs academically, more so than inclusive schools. However, inclusive schools are

socially better.

4.3.10 Suggestions on how to improve inclusive practice

Table 17: Suggestions (parents and teachers)

Open Codes	Category	Theme
• More support staff • Training in SEN • Flexible curriculum • More teaching/learning resources for pupils with ASD • Reduction in the number of subjects for pupils with ASD	Suggestions	Suggestions on how to improve inclusive practice

During the interviews some suggestions were made by the teachers about what they think could be done to promote the implementation of inclusive education. For example, the majority of teachers suggested the need for further training in SEN and more teaching/learning resources for pupils with ASD. The teachers also suggested introducing more support staff, since the inclusion of pupils with ASD means additional work for them. One of the teachers (T4) suggested that the range of subjects should be reduced for pupils with ASD since there are too many subjects in the curriculum. The parent of a child with ASD stated that the school needs experienced, skilled, trained, specialist teachers.

4.4 Summary of findings from the private school

The aim of this summary is to compare and contrast the results of observation, and interview data gained from the study of inclusion at the private school. The intention of the summary is to gain overall insight into the results for the private school. The results will be analysed in light of the four research questions.

The data gathered from the observations and interviews reveals that the participants, especially teachers and auxiliary staff are generally supportive of inclusive education for pupils with ASD despite some challenges. Also, apart from the period when the pupils are taken to the resource room for additional support, a practice that facilitates inclusion by ensuring that pupils with SEN receive extra instruction whilst participating in school life as much as possible, the pupils with ASD are involved in all the learning and social activities along with the rest of pupils in the school. During lessons, the teachers are generally very supportive, and the class seating arrangement has been designed such that gifted pupils sit next to the pupils with ASD to offer support.

Question two is: "What are the opinions and perspectives of parents, teachers, non-SEN pupils and staff regarding inclusion *(in particular pupils with ASD) in Saudi primary schools?"* The interview data from the private school revealed that whilst the parents and pupils have positive opinions and perspectives on inclusive education for pupils with ASD, the majority of the teachers are of the opinion that having pupils with ASD in a mainstream school adds an extra workload for them. They were of the opinion that inclusive education would be more effective with fewer pupils with ASD in regular classes, as according to the observation data there were two pupils with ASD in the class observed along with a pupil with behavioural problems, which may have

been difficult for the teacher to manage. During the observations, no increased workload was witnessed for teachers academically; teachers did not spend more time with pupils with ASD and teachers were unconcerned as to whether pupils with ASD actually understood the materials or not. This suggested that teachers' failed to understand the actual principles of inclusion, which are to support pupils with SEN in a mainstream environment. Teachers gave pupils with ASD the opportunity to contribute as other pupils. There was no evidence that would suggest that teachers, staff or pupils experienced any challenging behaviour from pupils with ASD. In the interviews, the teachers did say they have experienced challenging behaviour from pupils with ASD, but the evidence from other teachers suggests that they only experienced challenging behaviour in the first few weeks of the inclusion of pupils with ASD with severe conditions. This evidence indicates there is some discrepancy between the observation and interview data.

In response to the third research question, there is a lot to be learnt from the data collected from the private school. For example, the participants' experience of the inclusion of pupils with ASD in the school meant they were able to identify the barriers to inclusive education and provide suggestions to make inclusive education more effective.

The data from the interviews and from the observations has revealed several preventing factors and barriers to the total implementation of inclusive education in Saudi Arabia, particularly for pupils with ASD. For example, the data reveals a lack of a national policy on inclusive education which is seen to be the responsibility of the MoE. Despite the support for the inclusion of pupils with ASD in the school, the majority of

the teachers were of the opinion that they may not be able to include pupils with severe ASD. The data from the parents of pupils with ASD and non-SEN pupils also reveals that the parents are supportive of inclusive practices; nonetheless, they stated they were hardly consulted when decisions were being made with regard to inclusive education. Another preventing factor affecting the success of inclusive education is that the teacher expressed the need for further training to be able to properly support pupils with ASD in mainstream schools.

4.4.1 Observation Summary

The observations of pupils with ASD at the private school suggested that little was being done to help pupils with ASD feel included in the school community outside structured activities. For example, the observations showed that pupils with ASD struggled to interact with their peers during playtime.

The auxiliary staff appeared to be of the opinion that they did not need to help pupil with ASD unless they had been specifically told to do so. As a result, they did little to help pupil with ASD interact with their peers during unstructured periods of the school day. Auxiliary staff only helped pupils with ASD in the resources room (not in the playground or the classroom), or if they had been assigned to support a pupil with ASD during social activities, such as prayers.

One factor that was found to prevent full inclusion was that teachers were observed to be dismissive and did little to help pupil with ASD. This, coupled with the unwillingness of auxiliary staff to help pupil with ASD when they had not been ordered to do so, seems to be preventing full inclusion at the private school.

4.4.2 Interview Summary

The interview data revealed that teachers were generally supportive of inclusive practice and that pupils with ASD were included in both teaching and social activities at the private school. Also, pupils with ASD were seated with gifted pupils who were able to provide extra educational and social support in the classroom.

Evaluation of the opinions and perspectives generated from the interview data revealed that both parents and pupils had positive opinions of inclusion. However, teachers felt that pupils with ASD added to their workload and reported having experienced challenging behaviour from pupils with ASD. For this reason, teachers felt that pupils with ASD would be better off if there were educated in smaller classes.

The interviews at the private school suggested that some lessons could be learnt before inclusive practice was implemented. This was because the interviews revealed that a lack of national policy on the subject, and that the teachers felt unable to support pupils severely affected by ASD.

In terms of factors preventing inclusive practice, the interviews revealed that the parents of pupils with ASD felt that they were not consulted by the school when it came to making decisions about inclusion. Also, teachers and auxiliary staff felt that they had not received sufficient training to properly deal with pupils with ASD.

4.5 Data from the Public School

This section contains the data analysis from the public school. The data has been

systematically analysed and presented, starting with the observation data and then the interview data. The section concludes by providing a general summary of the findings from the data with reference to the four research questions and objectives.

The public school is state funded and the first officially founded inclusive school for pupils with ASD in Saudi. It has two streams from year one to year six; hence it has 12 classrooms, a playground and a staff room. Each year has two classrooms. The school has a population of 216 pupils, with 36 teachers, including one speech and language therapist and one special needs teacher. In addition, the school has 15 auxiliary staff members. Classes contain an average of 15 to 25 pupils; inclusive classes have 15 pupils. There were three pupils with ASD of different ages enrolled in the school. New pupils with ASD are enrolled at the school after they have either been referred by the Ministry of Education or by King Faisal's research centre.

The building is a typical school building. The primary school has three floors and the playground is located on the ground floor, and is very big and in the open. The playground has a few benches for sitting, and the pupils usually eat and play in the playground. The playground has no resources for games. This is typically the general structure of Saudi public schools.

 The ground floor also hosts a year five classroom since it needed to be accessible to a child who has a physical disability and is in a wheelchair. The first and second floors overlook the playground, and this alarms one of the staff members because it is a safety hazard—it hosts all other classes, as well as the administration offices; there are no lifts to these floors, just stairs. The school has a resource room where pupils with

ASD would be taken for remedial teaching by the SEN teacher. The researcher met with the head teacher and showed her that she had permission from the Ministry of Education to review school documents on inclusion policies; she said she does not have any school policy on inclusive education for pupils with ASD, but only documents showing that she accepts inclusion at her school and it was her decision.

Pupils with ASD in the public school are picked up from school 30 minutes earlier than the rest of the pupils. This, according to the teachers, makes it easier for them to leave without being caught up in the melee when the rest of the pupils are released to go home. Pupils with ASD are normally picked up by the support staff and then escorted to the bus.

4.6 Observation Data from the Public School

In this section, data are presented from the observations conducted in the public school. The data (see table 12) has been grouped into four categories: (1) general classroom environment; (2) teacher interactions with pupils (non-SEN pupils and pupils with ASD) in the classroom; (3) pupils' interaction with their peers with ASD in classroom; and (4) interaction of pupils with ASD in social settings. The table also shows the corresponding objectives for each category. The aim of the four categories was to seek answers to research questions three and four: "What lessons can be learned from those schools which have adopted inclusive practices?" And: "What are the preventing factors and barriers to implementing an inclusive approach to education in Saudi Arabia (particularly for children with ASD) These categories are the same as the ones used to analyse the observations undertaken at the private school.

4.6.1 Classroom environment

The aim of conducting classroom observations was to find out whether the classrooms are designed to promote the inclusion of pupils with ASD, and whether the classrooms are organised and structured to create a suitable learning atmosphere for learners with ASD. Additionally, the pupils with ASD interactions in general in a mainstream classroom were observed, as well as the reaction of pupils with ASD to any changes in their routine; moreover, the interaction between pupils and non-SEN pupils with their teachers and staff in general. After the first three days, which were introductory and included a general observation of the school, attending classes so that pupils would become acquainted with the researcher, the data collecting process started, specifically focusing on the classroom environment. Six lessons per day were observed over two days.

The weekly timetable contains six lessons a day; each lesson is taught by one teacher without any assistance, and subjects are taught by different teachers. The class that was observed is grade five and it has a child with ASD. The class has 15 pupils in total, including one with ASD and one in a wheelchair and one who is gifted. The focus was on one child with ASD who has been given the name Norah for the purposes of this research and to ensure anonymity.

The class has a regular population. The classroom is wide in size and pupils were seated apart from the board and the teacher. The seating arrangement was designed in a three-three formation; the pupil with ASD sat next to the gifted pupil. There were specific guidelines created by the pupils themselves to look after Norah during lunchtime and break time.

The researcher noticed that the pupil with ASD was loud sometimes, especially when she interacted with teachers or when she needed help. Norah is different from the other pupils, as she is taller and she is 13, unlike her peers who are aged 9–10. Norah did not make eye contact with teachers or other pupils when she spoke. The teacher's voice is normal and is not too loud. It was very rare for Norah to make eye contact; she keeps herself busy by organising her books and notes. Sometimes, she would draw, which is something she is good at. Furthermore, her peers would usually alert Norah to pay attention. All other pupils were quiet. The teacher would usually pose question to the class and all pupils would raise their hands to answer, except for Norah, but she would answer when asked directly. During the lesson some teachers raised their voices at Norah to alert her to pay attention. When Norah answered, she did not answer clearly, and then the teacher would try to simplify the question and accept near correct answers. The teacher would also praise the pupil and ask pupils to applaud the pupil. In addition, Norah's peers appeared to feel proud of her when she answered correctly and she seemed to feel happy about the support, for example, she would smile; the teacher does the same for all pupils. Norah is not very attentive in class, for example, during the religious studies lesson, the teacher asked pupils to recite from the Qur'an in order. Norah is not aware of this, but her peers reminded her to recite when it is her turn. Regarding routine changes, sometimes when the routine changes the teacher introduces new materials, but Norah is not aware of this, so her peers tend to remind her about the new material. Concerning routine changes, lessons are taught by different teachers, and although Norah knew each teacher for each lesson, she did not prepare accordingly like her peers. Her peers helped her prepare for lessons. Norah does not ask for help when she feels confused, but a peer pupil nearby constantly looks after her. Between lessons, pupils leave the classroom and wait outside for the

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teacher to arrive. Norah did not follow her peers and stand outside; however, her peers took her by the hand to follow them and she did not seem to mind but follows them happily. Furthermore, whoever is responsible for looking after Norah—according to the timetable they have made—is the one who makes sure Norah follows them. During the day, the resources room staff, specialist teachers, and therapists come to withdraw pupils with SEN from lessons to the resources room. Norah is aware of this and routinely withdraws from lessons with SEN teachers.

4.6.2 Teacher interaction with pupils (non-SEN pupils and pupils with ASD) in classroom

The aim was to observe how teachers academically interact with pupils with ASD and non-SEN pupils in class. A class was observed to meet this objective for six lessons per day over two days.

At the beginning of each lesson, the teacher would begin by asking about the homework. She would go around the class checking whether the homework was done or not. Norah and most of the pupils do their homework to a good standard; the teacher would then praise the pupils for doing their homework.

The teachers maintained eye contact when addressing pupils in general, and also with pupils with ASD to ensure that they were actively involved. The teachers also made efforts to balance the support given to all learners regardless of their individual differences. For example, pupils with ASD were given the opportunity to participate during lessons; feedback was also given equally to all learners regardless of their individual differences.

All learners were required to raise their hands whenever they wanted to respond to a question, to ask a question, or in case they needed something from the teacher. Norah, most of the time, was withdrawn, and the teachers kept prompting her to participate in class. Most teachers would alert her with a regular voice, but a few teachers would raise their voice at Norah to alert her. Sometimes, the teachers would pose a question to Norah directly to answer even when she did not raise her hand. The teacher would not spend too much time with Norah when she did not know the answer; she would try to help her, but then move on.

At the end of the lesson, the teacher would write the homework on the board and pupils were required to write it down in their diaries, except Norah; she does not know what to do, but her peers help her with it as they usually do. Additionally, the teacher was asked about Norah's individual education plan and she said it was not her responsibility, but it can be found in the resources room with the specialists. The teacher went further to say that she does not teach specific curricula for each pupil, but one curriculum for all pupils including pupils with SEN. The resources room staff showed the researcher the individual educational plan for Norah; they said Norah has the same curriculum as every other pupil, but they simplify the curriculum through the resources. Furthermore, the researcher was shown Norah's exercise books and learning materials, and this contained a very minimal amount of work loosely related to the curriculum.

4.6.3 Pupils' interactions with their peers with ASD in the classroom

The aim was to observe the interaction between pupils and their ASD peers in the classroom. Pupils with ASD interacted actively with their peers during class time. In

class, the pupil with ASD sat next to the gifted pupil during lessons so she could support and help her during the lesson; for example, in making sure that she had the right materials for the lesson and in identifying the correct page and line during reading lessons. In addition, they explain to her what she needs to have for the lesson. The pupils put their timetable—the one they created—on the wall to remind me of their shifts for looking after Norah at break time and lunchtime. Norah gets academic support from her nearby peers, and sometimes they help her with homework and explain to her what is happening in the lesson. Norah is accepting of other pupils sitting next to her to help her during the lesson; she smiles and appears confident around other pupils. During the lesson, Norah naturally does not ask her peers for help even when she does not understand; she only asks for help when she feels bored, for example, she would say that she wants to go home or wants to sleep. Norah, does not speak the general Saudi dialect, but speaks the classical Arabic dialect. All her peers speak with her using the same dialect. Furthermore, Norah's peers appear to be over caring. They were constantly checking her and they would pack her bag for her.

To determine the interaction between pupils with ASD and their peers without SEN, the researcher organised a game in class when their teacher was absent, to observe the interactions between non-SEN pupils and pupils with ASD in class. Norah did not like that game, and she withdrew from the game. Then her peers suggested that they should play her favourite game, noughts and crosses. Her peers did not compete with her, letting her win the game.

4.6.4 Interaction of pupils with ASD and other pupils in social settings

The aim of the observation in this section was to observe the interactions between

pupils with ASD and non-SEN pupils, and the interactions between staff members and pupils with ASD and non-SEN pupils in social settings. The observations were conducted during playtime, free time, lunchtime and at the end of the day when they were getting ready to leave. At lunchtime, the pupils sit in groups; sometimes, pupils from the same class sit together and sometimes they do not. Norah spent most of her lunchtime in class accompanied by her peer who was on shift that day to look after her; sometimes they would converse, but she likes to concentrate on drawing cartoon characters on balloons. Occasionally, Norah would join her peers to play in the playground and she would go with them. When she is in the playground, pupils from different classes come to meet and greet her. Norah enjoyed playing in the playground with her peers and pupils from other classes. Norah did not get bullied in the playground, and all pupils respected her. In the playground, there was always a staff member supervising the pupils and looking after them, but they do not organise activities or games. On one occasion, Norah's class and the other class created a power point presentation, but Norah was not due to take part. The researcher suggested to the staff member that maybe they should ask Norah to present with her peers. The staff member welcomed the idea, and said Norah's peers should have given Norah a slide to present. Her peers were happy to let Norah present with them. Her peers seemed proud of her and she was praised by her peers and other pupils. At the end of presentation, all pupils were given ice cream and one pupil from non-inclusive class came up to Norah and asked her what her favourite flavour is.

Pupils with ASD usually leave the school 30 minutes earlier than other pupils, and are escorted by a staff member to catch the school bus. Next to Norah's seat there was a poster to remind her to wear her Abaya.

4.7 Interview Data from the Public School

This section presents the data from the interviews conducted in the public school. The findings have been presented as codes and categories, which have then been grouped into 12 themes. The data analysis and presentation has been guided by the four research questions, with the aim of achieving the research objectives. The codes, categories and themes are presented in tables, which are subsequently followed by a brief summary of the findings.

4.7.1 Understandings of SEN and ASD

Table 18: Understanding of SEN (parents, teachers, pupils, and staff)

Open Codes	Categories	Theme
• Hearing impairment • Visual impairment • Mental retardation • Physical disabilities • Learning difficulties • ASD • Down syndrome	Types of SEN	Understanding of SEN and ASD
• Is a type of disease • Lack communication skills • Do not like loud environments • They have behavioural disorders	Understanding of ASD	

• Are antisocial		
• Play in a weird way		
• Cry and laugh for no reason		

The participants' understanding of SEN has been categorised into two: types of SEN and understanding of ASD, as indicated in table 11. The table contains codes generated from the data gathered from all the participants on how the participants described SEN in terms of a type of disability, for example, the terms visual impairment, mental retardation, and physical disabilities were used by the participants. Most of the participants know the meaning of SEN in general. In terms of understanding ASD, some participants described their understanding of ASD in terms of how pupils with ASD behave. Most of the participants know the meaning of ASD in general. Also, phrases such as 'they are antisocial' (parent of pupil with ASD) 'play in a weird way' and as 'a type of disease' (non-SEN pupil) were used.

Most of the non-SEN pupils understand the meaning of ASD in general. One non-SEN pupil stated that:

"ASD is a type of disease, and in the lecture they said that they lack communication and don't like loud environments."

Another non-SEN pupil said that *"They [pupils with ASD] have behavioural disorders."*

But a fellow non-SEN pupil at the public school noted that: "They [pupils with ASD] are smart pupils."

4.7.2 Challenges of implementing an inclusive education policy

Table 19: Challenges of implementing inclusive education

Open Codes	Categories	Theme
• Inclusion was forced upon me • Teachers cannot choose which school to go to • Teachers are under pressure	Some teachers not supportive of the inclusion of pupils with ASD	Challenges of implementing inclusive education policy
• No obligation to admit pupils with SEN • Inclusive education policy at school level	Lack of national inclusive education policy	

A challenge in implementing inclusive education is one of the themes which emerged following the analysis of the interview data obtained from the participants. The open codes have been categorised into two categories, as indicated in table 19: (1) teachers not supportive of the inclusion of pupils with ASD, and (2) lack of national inclusive education policy. With regard to teachers' support of the inclusion of pupils with ASD the data gathered from the teachers indicates that whilst some teachers support the inclusion of pupils with ASD in the school, others indicated that given a choice they would prefer non-inclusive schools. One teacher reported that: *"We were offered training in ASD, but not inclusion."* T2 said: *"Yes, I received training in 'playing in inclusion. But it wasn't applied the way they showed us in the training."*

Inclusive education was causing teachers to work under pressure.

One teacher said:

"Preparing the environment, school and teachers for inclusion, I'm not trained to deal

with unexpected behaviour. That's why we need more practical training."

Another teacher observed:

"Yes we received support in the first semester, but after that some assistant teachers left school and this had a negative effect on pupils. They became more distracted."

T7 said: *"Resources room provides support for pupil with ASD, helping them achieve things I couldn't achieve with them."*

Inclusive education was causing teachers to work under pressure.

Lack of a national inclusive education policy in the school was noted as another barrier to the implementation of inclusive practices. For example, according to the head teacher, the admission of pupils with ASD was at her discretion, as indicated by her statement that:

"I meet with parents and their pupils, look at their medical files and decide whether they're fit for school or not."

The data from the participants indicates there is an inclusive policy at the school level which is implemented at the head teachers' discretion. One teacher said: *"Through meetings with the head teacher, she said there will be inclusion in classrooms, and she would reduce the number of pupils in inclusive classrooms. Next year we will include more pupils with ASD."*

T5 said: *"The head teacher spoke generally about inclusion, but the school and*

teachers are not prepared enough for inclusion. It was all done too quickly"

4.7.3 Awareness of inclusive practice

Table 20: Awareness of inclusive practice (teachers and pupils)

Open Codes	Theme
• Mixing disabled pupils with non-disabled pupils in the same environment • The inclusion of pupils with ASD with mild disabilities who can learn • Non-disabled pupils learning with pupils with learning difficulties • Inclusion is only for private schools • Inclusion of pupils with ASD into society • Bringing pupils from special schools to mainstream schools • Helping pupils with ASD improve and become independent through studying with non-SEN pupils	Awareness of inclusive practices

Participants' awareness of inclusive practices emerged as a theme on its own. Table 20 contains the codes generated from the interview data gathered from the participants who indicated that the majority of them have some knowledge of what inclusion is about. S4 and S10 said: "*Bringing pupils from special school to mainstream schools, so that they learn from other pupils."* One non-SEN pupil said: *"In the lecture we had, they said it's the inclusion of non-SEN pupils with pupils with SEN."* S7 said: "*Teaching*

pupils with ASD how to integrate with us, to help them concentrate with the teacher and help them change their behaviour." However, T7 who was of the opinion that inclusion is only applicable in private schools.

4.7.4 Teacher training and experience

Table 21: Teacher training and experience

Open Codes	Categories	Theme
• Lack of training • Received training online and from school • We learn from each other • We had support at first, but now we do not • Lack of experience • We receive training from King Faisal's Medical Centre • Training sessions on behaviour management and ASD • Teachers did receive some training	Training and experience on how to handle pupils with ASD	Teacher Training and experience
• Confident working with pupils with ASD • Sometimes I need	Teachers' confidence in working with pupils with ASD	

assistance • At first I was scared, but I have become used to it		

Data analysed from the participants reveals that teachers were not adequately trained to manage learners with ASD in an inclusive setting. Two categories emerged from the interview data, as shown in table 21. Most of the teachers received training from the King Faisal research centre, although some teachers stated that they received some SEN training online, for example one teacher stated that *"I attended 8 training sessions from King Faisal's centre and school. They weren't about inclusion. We need more training sessions to prepare for inclusion."* In addition, another teacher explained that *"Preparing the environment, school and teachers for inclusion. I'm not trained to deal with unexpected behaviour. That's why we need more practical training."* And, for example, for T3, T5, and T8, there were some who felt that they needed further training in ASD, for example T1) stated that *"Teachers need training on how to teach pupils with ASD in inclusive schools."* Another teacher noted that *"We were offered training in ASD, but not inclusion."* The mother of the pupil with ASD in the school was also of the opinion that teachers need further training in ASD. T1 and T2, as well as T3, expressed their confidence in working with pupils with ASD.

4.7.5 Staff and Parents' Collaboration

Table 22: Collaboration

Open Codes	Theme
• Lack of opportunity to work with parents • No experience with parents • Parents had a WhatsApp group to share experiences	Collaboration between staff and parents

The data obtained from the participants reveals a lack of collaboration between teachers and parents. For example, Staff 1 was quoted as saying: *"I have no experience with parents; my role is to look after pupils in the classroom."* Staff 2 was also quoted as saying: "*I have no problem with working with parents, but I didn't get the opportunity."* According to the mother of the child with ASD, parents have a WhatsApp group on which they share experiences with other parents of pupils with ASD.

The parent of a pupil with ASD said: "*Usually, I'm the one who's in contact, but they're also very welcoming. But I need them to contact me frequently, because my daughter doesn't tell me what happens in school, for example non-curricular activities"*

4.7.6 Perceptions of inclusive practice

Table 23: Perceptions of inclusive practice (parents, teachers, pupils)

Open Codes	Categories	Theme
• They might be a bad influence on	Teachers' perceptions of	Perceptions of

other pupils	the inclusion of pupils with ASD	inclusive practices
• Increases teachers' workload		
• Builds a sense of responsibility		
• Inclusion at a young age really helps		
• Inclusion might not work for severe cases		
• The school and teachers are not prepared enough for inclusion		
• Not good placing different disabilities in one classroom		
• Uncertainty about the future of inclusive practice		
• Inclusion is beneficial for pupils with SEN.		
• Good for pupils with minor disabilities	Pupils' perception of inclusive education	
• It is hard to include pupils with severe cases		
• Inclusion is beneficial to all pupils		
• Comfortable with inclusive practice	Parents' perceptions of inclusive education	
• The inclusion policy has positive effects on disabled pupils		

• Academic achievement at a special centre was better than at inclusive school		
• Some pupils might not be able to cope with inclusion		

The perceptions of inclusive education emerged as a theme after analysing the interview data from all the participants at the public school. Table 23 contains the open codes generated from the data, which have been further categorised into three sections. Data gathered from the majority of teachers indicates that they have a positive perception of inclusive education. Some of them, however, were of the opinion that pupils with severe ASD may not benefit in an inclusive school, and that pupils with ASD might be a bad influence on non-SEN pupils. For example, T7 was quoted as saying: *"Inclusion doesn't cause any problems if the pupils are teachable. Severe cases should not be included, because they won't benefit, and they might be a bad influence on other pupils."* T8, on the other hand, was of the opinion that it was not good to place pupils with different disabilities in the same class.

T8 stated that *"After including pupils with ASD, there was one pupil with a physical disability, and the teachers' attention shifted from that pupil towards the pupils with ASD. I think that's one disadvantage of inclusion- placing different disabilities in one classroom."*

T6 said: *"It's important to me, but I take issue with the operating mechanism. Schools should be well prepared, and inclusion is better than special centres."*

T7 stated that: *"I agree that inclusion should be mainstream. Before I knew about ASD and inclusion, I was afraid, but working at this school has made me realise it is good and beneficial."*

One teacher said: *"Although we are in the beginning stages of inclusion, it is looking good."* And another teacher stated: *"I feel proud of myself when I help pupils with ASD do well."*

T7 said: *"I was close to retirement after 28 years of teaching. After teaching inclusive classes, I feel happy and feel like a new teacher filled with excitement and happiness; I feel like I'm providing something new for society."*

T7 said: *"I feel happy to teach inclusive classes, because the ministry was impressed by my teaching so they approved inclusion at my school."*

The majority of non-SEN pupils were of the opinion that pupils with ASD benefited in an inclusive school because they had the opportunity to gain support from non-SEN pupils (S2, S4). One pupil stated that, *"we don't have inclusion in my class, but if we did I am ready to help them."* S3 said, "*After the inclusion of Norah, I can see that inclusion is easy for all disabled pupils."* Another pupil noted that *"Norah at first was loud, but now she is quiet."* A pupil said that, "*We like them, feel compassionate for them and feel proud of ourselves for serving them."* Some of

the non-SEN pupils, however, were of the opinion that it was hard to include pupils with severe cases (S7).

However, a pupil stated that *"They learn from us, but if they stay in special schools they might hurt each other."*

Parents of pupils with ASD and non-SEN pupils were of the opinion that inclusive education was beneficial to all pupils. Parents 1 and 2 of non-SEN pupils said "*The existence of the inclusion policy did not affect my decision to send my daughter to this school. I welcomed inclusion and prepared my daughter for inclusion. My daughter has benefitted from this and she has gained a sense of responsibility."* They all stated that their children were comfortable learning in an inclusive school. However, P2, the parent of a non-SEN pupil, was of the opinion that some pupils would not cope in an inclusive school, whilst the mother of the child with ASD was of the opinion that her child's academic achievement at special centres was better than in the inclusive school and that the child benefited mostly from social development.

> *"Her academic achievement at the special centre was better than in inclusive school, but not socially; she's socially better in the inclusive school, but not academically"*

4.7.7 Programmes for pupils with ASD

Table 24: Programmes for Pupils with ASD (teachers)

Open Codes	Category	Theme
• Behaviour management • Support from other pupils • Support by specialist teachers • Use of resources room for extra support • Speech therapy	Support for pupils with ASD	Programmes for pupils with ASD

The data from the interviews reveals that there are programmes for pupils with ASD to facilitate their learning in an inclusive setting. For example, T7 stated that the resources room provides support for pupil with ASD to achieve what she could not achieve with them in the regular class. T1, T2, T4, T5, and T6 said that *"I deal with all pupils in the same way. Pupils with ASD go to the resources room most of the time."* The remedial teaching in the resources room is conducted by specialist teachers. According to the teachers, other pupils also encourage pupils with ASD during lessons and in social activities. The school has a speech therapist to support pupils with ASD (T9).

4.7.8 Advantages of inclusive practice

Table 25: Advantages of inclusive education (parents, teachers)

Open Codes	Categories	Theme
• Opportunity for social	Advantages of inclusion	Advantages of

interaction	for pupils with SEN	inclusive practice
• Pupils study together		
• Improved communication skills		
• Pupils benefit academically		
• Fosters cooperation		
• Support by non-SEN peers		
• Pupils with SEN imitate other pupils' positive behaviour		
• Develop a sense of responsibility • Creates awareness • Changes perceptions of disabilities	Advantages of inclusion for non-SEN pupils	
• A sense of compassion towards pupils with ASD • Improved teaching techniques • Opportunity for further training	Teachers gained experience from inclusion	

The participants from the public school cited several advantages of inclusive education for pupils with ASD and for non-SEN pupils. The majority of the participants stated that pupils with ASD benefited more in an inclusive school than in a special school. For example, T1 stated that *"pupil with ASD learn good behaviour from non-SEN pupils."* The speech therapist (T9) was also quoted as saying:

"My school provides full inclusion that benefits disabled pupils to gain social and academic skills. Inclusion helps to raise awareness in society and informs people about the different types of disabilities and changes perceptions of disabilities."

The parent of a child with ASD was of the opinion that her child benefited more from social interaction in the mainstream school than in 'special centres' (T1, T2, T3). According to the participants, inclusive education also benefited non-SEN pupils in that it created awareness around disability, hence making the pupils more accommodating of their peers with disabilities. In addition, they gained a sense of responsibility (Non ASD parents, P1 and P2).

The majority of the teachers also feel that inclusive education has benefited them in that it encourages a sense of compassion towards pupils with ASD (T4). Some of the teachers (e.g., T1, T2) stated that their teaching methods improved as a result of having pupils with ASD in their classes. Others felt that inclusive education provided them with an opportunity for further studies to be able to manage pupils with ASD in a regular classroom (T2, T3, T4).

4.7.9 Disadvantages of inclusive education

Table 26: Disadvantages of inclusive education (parents, teachers)

Open Codes	Theme
• Severe ASD cases can have a negative effect on non-SEN pupils • Extra burden for teachers • Inadequate SEN teachers • Young pupils without SEN might be negatively influenced	Disadvantages of inclusive education

According to the majority of the participants, the advantages of inclusive education outweigh the disadvantages. Table 26 contains open codes for the disadvantages of inclusive education. Some participants from the public school were of the opinion that due to the behaviour exhibited by pupils with ASD, those with severe ASD would have a negative effect on non-SEN pupils (T1, T4, T5, T7). Although the majority of teachers stated that they were comfortable having pupils with ASD in their classes, at the same time they expressed the need for further training in SEN so that they could be more effective.

The specialist teacher said that *"Pupils with ASD have benefited significantly from inclusion; they have learnt to be quiet, punctual, and have gained academic skills from their peers, but one of the disadvantages is that pupils become over-caring and teachers are usually not aware of this."*

On the other hand, specialist teacher number 9 said that *"Until now I haven't found*

any disadvantages to inclusion; maybe because we are still in the first stages (just 8

months), and there's a limited number of pupils with ASD"

4.7.10 The National Curriculum

Table 27: The National Curriculum (parents, teachers)

Open Codes	Category	Theme
• No curriculum for pupils with ASD • Simplify the national curriculum depending on pupils' needs • SEN curriculum approved by the head teacher and the educational supervisor	Curriculum	The national curriculum

The data gathered from the public school reveals that pupils with ASD followed the national curriculum which the teachers stated that they usually simplify to accommodate learners with ASD. According to T7, the head teacher and educational supervisor approved the curriculum designed by the teachers.

One teacher said that: "*I teach the whole curriculum, but try to make it simple. I accept pupils with ASD achieving the minimum grade."*

According to a parent of a pupil with ASD: "*My daughter to some extent has coped with the curriculum, but sometimes she's under pressure because of the curriculum. Her academic attainment meets the satisfactory standard. The school has allowed*

me to make up the questions for her exams that were appropriate for her (the curriculum is flexible, but it won't prepare my daughter for high school)."

Mother of pupil with ASD: *"The school has allowed me to make up the questions for her exams that were appropriate for her (curriculum is flexible, but it won't prepare my daughter for high school)."*

4.7.11 Suggestions on how to improve inclusive practice

Table 28: Suggestions (parents, teachers)

Open Codes	Category	Theme
• More auxiliary staff and facilities • Creating awareness for teachers, pupils and parents • Parents to be consulted before inclusion takes place • Teachers need training on how to teach pupils with ASD at inclusive schools • Specialist support for teachers • We need more training sessions to prepare for inclusion • Reduce the number of pupils in inclusive classrooms • It would be better if inclusion was	Suggestions	Suggestions on how to improve inclusive practice

introduced gradually		
• Preparing the environment, school and teachers for inclusion		
• Teachers need monetary incentives		

During the interview, the participants suggested some approaches for improving inclusive education. The majority of teachers stated that they require further training and that more auxiliary staff were required. Table 28 contains suggestions made by the participants from the public school, which they felt if implemented, would make inclusive education for pupils with ASD more effective- not only their school but across Saudi Arabia.

The mother of a pupil with ASD said that one of the biggest problems that their child faces is transportation *"Because the school is far away and it's the only school that accepted my daughter. The journey takes about 2 hours. She used to cry at first, but then she got used to it."*

Another mother of a pupil with ASD said that *"I have become aware of inclusive schools after research and surveying parents. It was difficult to find an inclusive school, and I only found out about this school through the educational supervisor."*

The mother of a pupil with ASD said that *"The difficulties I faced as a mother of a child with ASD are that teachers need training, social awareness, social programmes on the benefits of inclusion, and supporting parents to find inclusive schools."*

4.8 Findings from the Public School Data

This summary gathers and compares the results of the observation, and interview data collected to examine inclusion of pupil with ASD at the public school. The aim of this exercise was the gain insight into the results as a whole. The analysis will take into account the four research questions.

A summary of the data collected from the public school are presented and explored in relation to the four primary research questions outlined in the introductory chapter. From the data gathered from observations and interviews, there is evidence that efforts are being made by the teachers, parents and pupils in supporting the inclusion of pupils with ASD. For example, there is evidence of peer support, as non-SEN pupils would prepare a rota to support pupils with ASD. In class, pupils with ASD sat next to gifted pupils so they could be helped during lessons. The school has a resources room and an SEN teacher who provides extra support in the resources room for pupils with ASD. The school has support staff that can be with the pupils during out of class activities to ensure that pupils with ASD are safe and to prevent any form of bullying. During the observations at the public school, the researcher did not witness any increased workload for teachers academically; teachers did not spend more time on pupils with ASD, and teachers did not bother about whether pupils with ASD actually understood the materials or not. The teachers gave pupils with ASD the opportunity to contribute just like other pupils. Furthermore, the research was conducted one year after inclusion was implemented at the public school. Thus, it was interesting to see how teachers, auxiliary staff and parents were coping with this change. Additionally, teachers and staff at both schools suggested, in the interviews, that pupils with ASD experienced bullying, but the researcher did not witness any bullying during social or

academic activities.

Next, research question two: "What are the opinions and perspectives of parents, teachers, non-SEN pupils and staff regarding inclusion *(in particular pupils with ASD) in the Saudi primary schools?"* The data collected from the participants indicates a mixed perception of inclusion of pupils with ASD in mainstream schools. For example, whilst the majority are of the opinion that pupils with ASD benefit from inclusion, there are some parents and teachers who felt that due to the behaviours they exhibit, they might be a bad influence on the other pupils in the school. Teachers and auxiliary staff were worried that they might encounter severe cases in the future that may be beyond their expertise. Others are of the opinion that inclusive practice would not benefit pupils with severe ASD. Although the majority of the teachers emphasised the need for training, they at the same time stated that they did not find it challenging having pupils with ASD in their classes. The interview and observation data from the public school reveals, from the perspective of the participants that pupils with ASD benefit from inclusive practice despite the lack of a national inclusive education policy. According to the participants, the advantages of the inclusion of pupils with ASD in the public school outweigh the disadvantages. The interview data analysed from the teachers and the parents indicates that pupils with ASD and non-SEN pupils benefit from the inclusive practice.

The data collected from the public school suggests that many lessons that may be learnt from the implementation of inclusive education in Saudi Arabia. The participants were selected through purposive sampling due to their knowledge of inclusive education, and since it is practised in their schools, they would seem to be in a better

position to provide suggestions on how to improve inclusive education in the country. The participants stated the challenges they face in accommodating pupils with ASD, which they felt if addressed would promote the education of pupils with ASD in mainstream schools. For example, the teachers pointed out the need for more auxiliary staff to support them, and more teaching and learning resources. They also expressed the need for further training, since the initial teacher training is usually generic, hence they feel further training in SEN would be beneficial. The parents also suggested that they too should be involved in major decision-making regarding inclusive education.

The observation data and the interview data from the public school reveal several preventing factors and barriers to implementing an inclusive approach to education in Saudi Arabia, particularly for pupils with ASD. For example, the data shows a lack of collaboration between teachers and parents. Some of the teachers stated that they have had no opportunity to work with parents, whilst some stated that they lack experience in working with parents. This may explain why the parents have a WhatsApp group, which they stated that they use to support each other and to share experiences.

The data highlights the need for national SEN policies to support pupils with ASD. According to the public school head teacher, the inclusive education policy is at school level, and the admission of pupils with SEN is at her discretion. With regard to the national curriculum, the teachers stated that there is no curriculum for pupils with ASD, so they usually simplify the national curriculum depending on the pupil's needs. The majority of the teachers stated that they lack SEN training, or adequate specialist

support from the MoE, to support pupils with ASD. They also suggested that more auxiliary staff be recruited to help them in managing pupils with ASD.

4.9 Cross-school summary of findings by type of data

It has been previously explained that the data collected from the two schools was not initially intended for comparison purposes—the schools were purposively selected - the inclusive public school was the only one of it is kind), and the private school was the only one recommended by the Ministry of Education. However, at this stage, it is interesting to make some tentative comparisons in order to evaluate the findings that have been generated from the primary research.

4.9.1 Findings from the Observation Data

The observation data has revealed the extent to which pupils with ASD are included in mainstream schools. The data provides first-hand information regarding the support provided to pupils with ASD in mainstream schools to facilitate inclusion. The data from observations of the general school environment has not revealed any major differences between the two schools. This observation is important in demonstrating that the two schools only differ in management- one being a private school and the other a public school; both are mainstream schools which have pupils with diverse SEN, including ASD. Both schools have auxiliary staff to facilitate the inclusion of pupils with SEN, and a resources room which is used to provide extra support to learners with ASD.

With regard to the observations made of pupils with ASD at the public school, it was clear that these pupils were included in both structured and unstructured activities at

the school. This was mainly due to the support pupil with ASD received from their peers. Pupils with ASD were sat next to gifted pupils in order to receive support in the regular classroom whilst each day a non-SEN pupil was placed in charge of looking after a pupil with ASD in the playground and during recreational activities to encourage social interaction. However, pupils with ASD were often taken out of the mainstream classroom to participate in special needs sessions in the resources room at both the public and private school.

In regard to opinions and perspectives, the observations at the private school suggested that teachers felt that pupil with ASD could be disruptive and inattentive, sometimes responding by shouting at pupil with ASD, betraying impatience. Furthermore, the teachers appeared to feel that it was the responsibility of the specialists to supervise and offer support to pupil with ASD.

As to the lessons that can be learnt to implement inclusive practice, observations at the public school showed that it was important to encourage non-SEN pupils to interact with and support their ASD peers. It was encouraging to see that non-SEN pupils were so keen to socialise with and lend support to the pupil with ASD at the public school.

The observations suggested that some factors were preventing inclusion at the public school. One of these was that teachers seemed to struggle to cope with the needs of pupil with ASD. Furthermore, teachers seemed to feel that it was not their responsibility to include or support pupil with ASD in the classroom, instead feeling that it was the responsibility of specialists to help pupil with ASD out academically. A similar finding resulted from the observations made at the private school.

The four aims indicated in Table 27 provided a guide to observing the support given to pupils in both schools. The only notable difference in the findings is that unlike in the private school, pupils in the public school created a timetable for supporting their ASD peers. Each pupil was allocated a time slot when they should look after a pupil with ASD, and this was created by the pupils themselves. Furthermore, the research was conducted one year after inclusion was implemented at the public school, and few years after inclusion at the private school. Thus, it was interesting to see if inclusion was differently implemented at the private school and how well the public school was coping with the introduction of inclusive practice. Additionally, the teachers and staff from both schools suggested that pupil with ASD experienced bullying, although the researcher did not witness any bullying during social or academic activities.

Table 29: Support given to Pupils with ASD

Aim	Common characteristics
To observe the support given to pupils with ASD in class	• The teachers motivated pupils with ASD by appreciating when they participated • The teachers paid equal attention to all pupils during lessons • The teachers gave equal opportunities for participation to all pupils • Teachers encouraged other classmates to appreciate the efforts made by the pupils with ASD during lessons • The teachers maintained eye-contact with pupils with

	ASD at all times
	• The pupils with ASD were encouraged to participate in group reading
	• Pupils with ASD had IEPs
	• Pupils with ASD sat next to gifted pupils in class so that they could be helped during lessons
	• The pupil with ASD had to be prompted to participate in class
	• Pupils with ASD imitated their peers in their readiness for the lessons
To observe the support given to pupils with ASD in social settings	• Non-SEN pupils encouraged pupils with ASD to join them during play time
	• Teachers supported pupils with ASD in good grooming, for example in making their hair neat
	• Auxiliary staff remained with the pupils during playtime to ensure they were not bullied and to motivate them
To observe behaviour management strategies	• Teachers were tolerant when pupils with ASD exhibited challenging behaviours
	• The pupil with ASD were encouraged to raise their hands to gain the teachers' attention
	• Pupil with ASD were encouraged to accept changes such as transferring to another activity or classroom
	• The pupils with ASD would put their fingers in their

	ears when the class was noisy, and the teacher would control the class
To observe interactions between pupil with ASD and their non-SEN peers in social settings	• Pupil with ASD played alone most of the time unless prompted by their peers to join them • The pupil with ASD joined others during breakfast and morning assembly • Pupils with ASD imitated their peers during playtime • Pupils with ASD were protected by their non-SEN classmates from being bullied by non-SEN pupils from other classes • Pupils in the public school created a timetable for looking after pupils with ASD; each pupil was allocated a time slot for when they should look after a pupil with ASD. This was created by the pupils themselves, not the teachers, and they seemed to enjoy using it

4.9.2 Findings from the Interview Data

As with the observations, the interview data from the two schools was compared to identify common themes in determining the extent to which pupils with ASD are included in mainstream schools in Saudi. The data from the interviews was generated to meet the research objectives indicated in section 1.5 of Chapter One, resulting in 11 common themes with one additional theme on collaboration between

teachers and parents, which emerged from the public school only. This was the only area that significantly differed between the two schools.

The interview data from the public school reveals, from the perspective of the participants, pupils with ASD benefit from inclusive practice despite the lack of a national inclusive education policy. According to the participants, the advantages of the inclusion of pupils with ASD in the public school outweigh the disadvantages. The interview data analysed from the teachers and the parents indicate that pupils with ASD and non-SEN pupils benefit from the inclusive practice at both the public and the private schools. In terms of opinions and perspectives, whilst the majority are of the opinion that pupils with ASD benefit from inclusion, there are some parents and teachers who felt that due to the behaviours they exhibit, they might be a bad influence on the other pupils in the school. Teachers and auxiliary staff at the public school were worried that they might encounter severe cases in the future that may be beyond their expertise.

The data collected from the public school provides a lot of lessons that could be learnt from implementing inclusive education in Saudi Arabia and elsewhere. The participants stated the challenges they face in accommodating pupils with ASD, which they felt if addressed would promote the education of pupils with ASD in mainstream schools. For example, the teachers pointed out the need for more auxiliary staff to support them, and more teaching and learning resources. They also expressed the need for further training, since the initial teacher training is usually generic, hence they feel further training in SEN would be beneficial. The parents also suggested that they too should be involved in major decision-making regarding inclusive education. In terms of the

challenges identified when it came to implementing full inclusion at the public and private schools, the data shows a lack of collaboration between teachers and parents. Some of the teachers stated that they have had no opportunity to work with parents, whilst some stated that they lack experience in working with parents.

5   Chapter 5: Discussion

5.1 Introduction

The discussion chapter will discuss the results of the interviews and observations regarding what they reveal about the inclusion of pupils with ASD in mainstream Saudi primary schools in light of the literature, theory and the four main research questions, which are:

1. *How are pupils with ASD currently being included in mainstream Saudi primary schools?*

2. *What are the opinions and perspectives of parents, teachers, non-SEN pupils and staff regarding the inclusion of pupils with ASD in Saudi Arabian primary schools?*

3. *What lessons can be learned from those schools which have adopted inclusive practices?*

4. *What are the preventing factors and barriers to implementing an inclusive approach to education in Saudi Arabia (particularly for pupils with ASD)?*

The interview data will be used to consider inclusion in Saudi Arabia primary schools from the perspectives of parents, teachers, staff and pupils, whilst the observation data will be discussed in relation to how teachers, staff and pupils appear to have adapted to inclusion. How the findings relate to each research question will be explored and discussed in light of relevant literature. The following paragraphs consider the current educational provision in Saudi Arabia and how they relate to inclusion, as well as how inclusion policies have been implemented in Saudi Arabia in terms of opinions and perspectives; challenges to policy implementation, and its

relationship to teacher training. The discussion chapter then looks at the advantages of inclusion and the problems with inclusion identified by this research, before presenting some brief conclusions on this topic.

5.2 Current Educational Provision in Saudi Arabia

This section explores current educational provision in Saudi Arabia and how inclusion has been incorporated into the mainstream Saudi education system. The issue of the current state of inclusion in Saudi Arabia is explored in detail in section 2.3. Provision of education for pupils with special educational needs (SEN) in Saudi Arabia is based on Islamic rules that state that education should be for all children, regardless of ability, disability or needs (Langdon and Saenz, 2016). In terms of how inclusion theory has been interpreted in Saudi Arabia, it is clear that the Kingdom has embraced the idea of inclusion of disabled children in mainstream schools in the political sense. For example, Saudi Arabia has signed the United Nations (UN) Convention on the Rights of the Child (1989), which means that they have an obligation to integrate disabled children and respect their right to be member of educational, social, vocational and civic institutions.

5.2.1 Inclusive Education Policy

Teachers at the public school agreed that the lack of a national inclusive education policy in Saudi Arabia was a barrier to implementing inclusive practices. During the interview process, the head teacher at the public school explained that pupils with ASD were admitted at her discretion, and she would decide whether a pupil with ASD should be allowed to study at the school after a meeting with the prospective pupil and their parents and looking through their medical file. Other study participants

indicated that an inclusive policy exists at the public school, and that it is implemented at the discretion of the head teacher. Teachers at the public school reported that the head teacher announced the inclusion policy during meetings and that the number of pupils in classrooms would be reduced and more pupils with ASD would be admitted the following year. Evidence gathered by Aldabas (2015) indicates that there is no formal provision, only general guidelines for the education of pupils with ASD in Saudi Arabia. Between 1990 and 2000, pupils with ASD were often provided for in full-time special education classrooms at public schools, and educated alongside other pupils with SEN, rather than in a classroom with non-SEN pupils (Aldabas, 2015). At present, Saudi government guidelines state that pupils with mild to moderate learning disabilities should be educated in general education classrooms with assistance from the resources room, whilst pupils with 'moderate, profound and severe disabilities' including ASD are provided for in special day schools (Aldabas, 2015, p. 1159).

When asked about the current inclusion policy at the school, the teachers at the private school seemed unsure about the exact wording and scope of such a policy. Three teachers seemed to believe that inclusion policy only applied to specific learning difficulties and did not cover or make provision for pupils with ASD. Furthermore, it seemed that the majority of the teachers at the private school were unaware that the school had an inclusion policy. According to Teacher 1, she had no idea whether any inclusion policy existed. But when meetings were held between the teachers and the head teacher they were told that pupils with SEN had rights and they should look after them. This response appears to suggest that a formal (written)

policy on inclusion has yet to be created for the private school; instead, an informal inclusion policy seems to be in operation.

These guidelines and the results of the primary research indicate that pupils with ASD have only recently been catered for in an inclusive environment. Also, the decision to educate pupils with ASD at an inclusive mainstream school remains up to the discretion of head teachers and parents, usually depending on how severely ASD the pupil is affected and whether they display disruptive behaviour or not.

According to Aldabas (2015), the current provisions regarding the education of pupils with ASD meet the standards set by the Saudi government, which is that pupils with mild to moderate disabilities should be educated in a general education classroom with assistance from the resources room. Whilst ASD is understood by the Saudi Arabian authorities as a moderate or profound/severe disability, the condition occurs on a spectrum and the mildly to moderately affected are more likely to fit into the former category. Consequently, it appears that the provisions made for pupils with ASD at both schools meet current standards set by the Saudi government. The literature relating to this subject suggests that inclusion in Saudi Arabia has a number of positive and negative aspects. As such, it is important to explore how participants in the research study understand the concept of inclusion as it will help inform understandings of the extent to which the Saudi government facilitates the inclusion of children with ASD in mainstream schools. Furthermore, this paragraph indicates that cultural prejudices may potentially affect how inclusion is treated at mainstream schools. While the government should be in charge of monitoring and providing guidance on inclusion, charities need to support the vision for inclusion put

forward by the government, rather than endorsing the institutionalisation of children with ASD.

5.2.2 Involvement of Auxiliary Staff

The involvement of auxiliary staff at certain times of the school day in the private school indicates that there are times when pupils with ASD are not entirely included in mainstream schooling, and this is upsetting for non-ASD pupils. During the day, pupils with ASD at the private school were withdrawn from the mainstream classroom to study and receive additional help in the resources room from support staff, specialist teachers and therapists. Pupils with ASD seemed to understand and appreciate this, although some non-ASD -pupils questioned this approach to the education of pupils with SEN. At the public school, auxiliary staff also regularly withdrew the pupil with ASD for special instruction in the resources room. Whilst Noha struggled to understand some aspects of the school routine, she was aware that she sometimes needed to attend sessions in the resources room and was happy to do this. In addition, it was observed that members of auxiliary staff at the private school were flexible when it came to withdrawing pupils with ASD from mainstream classrooms. For example, when Gaida's non-SEN peers objected to her being withdrawn from class during her favourite lesson (English Language), auxiliary staff listened to them and delayed withdrawing Gaida. It was reassuring to find that auxiliary staff were so devoted to meeting the needs of a pupil with ASD and were flexible when it came to taking pupils with ASD to the resources room, if necessary. The evidence put forward by Aldabas (2015) indicates that such provisions do meet the requirements set out by the Saudi government; however, in practice it can be disruptive for non-SEN pupils and affect the bonds between pupils with ASD and

their non-SEN peers. However, it may be difficult to increase the amount of time that pupils with ASD spend in mainstream classrooms at the private school due to teacher shortages.

5.2.3 Participants' Understanding of Inclusion

This section explores how the participants understand inclusion, and addresses the third research question. It has been interesting to assess understandings of inclusion as there is no universal definition of the term. Instead, teachers and auxiliary staff in England, for example, are required to implement inclusion but must enact it dependent on their understanding of the concept, which makes understanding of the concept significant (Sikes et al., 2007). The interview data indicates that all groups of participants seemed to have some kind of understanding of the concept of inclusion and its implications for pupils with disabilities and SEN. Responses ranged, but it is interesting to observe that when asked what their understanding was of the term 'special educational needs', participants chose to focus on one aspect of disability. For example, Teacher 1 focused on the relationship between inclusion and disability, whilst Parent 4 emphasised the specific needs of children with SEN, and Parent 2 pointed out that pupils with SEN may be gifted as well as disabled. It was interesting to note that other responses focused on the abilities of learners with ASD rather than the assumed disabilities or shortcomings of these pupils. Sikes et al. (2007) suggest that teachers and auxiliary staff should act according to their understanding of inclusion. While this appears like a sound solution on a practical level, differences in understandings of inclusion could lead to confusion. As such, this indicates that training is necessary to align understandings of inclusion so that they can be applied effectively in the classroom.

At the public school, the majority of the participants had a general understanding of SEN. In regard to their specific understanding of ASD, the participants knew the meaning of ASD in general and seemed to understand the condition in reference to the behavioural symptoms of pupils with ASD at the school. Participants described pupils with ASD as being anti-social, as playing in an unusual way and as having a 'disease.' Also, non-SEN pupils understood that pupils with ASD had a behavioural disorder but that they were often clever as well.

These responses relate to other recent studies on attitudes towards ASD and other disabilities in education in Saudi Arabia. Studies indicate that views on ASD and other disabilities, and how pupils with SEN should be educated, are evolving in Saudi Arabia. Alanazi (2012) found during a study of inclusion at an inclusive primary school for girls in Saudi Arabia, that understandings and the implementation of inclusion are heavily influenced by cultural traditions and Islamic precepts concerning equality and difference. Although the views on inclusion at the school described by Alanazi are generally positive, the attitudes of parents and teachers towards children with cognitive impairments were less positive (Alanazi, 2012). Despite progress, understandings of ASD in Saudi Arabia remain confused. This study and the research by Alqahtani (2012) indicates that most Saudi adults have a formal understanding of ASD; however, the latter study also found that the parents of children with ASD believe that it was possible that black magic, the evil eye or vaccines had caused their child's disability. Other studies have found that some adults continue to believe that children with ASD are contagious (Saudi Gazette, 2014). These findings indicate that inclusive education has the potential to educate non-ASD pupils about ASD and avoid such false information about the condition

being transmitted to the next generation. It could be suggested that a government campaign strategy would be appropriate in the case of Saudi Arabia to raise awareness of ASD and other developmental conditions so as to mitigate the problems caused by cultural suspicions and prejudices.

At the private school, non-SEN pupils' responses when asked to describe the characteristics of pupils with ASD highlight both the sensitive and the anti-social aspects of the personalities of pupils with ASD. Pupils at the public school explained that they feel that inclusion is about bringing in pupils from the special school to mainstream schools so they can learn from the pupils at that school. They feel that inclusion is about teaching pupils with ASD to socially interact and integrate with pupils and teachers as a means of improving their behaviour. When asked about current inclusive education policy at the private school, it seemed that both non-ASD pupils and their parents were aware of inclusive practice, but that they were unaware of current education policy. The non-SEN pupils were aware that some of their fellow pupils were 'different,' that is, they had a special educational need or were gifted and that pupils, regardless of specific needs, were educated alongside one another. It is clear that non-SEN pupils at both schools expressed caring and protective feelings to their peers with ASD. Although non-SEN pupils at both schools were unaware of the nuances of Saudi education policy, their perspectives on the presence of pupils with ASD at mainstream schools echo the idea that mainstream education benefits pupils with ASD as it helps them to develop the social skills that they struggle with as part of their disorder (Sansosti, 2008). This suggests that at least the social side of the needs of pupils with ASD is being provided in mainstream schools in Saudi Arabia.

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In regard to the opinions of non-SEN pupils at the private school about inclusive education, the interview data shows that they have made friends with their peers, regardless of whether they had SEN or not, viewing all pupils as their friends despite having learning difficulties or not. Non-SEN pupils also stated that they are keen to help and support their peers with ASD. Pupils who do not have ASD at the public school also stated that pupils with ASD would benefit from the inclusive school as they received additional support from non-SEN pupils. Essentially, they feel that pupils with ASD are there to learn from non-SEN pupils. Furthermore, exposure to pupils with ASD made non-SEN pupils feel that inclusion was easy to achieve. Whilst one pupil with ASD, Noha, was reportedly loud at first, her behaviour improved once she became used to her new environment. In fact, in 2002, RSEPI was required by the Saudi Ministry of Education to provide transition services to pupils with disabilities to prepare them for moving from one environment to another (Alquraini, 2014). This evidence indicates that such programmes seem to have been effective. As with the findings presented in the previous paragraph, this evidence suggests that the social aspect of the needs of pupils with ASD can be catered for in mainstream education classrooms.

The evidence cited above, and in the previous chapter, indicates that non-SEN pupils at both the private and the public school have easily adapted to inclusion and seem to enjoy learning alongside and socialising with pupils with ASD. Such evidence goes against the fears expressed in previous studies. For example, Hassanein (2015) reports that teachers in Egypt expressed fears that parents of non-SEN pupils may oppose inclusion because their child's learning will be affected. Also, the same study reports that teachers were concerned that non-SEN pupils

might have already developed negative attitudes towards disabled people, which could prevent the inclusion of pupils with SEN. As well as this, special education teachers expressed fears that non-SEN pupils might bully pupils with SEN (Hassanein, 2015). This evidence indicates that there is potentially some resistance to inclusion in Middle Eastern countries on the grounds that the learning of non-SEN pupils might be affected, and due to existing, ongoing prejudices against the disabled. It is interesting to find that this was not the case at either the private or public school examined in this study in Saudi Arabia. This suggests that prejudices against disability in Saudi Arabia may be challenged and conquered by exposure to and the opportunity to learn from pupils with disabilities.

5.3 Implementation of Inclusion in the Saudi Arabian Context

5.3.1 Opinions and Perspectives on Inclusion

This section explores inclusion in the Saudi Arabian context, addressing the second research question. It is clear that parents of both pupils with ASD and non-SEN pupils at the private school view inclusion in a positive light, believing inclusion to be beneficial. Non-SEN pupils at the private school reported that their teachers tend to focus on the pupils with ASD, but they felt that this did not affect their education and that their teachers treat both pupils with ASD and non-SEN pupils the same. Similarly, a pupil with ASD at the private school reported that the teachers treat them the same way as other pupils. Non-SEN pupils at the private school were keen to help out their peers with ASD and help them to integrate; inviting them to play with them and helping them make sensible choices at lunchtime. The non-SEN pupils interviewed at the private school reported that they consider the pupils with ASD to

be their friends and that they enjoy playing with them. Observations at the public school generated similar conclusions.

Parents of non-SEN pupils believe that inclusion has improved their children's academic and social development through exposure to academically gifted pupils. Also, parents felt that interacting with children with ASD had given their children increased awareness and tolerance of the condition. However, whilst parents of non-SEN pupils were comfortable with the presence of pupils with ASD at the school, they were concerned that their own children might be ignored because teachers had to prioritise the needs of pupils with ASD, reporting that their children felt envious when more attention was paid to pupils with SEN. Such concerns have often been explored in the available literature on the subject of inclusion. It has been suggested that if teachers pay too much attention to providing high-quality inclusive education to pupils with SEN, this will have a negative impact on the attainment of non-SEN pupils (Armstrong and Squires, 2012). However, Farrell et al. (2007) found that inclusion does not have a negative effect on the academic performance of pupils in inclusive mainstream schools. It could be suggested that because inclusion has only recently been introduced in both schools involved in the study, that pupils, teachers, parents and staff are still adapting to it and if there are any imbalances in the amount of attention paid to pupils with ASD and non-ASD pupils by teachers, this will improve in time as non-SEN pupils get used to the presence and needs of pupils with ASD in mainstream classrooms.

Parents of pupils with ASD at the private school felt that inclusion is facilitated by the school, which listened to their recommendations, appointing a shadow teacher to

assist one pupil with ASD working at the school. Whilst parents of pupils with ASD felt that their children could easily cope with academic work with assistance from the resources room, they have concerns about their child's ability to socialise without appropriate support. One parent reported that their child's teacher had encouraged their child to play with non-ASD pupils and they had enjoyed the experience.

Similarly, at the public school, the parents of both pupils with ASD and non-SEN pupils agreed that inclusion is beneficial to all pupils at the school. The parents of non-ASD pupils agreed that the inclusion policy had not affected their decision to send their child to the school. In fact, they had welcomed inclusion, feeling that it was beneficial to their children and gave them a sense of responsibility. Also, some of the parents of non-ASD pupils felt that their children were comfortable learning in an inclusive environment. On the other hand, other parents of non-SEN children at the public school felt that some pupils would be unable to cope in an inclusive school. One parent of a pupil with ASD agreed that there were some drawbacks to inclusion, as she felt that her child's academic attainment had been higher at the special centre than at the inclusive school. However, the same parent felt that her child's social abilities had improved at the inclusive school. It has been found that educating pupils with ASD in a mainstream classroom improves both academic and social attainment. This is because when educated in a mainstream classroom:

> *Pupils with ASD are able to learn social conventions and skills, which can lead to improved mental health, by modelling [their behaviour on that of] their typically developing peers* (Mundy and Mastergeorge, 2012, p. 50).

Essentially, studies into inclusion have found that ASD and non-ASD pupils have a positive influence on one another, as cited in studies by Chaaya (2012) and De Boer

(2012). It could be suggested that although the academic achievements of some pupils with ASD involved in this study have suffered after moving from the special centre to a mainstream school, this may be to do with the fact these pupils are adjusting to a new environment and teachers need more training in how to help pupils with ASD. This is confirmed by Barnard et al. (2000) who looked at the success of the inclusion of pupils with ASD in mainstream schools shortly after it was first introduced in the UK rather than there being any problem with the philosophy of inclusion.

5.3.2 Challenges around Policy Implementation

This section considers the challenges around policy implementation and explores the first, third and fourth research questions. The challenge with implementing inclusion in Saudi Arabia has been identified by Brown (2005), who explains that inclusive thinking differs from inclusive practice. This is because whilst inclusive thinking refers to the philosophical and internalised belief that society will benefit from the removal of discriminatory barriers to the integration and participation of disabled citizens in the community, inclusive practices are the individual activities that facilitate integration. However, it has been noted that there is no common policy for children with special educational needs within the GCC, as explored in previous paragraphs (Weber, 2012). This means that although inclusion is accepted in theory, it is often not implemented in Saudi Arabia in practice.

Interview data with staff at the private school revealed that it is difficult to include pupils with ASD, despite current policy, because of teacher shortages. This is important to consider as it is vital that the barriers which are preventing inclusion be

investigated following the Kingdom of Saudi Arabia's involvement in the Third International Conference on Disability and Rehabilitation (held in Riyadh in 2009). The recommendation of this conference was that the Kingdom should continue the expansion of mainstreaming programmes, with the aim of an inclusive approach to education. However, the educational supervisor at the private school reported that although there is an inclusion policy at the school, it could not be properly implemented as the Ministry of Education would not grant them the resources required to do so. For example, according to evidence gathered during the interviews, the educational supervisor pointed out that nationwide 2,000 teachers were needed to properly implement the inclusion policy, but, in reality, only 100 had been recruited. Therefore, the educational authority appoints teachers randomly, not on the basis of need. Furthermore, the teachers interviewed at the private school acknowledged that there is a shortage of SEN teachers in Saudi Arabia and that they were taking private study in their spare time to identify strategies for teaching pupils with ASD.

Teacher shortages remain a serious problem on a global level. For example, the UN estimated that an extra eight million teachers would be needed worldwide by 2015 to cope with increased educational provision worldwide (Guardian, 2016). According to a report by *the Guardian,* in 2009, Saudi Arabia had 284,800 teaching staff and it was estimated that 302,600 teaching staff would be needed to cope with demand by 2015 (Guardian, 2016). These statistics indicate that there is a slight deficit in teaching staff in Saudi Arabia. Furthermore, in May 2016, it was reported that teacher shortages were a problem for all GCC countries, resulting in overdependence on expats (Arabian Business, 2016). The total number of pupils in

the GCC education sector is projected to reach 15 million by 2020. A report by Alpen Capital found that 9.2 million pupils were being educated in Saudi Arabia in 2015 and, as pupil numbers are growing at an annual rate of 3.5 per cent, there will be 11 million pupils being educated in the country by 2020 (Arabian Business, 2016). To meet increased demand, more schools will need to be built, although teacher shortages and high teacher turnover remain a problem (Arabian Business, 2016). This is because teacher shortages in Saudi Arabia have been found to result in large numbers of pupils being educated in classrooms along with a decline in the quality of education (Jensen, 2015).

These teacher shortages extend to special needs teachers. It has been said that:

> *The shortage of skilled teachers remains the biggest challenge for the GCC education sector. This shortage will pose a serious threat for the private school operators to maintain the current provision of quality of education* (Osman and Anouze, 2014, p. 195).

This statement indicates that teacher shortages are affecting educational provision overall in Saudi Arabia, and are therefore also affecting how the education of pupils with SEN is addressed. Historically, teacher shortages have affected how education is provided in Saudi Arabia. A dramatic rise in the availability of education in Saudi Arabia in the 1940s and 1950s created teacher shortages, leading to certain strategies being adopted to cope with demand. An example is the lingering popularity of rote and memory-based education in Saudi Arabia- a strategy that might not be helpful for pupils with ASD (Alwasal and AlHadlaq, 2012). Therefore, teacher shortages in Saudi Arabia are a cause of serious concern when it comes to the education of pupils with ASD. It seems that teacher shortages are caused by the lack of training facilities for teachers in Saudi Arabia. As well as this, the Saudi

Arabian government offers few places for teachers in Saudi schools and most of the places are filled randomly without considering the needs of each area.

Another challenge with implementing policy is the lack of communication between parents and staff. In regard to what lessons can be learnt from schools that have effectively implemented inclusive practices, interview data from the private school revealed some interesting findings. It seems that communication between parents of pupils with ASD and staff is integral to implementing inclusive practice. For example, the parent of one pupil with ASD explained that they had given the school vital advice to help them educate their child. In this case, the parent recommended that an assistant be hired (financed by the parents) to help the child in class. At the private school, a member of auxiliary staff (speech therapist) stated that they generally communicate with parents over the phone and through face-to-face meetings, and the parent of a pupil with ASD mentioned that they had mostly communicated with the school via phone calls. Parents of children with ASD studying at the private school had also made efforts to communicate with one another to provide vital support. The interview data reveals that most of this communication takes place via a WhatsApp group. Similar problems are mentioned by Barnard et al. (2000) as a result of their study at the start of the inclusion of pupils with ASD in the UK, indicating that teachers need to realise that more communication is needed between teachers and parents of pupils with ASD because of the nature of the disability.

However, when decision-making took place at the private school in this study, the parent of a child with ASD reported that decisions concerning their child were usually

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made by the head teacher and the parents were not usually involved in the decision-making process. Also, the parent of the pupil with ASD feels that teachers are not welcoming- a problem she attributes to a lack of training and experience. In fact, inclusion was only implemented in international schools in Saudi Arabia recently. It is only during the last few years that children with mild disabilities have been educated in mainstream classrooms in government or public schools (Ennis, 2017; Aldabas, 2015). It has been said about teachers in government schools in Saudi Arabia that:

> *Although teachers express positive attitudes toward their pupils with disabilities, unfortunately, they lack knowledge of how to manage pupil behaviours, especially with learning disabilities* (Ennis, 2017, 255).

Because teachers lack knowledge of ASD, they are often unaware that they need to communicate more with the parents of pupils with ASD due to the communication problems and lack of social awareness commonly experienced by children with this particular disability.

It was observed that pupils with ASD benefit from additional staff support during non-educational activities. Pupils with ASD at the private school are supported by a member of staff during structured social activities. For example, during daily religious devotions, members of staff support pupils with ASD, encouraging them to join in and interact with their non-SEN peers. However, in general, it is clear that more staff support is needed for pupils with ASD in both the classroom and at lunchtime, break times and collection time. Auxiliary staff at the private school only provided support to pupils with ASD in the resources room, not offering extra help anywhere else or during other activities at school. For example, in the playground, a staff member supervises pupils but does not organise games or activities. Furthermore, at the

private school, when parents arrive to pick their children up, members of staff call out each child's name when their parent(s) arrive. However, Gaida often misses this cue and members of staff have to find her. Furthermore, pick up time can be particularly stressful for pupils with ASD. This indicates that effective inclusive practice requires more support from auxiliary staff to meet the specific needs of pupils with ASD studying at mainstream schools. According to one parent in the public school, transportation is a serious problem due to the two-hour journey between home and school, which was initially distressing for her daughter who has ASD. This example suggests that implementing inclusion is difficult and that inclusive schools are still not widespread enough to allow pupils with SEN to study close to home.

5.3.3 Current Policy and Teacher Training

One of the challenges identified by participants at the private school concerning implementing inclusion is teacher training, which is relevant to the second, third and fourth research questions. This problem has been explored in studies by Alquraini (2014) and Alhudaithi (2015). When asked 'have you been offered or encouraged to take up additional vocational training on accommodating pupils with special educational needs?' and 'how confident are you in your ability to deal with pupils with special educational needs, in particular with ASD pupils?' Six out of the seven teachers interviewed expressed concerns about the fact they had not received enough training on how to properly address the needs of pupils with ASD. Teacher 5 reported that although they had been offered compulsory training courses on SEN by the Ministry of Education, these courses do not offer any training on how to teach pupils with ASD. Similar opinions were expressed by the teachers from the public school. One teacher reported attending eight training sessions at King Faisal's centre and school. However,

these training sessions did not approach inclusion and teachers expressed a desire to have more training sessions focused on inclusion, which would help them prepare for and implement it. This is because teachers at the public school are not trained in how to cope with pupils with ASD and any unexpected behavioural problems. According to one respondent from the public school, teachers needed additional training on how to teach pupils with ASD in inclusive schools. Although teachers at the public school reported that they had been offered training in ASD, they had not been trained on how best to implement inclusion.

In regard to the kind of teacher training on offer to teachers at the public school, the teachers interviewed reported that they have been offered training in ASD but not about inclusion. One teacher reported that they had received training about inclusion, but that at the school inclusion is applied differently, making the training irrelevant. Teachers at the public school expressed a need to receive more practical training as they felt they had not been appropriately trained in how to cope with the challenging behaviour often displayed by pupils with ASD. Also, they feel that inclusion means they are under more pressure than before. In Saudi Arabia, there are 24 special education departments in universities. These departments are separated by the category of pupil the teacher is being trained to work with, that is, learning disability, ASD, or hearing impaired (Alquraini, 2014). But there is only one university department in Saudi Arabia that provides a programme that prepares teachers to work with pupils with multiple disabilities and provide early intervention for pupils with disabilities (Alquraini, 2014). Instead, most university teaching programmes provide general education training and special programmes that focus on specific disabilities:

> *…There are 24 university special education departments that prepare special education teachers in KSA [Kingdom of Saudi Arabia], [but] these departments do not always provide the best knowledge base and teaching technique skills required to assist the teachers to work in inclusive classrooms, to provide effective transition services, and to use assistive technologies* (Alquraini, 2014, pp. 523-524).

Whilst specific training for special educational needs teachers is provided by Saudi Arabian universities, the evidence available indicates that little training in SEN, and specific forms of SEN such as ASD, is available to general education teachers. Therefore, it is suggested that better instruction in specific forms of SEN needs to be made available to teachers when they are qualifying.

The interview data indicates that teachers at the public school feel that they need more auxiliary staff and more support from other members of staff to improve inclusive practice. This means that the teachers themselves feel they need more training to properly meet the needs of pupils with ASD. They reported receiving additional support during the first semester when inclusion was implemented; however, after this, some auxiliary staff left the school, which had a negative impact on pupils with ASD, making them more distant. According to one teacher at the public school, it is the resource room that provides crucial support for pupils with ASD—not teachers in mainstream classrooms. It has been found that Saudi Arabian public schools lack paraprofessionals that can provide support to both pupils and teachers to help them make curriculum changes and adopt strategies to include pupils with SEN in mainstream classrooms (Alquraini, 2014). That there is a lack of support services for disabled pupils is a known problem in Saudi Arabia, as pupils can only access such services if the parents pay for them out of their own pockets (Alquraini, 2014). In fact, one of the parents of a child with ASD at the private school

interviewed as a part of this study did just that to improve the educational attainment of their child.

When asked about current inclusion policy at the private school, an educational supervisor observed that inclusion had been implemented at that school, but was not universal practice across Saudi Arabia. In fact, inclusion is only introduced if the head teacher gives permission. It is also important for schools to have the 'right resources in place' to implement inclusion. Generally, it is thought that schools and head teachers cannot be forced to adopt inclusion or accept pupils with ASD in Saudi Arabia as such a policy might lead to problems.

The interview data from the private school indicates that confidence in working with pupils with ASD is heavily dependent on individual experience. For example, teachers with more experience of teaching in general were more confident than their more recently qualified colleagues. Another problem identified by one teacher is that although it is easy to deal with the academic needs of pupils with ASD, coping with the social and behavioural symptoms of ASD is far more challenging and means that they spend more time dealing with challenging behaviour than teaching. It was felt that more auxiliary staff are needed to deal with this aspect of teaching pupils with ASD in a mainstream environment.

The teachers from the private school reported that they feel uncertain about their performance and the outcome of the strategies they have adopted for teaching pupils with ASD. They seem to feel that their lack of strategies for teaching pupils with ASD is due to a lack of support from the government. This is because during the

primary research study, teachers expressed dissatisfaction with the support that they are receiving from the Ministry of Education and other professionals when it comes to including pupils with ASD in a mainstream learning environment.

On the other hand, all seven teachers interviewed at the private school reported that they do not face any serious problems with the inclusion of pupils with SEN, although they may struggle to find strategies to teach this group of pupils. Whilst some cases were challenging to begin with, the situation has stabilised and improved over time. Also, teachers observed that they treat pupils with ASD in the same way that they treat non-SEN pupils. The only time pupils with ASD are dealt with differently is when the SEN teacher takes them for special instruction in the resources room. In addition, the head teacher of the private school welcomes inclusion. Teachers at the public school reported that they are confident in their ability to work effectively with pupils with ASD. However, whilst teachers at the public school respect the decision made by the head teacher, they did not feel prepared for it, and felt it had taken place too quickly. In fact, one teacher was of the opinion that inclusion should only be introduced in private schools.

However, teachers at the public school did not feel that inclusion was a problem if pupils with ASD were 'teachable.' On the other hand, teachers felt that pupils with severe cases of ASD should not be educated in a mainstream environment as they would not benefit from the experience and could be a negative influence on other pupils. Furthermore, another teacher felt that it would not be a good idea to place pupils with different disabilities in the same class. Teacher 8 explained that it is difficult to cater to the needs of pupils with different disabilities in the same

classroom. Alanazi (2012) suggests that the adoption of a capability approach would improve inclusion in Saudi Arabian classrooms. The capability approach focuses on what the pupil can actually do than what they cannot do, and emphasises the importance of treating all pupils equally (Boardman, 2010). Finally, it is interesting that the interview evidence indicates that teachers at the private and the public school were equally confident about implementing inclusion, as Alhudaithi (2015) found that female private elementary school teachers in Saudi Arabia had a more positive attitude to inclusion than government school teachers. Interestingly, observations of pupils at the public school indicate that there was less teacher and staff support for pupils with ASD than at the private school. In fact, the study by Alhudaithi (2015), and evidence gathered in the interviews and observations undertaken as part of this study, both indicate that teachers need further preparation and training to properly implement inclusive practice.

One preventative factor to inclusion in Saudi Arabia revealed in the interviews is that teachers at the private school lack training or understanding of inclusion, although the same teachers reported that the curriculum they were given is flexible in regard to accommodating the needs of pupils with ASD. To rectify the problem, teachers at the private school suggested that more training is needed and that specialist teachers need to be appointed to improve inclusive practice at the school. Another problem is that teachers seem to feel unable to meet all the needs of a diverse range of pupils in one classroom. This indicates that either more auxiliary staff support is needed in these situations, or that careful attention needs to be paid to the compatibility of the needs of pupils in certain classrooms. Similarly, data from the public school reveals that there is a lack of communication and collaboration

between parents and teaching staff. Staff explained that they were unlikely to contact parents as they did not feel that dealing with the needs of parents was part of their job; instead, their job was to look after pupils whilst they were in the classroom. Another member of staff stated that this was not their problem as they have no opportunity to work with parents. It could be suggested that teacher training might mitigate the communication problem, as it would address how teachers and auxiliary staff should communicate with the parents of pupils with SEN to ensure that their needs are being met.

Observations at the private school revealed that teachers are less supportive and more dismissive of the needs of pupils with ASD than is indicated in the interview data. At the public school, the teacher told the researcher that the inclusive education plan for Noha is not their responsibility; it is that of specialist staff. The teacher taught the same curriculum to all pupils, regardless of their needs. Observations made at both the private and the public school revealed that the teachers of the classes observed were not inclined to find out about the special curriculum in place for the pupil with ASD. The special curriculum and extra instructions provided to pupils with ASD was seen to be the sole responsibility of the resources room. Thus, it seems that teachers need to take more interest in inclusion if it is to be implemented effectively.

Similar problems have been identified by other studies. Elkins et al. (2003) found that parents of pupils with ASD believe that that more resources are needed for educating pupils with SEN in an inclusive setting. This finding reflects the conclusions made in other studies that parents of pupils with SEN often report

having difficult relationships with their children's teachers and support staff due to a lack of awareness on the behalf of teachers and staff about the perceived complexity of their child's specific needs. For example, Grove and Fisher (1999) have reported that the parents of the children with SEN they surveyed reported that they found that staff lack knowledge about their children and that it is difficult to access teachers or other members of staff that are willing to provide and receive information about the needs of their children. Furthermore, Lake and Billingsley (2000) found that even when relationships between parents and staff are good, conflict can arise due to their different perspectives about the particular needs of the pupil with SEN concerned.

There did not seem to be much interaction or collaboration between staff and teachers, or staff support provided to pupils with ASD beyond the resources room at either the private or the public school. For example, at the public school, a staff member was always in the playground to supervise pupils but did not organise activities or games that might encourage pupils with ASD to interact with their peers more. As such, it can be suggested that auxiliary staff need to collaborate more with teachers and provide support to pupils with ASD in all areas of school life, not just the resources room.

The observations revealed that teachers have received no additional support from staff in the classroom at the private school. This could be a problem when it comes to addressing the needs of pupils with ASD in class, especially in this instance as out of seven pupils, three had special needs (one pupil with ASD, one pupil with behavioural problems, and one gifted pupil). A similar picture emerged from observations at the public school. Here, pupils with ASD only received additional

support form auxiliary staff in the resources room. Otherwise, pupils with ASD were left to their own devices. As teachers were unwilling to provide additional support, fellow pupils were seen stepping in to provide additional support for Noha in the classroom and at break time.

The teacher at the public school felt that implementing inclusion was the responsibility of resources room staff, but further investigation found that this curriculum was minimal. According to the resources room staff, Noha had the same curriculum as non-ASD pupils, but simplified. An inspection of Noha's exercise books and learning materials revealed that Noha was doing a minimal amount of work that was loosely related to the curriculum. A parent of a pupil with ASD at the public school reported that the school allowed her to make up questions in the exams for her daughter. Thus, although the parent concluded that the system is flexible, it is not preparing her daughter for the rigours of the mainstream education system. This evidence indicates that members of auxiliary staff have been limiting the potential of pupils with ASD by failing to take their academic abilities and needs seriously.

5.4 Advantages of Inclusion

5.4.1 Involvement in the Mainstream Curriculum

This section explores the advantages of inclusive practice, addressing the first and fourth research questions. The observations at the private school indicate that the teachers are making an effort to include pupils with ASD in classroom activities, and that they make an effort to help pupils with ASD outside the class whilst ensuring that they treat ASD pupils the same as non-SEN pupils. The observations at the

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public school also indicate that teachers make an effort to include pupils with ASD in classroom activities, although they sometimes had to raise their voices to do so. Also, teachers at the public school praised pupils with ASD when they complied and answered questions correctly.

The observations at both the private and public schools show that teachers are good at involving pupils with ASD in lessons and encouraging them to contribute. Teachers at both schools also expected pupils with ASD to keep up with the general curriculum. It is a widespread expectation that pupils with ASD admitted to mainstream schools are capable of keeping up educationally with other pupils and the curriculum; however, Cigman (2007) expresses concerns that the demands of the social environment of the mainstream school can make it difficult for pupils with ASD to make progress, and may even lead to regression in some cases. As such, it is important that teachers are aware of the particular needs of pupils with ASD. These needs can then be implemented into lesson planning.

5.4.2 Encouraging Interaction between pupils with ASD and non-SEN pupils

During the interviews, parents of non-SEN pupils at the school explained that effective inclusive practice led to their children becoming more aware of SEN and disability. An important lesson is that the inclusion of pupils with SEN did not affect educational attainment, and it increased awareness of inclusion and ASD amongst both parents and pupils. Interviews with the parents of non-ASD pupils from both the public and private schools found that parents think that specialist centres are more aware of the academic needs of pupils with ASD than inclusive schools, but that

inclusive schools improve social behaviour and awareness amongst pupils with ASD. Teachers at the public school feel that inclusive practice involves non-SEN pupils developing a sense of compassion towards pupils with ASD. Also, inclusion was reported to have improved the teaching of teachers at the public school as they now have to adapt to cater for the needs of pupils with ASD. Furthermore, teachers have found that inclusion encourages further study to improve their teaching practice.

Studies have found that the attitudes of non-SEN pupils towards their disabled peers usually improve as a result of inclusive practice (DeBoer, 2012). For example, Chaaya (2012) identified five types of attitudes and changes in opinion that come about due to the inclusion of special needs pupils in mainstream schools. These are: (1) that non-disabled pupils show reduced fear of differences in other children and feel more comfortable about such differences, (2) that social cognition increases and positive social development takes place, (3) the self-concept of non-SEN pupils improves, (4) that non-SEN pupils develop personal principles when learning about classmates with special needs and their abilities, which challenges ingrained stereotypes and (5) that warm and caring friendships form between special needs pupils and their non-SEN peers when teachers create play opportunities to facilitate social interactions. Thus, inclusion encourages pupils to appreciate and respect differences in others (DeBoer, 2012). As such, it seems that this study complements Chaaya's (2012) research and puts to rest the kind of fears expressed by Hassanein (2015).

The observations have revealed that pupils with ASD at the private school have good relationships with their non-SEN peers. Non-SEN pupils at the private school

feel that inclusion has encouraged them to learn from pupils with ASD. One pupil noted that they now realise that ASD people share a condition but have individual personalities. For example, this pupil reported learning the official Arabic language from one pupil with ASD, and that another pupil with ASD was 'aggressive' and 'naughty.' Furthermore, non-SEN pupils expressed concern when pupils with ASD were withdrawn from their favourite lessons to receive additional instruction in the resources room. Similarly, at the public school, non-ASD pupils were observed to be particularly supportive and made a considerable effort to care for Noha. In the classroom, pupils sat in a three by three formation, with Noha sitting next to the gifted pupil in the class so that the pupil could help her when needed, making sure that she had the correct materials for the lesson and was reading from the correct page in the textbook. In the classroom, Noha also had a peer pupil nearby to provide constant support, such as helping with homework and explaining what the teacher was doing. The pupils had created their own guidelines and timetable to help look after Noha in both the classroom and at break times. Because Noha receives constant support from non-ASD pupils, she smiles and appears confident in their company.

Non-ASD pupils at the private school often encourage their ASD peers to interact in class. On one occasion, they encouraged Gaida to thank the teacher when they had helped her tidy her hair. On another occasion, interaction between ASD and non-ASD pupils was tested via the medium of role-playing games set in a supermarket and a restaurant. On both occasions, Gaida played a customer. Whilst she enjoyed the first game, she did not like playing restaurants and withdrew. Her non-SEN peers asked her to come back but she declined and instead sat at her desk drawing for the

remainder of the game. In the public school classroom, Noha often kept herself busy with solitary activities such as organising books and notes or by drawing, which she enjoys. Non-ASD pupils in the classroom often encouraged the pupil with ASD to pay attention at the public school. For example, because Noha speaks the classical Arabic dialect rather than the general Saudi dialect spoken by most pupils at the school, her peers made sure to communicate with her in that language.

At the public school, Noha seemed far more involved in unstructured activities outside class. At lunchtime, Noha was accompanied by the peer assigned to look after her. She sometimes made conversation with her assigned companion but seemed to prefer to focus on her favourite activity- drawing cartoon characters on balloons. Occasionally, Noha was observed joining her non-SEN peers in the playground. Here, Noha was also accepted by other pupils as pupils from other classes were observed meeting and greeting her when she visited the playground. Noha clearly enjoys playing in the playground and did not get bullied, although she was naturally inclined to withdraw into her own company and activities during her free time. These findings correlate with those of Chaaya (2012) and DeBoer (2012) in that, firstly, inclusion encourages warm and caring friendships between pupils with SEN and their non-SEN peers and that, secondly, inclusion encourages pupils to appreciate differences amongst their peers (DeBoer, 2012).

One important lesson that can be learnt from inclusive practice is that pupils tend to protect and encourage pupils with SEN. At both the private and the public school, pupils with ASD were also protected and aided by their non-SEN peers during unstructured activities. For example, during playtime the observation was made that

pupils with ASD were usually protected by their peers, especially those from the same class with them, from being bullied by other pupils from other classes. There was one situation where a pupil from a different class accused the pupil with ASD of hitting and shouting at her, and the classmates of the pupil with ASD were quick to state that it was not true. Likewise, at the public school, non-ASD pupils had set up a timetable so that Noha would always have company at lunch, break time and in the playground. She was not bullied in the playground, partly due to such support and because whilst her grade five peers are aged nine to ten, Noha is 13 years old and considerably taller than the other pupils.

After the school day had ended at the private school, Gaida went with other pupils to the playground, where the pupils were waiting for their parents to pick them up or to catch the school bus home. Whilst Gaida followed other pupils to the pick-up point, she invariably played alone during the wait, although other pupils played together. However, at the public school, pupils with ASD were picked up 30 minutes earlier than their peers as it is considered easier for staff and teachers if disabled pupils are not caught up in and overwhelmed by other pupils travelling home en masse. It is clear that at both schools, measures need to be undertaken to encourage pupils with ASD to interact socially and for non-ASD pupils to encourage this.

One suggestion for improving the social skills of pupils with ASD has been made by Owen-DeSchryver et al. (2008). Their study looked at the impact of a peer training intervention scheme on the social interactions of three pupils with ASD and their non-SEN peers. Two to four typical peers for each of the three pupils with ASD participated in training sessions that targeted increased social interactions. These

skills were then evaluated during lunch breaks and break times. The result was increased initiations by trained non-SEN peers, prompting increased initiations and responses by pupils with ASD (Owen-DeSchryver et al., 2008). One interesting and unexpected result of the study was that training a handful of non-ASD pupils to make social initiations towards pupils with ASD encouraged untrained non-SEN peers to make more social initiations as well (Owen DeSchryver et al., 2008). This evidence indicates that encouraging non-ASD pupils to engage with pupils with ASD may increase the interactions made by the latter in the playground. Another means of increasing social interactions amongst pupils with ASD is for teachers and staff to initiate it. For example, at the public school, pupils created a power point presentation during their free time which Noha participated in when the researcher suggested this, with the permission of her parents and teacher. This activity increased Noha's confidence and encouraged her to interact with pupils from other classrooms. This finding complements Chaaya's (2012) research, which shows that teachers can encourage SEN and non-SEN pupils to establish warm and caring friendships by creating play opportunities to encourage SEN and non-SEN pupils to socially interact with one another.

5.5 Problems with Inclusive Practice

5.5.1 Catering for Pupils with ASD

This section explores the problems with inclusive practice in the public and private schools and relates to the fourth research question. Whilst the teachers at the private school were found to be somewhat dismissive of the needs of pupils with ASD, teachers at both the private and the public school make considerable efforts to

ensure that pupils with ASD actively participate in class, answering questions and remaining involved in classroom activities. The findings by Barnard et al. (2000) suggest that mainstream schools struggle to adapt when inclusion is first introduced. When inclusion was first introduced to the UK, parents of pupils with ASD expressed concerns that they were not being listened to, and teachers appeared to be unaware as to how to meet the needs of pupils with ASD.

For example, a parent of a pupil with ASD studying at a mainstream British secondary school reported that:

> *[The school is] SEN sympathetic but [it is a] very large school and some teachers are dismissive of special needs which are only social and comprehension. Little training [has been provided] for teachers although they are sent factsheets and have had a nurse . . . [come] to school to explain his problem to them* (Barnard et al., 2000, p. 12).

Such findings indicate that some teachers do not take the time to adapt to inclusion and understand the specific needs of pupils with ASD as they are unaware that this group of pupils require special support. In terms of the factors preventing the implementation of an inclusive approach to education, the interview data suggests that parents of pupils with ASD at the private school feel that teachers are a preventative factor to proper inclusive practice, as although they are cooperative, they need more teaching support to properly educate pupils with ASD. Parents of pupils with ASD claimed that teachers are overly reliant on specialist teachers in the resources room and need more assistance from support staff in class. A parent of a pupil with ASD at the public school reported that they think there is not enough contact between staff at the school and the parents of SEN children, stating that most contact between themselves and the school is initiated by the parent. The

parent feels that such contact is important as their child with ASD is unlikely to tell them what went on in school due to their condition. On the other hand, Florian et al. (2017) indicate that high levels of inclusion should not be a barrier to high levels of achievement. For this reason, inclusion can encourage academic achievement for pupils with SEN instead of ignoring it (Black-Hawkins et al., 2007). Also, inclusion should promote social interaction through social activities such as organised play (Theodorou and Nind, 2010). This suggests that inclusion can be understood as both a means of increasing academic achievement for disabled pupils and as a means of social inclusion.

Understandings of inclusion in the Arab world do not seem to have evolved in the same way as their Western and European counterparts. From one perspective, in the UK, inclusion is understood as inclusion in the mainstream school system dependent on the severity of the pupil's specific disability (Almasoud, 2010). Gaad (2004) notes that the majority of parents in the UAE feel that inclusion simply means that their child is educated in a mainstream school, even if they are not in a mainstream classroom (Gaad, 2004). For these parents, it is important that their children are at 'the same school [on] the same bus as [their] brothers, sisters, and neighbours' (Gaad, 2004, p. 317). In this case, inclusion is not just about having access to educational opportunities, it is also about having the same experiences as regular peers. Thus, some conflict exists within definitions of inclusion relating to the UK and UAE examples in terms of inclusion as a means of giving pupils access to opportunities, versus inclusion as a means for pupils to share the same environment and experiences as their peers regardless of their intellectual capacities or attainments. Similarly, there are conflicting understandings of inclusion within the

membership of the GCC (Weber, 2012). Alternatively, inclusion can be understood as the mainstreaming of disabled and/or handicapped children into the regular education system. In other words, there is a lack of agreement as to how the concept of inclusion should be applied in mainstream schools within the GCC and the Arab world.

The following observations show how inclusion can be used to enhance the social interactions of pupils with ASD. The behaviour and interactions of pupils with ASD at the private school, outside of structured activities, was observed during playtime, lunchtime and when pupils were leaving school at the end of the school day. At lunchtime, Gaida sat with her classmates, but after she had eaten, she mostly sat alone watching other pupils play. On some occasions, she joined them without invitation.

It was observed that during playtime, Gaida withdraws into herself, and she would sit and watch them [other pupils] play or play alone. This observation seems to indicate that Gaida needs additional support during unstructured periods of the school day. However, during the interview at the private school, the educational supervisor expressed the opinion that staff levels are not high enough to properly implement inclusion. Also, teachers at the private school feel that the responsibility of providing additional support for pupils with SEN, particularly pupils with ASD, is the responsibility of the staff in the resources room. Furthermore, teachers at the public school expressed the opinion that resources room support is vital for pupils with ASD.

In a UK-based study, Barnard et al. (2000) found that the social skills of pupils with ASD are often neglected by mainstream schools, with greater emphasis being placed on academic achievement. Failing to help pupils with ASD improve their social skills can lead to bullying. Therefore, it is important for schools to adopt positive inclusive policies to encourage friendships and ensure that pupils with ASD are supported by their peers (Barnard et al., 2000). As such, schools need to work positively to encourage social integration, not just introduce anti-bullying policies. Inclusion does not work if it is wholly academic in focus, as it is important to prepare pupils for adult life. Consequently, pupils with ASD need to improve their social skills and learn skills necessary to lead an independent, full adult life, such as shopping and living independently, and those higher on the ASD spectrum need to learn to deal with a workplace environment (Barnard et al., 2000). Thus, both schools need to work on encouraging pupils with ASD to integrate socially in order to improve their social skills and prepare them for the demands of adult life. Education is the primary means of helping pupils with ASD. This is because educational goals for pupils with ASD tend to emphasise communication and language, how to behave in social situations and necessary self-help skills (Sansosti, 2008). This is because pupils with ASD generally struggle to comprehend social interactions, social communication and social imagination (Glasper et al., 2015). For these reasons, inclusion can be beneficial for pupils with ASD as it helps them acquire such skills as part of their wider education, as pupils with ASD 'often need to be taught certain behaviours that typically developing children often learn without instruction' (Sansosti, 2008, p. 9). Also, pupils with ASD usually require both general education in academic topics and a specially tailored education programme to help them develop adequate social skills (De Boer, 2009). This means that inclusion is perhaps the best way through which

the needs of pupils with ASD can be met. Smith (2012) explains that supported inclusion programmes are often seen as the best way through which to educate pupils with ASD. This is because such educational programmes allow pupils with ASD to experience mainstream education and receive the support that they need. Such support can then encourage pupils with ASD to improve their social skills, to set and achieve educational goals and to work out how to function in social situations (Smith, 2012). For these reasons, inclusion can be seen as one of the best ways through which pupils with ASD can be guided towards reaching their full potential.

From the interviews, it is clear that at both the private and the public school that there is a need for more auxiliary staff in classrooms and during unstructured activities to provide assistance and support to pupils with ASD. At present, when pupils with ASD have additional needs in the classroom or during unstructured activities, they are assisted by non-ASD pupils. However, if non-ASD pupils were unwilling or were becoming unwilling to provide additional assistance, there is a real risk that pupils with ASD could become confused or distressed if not given support. Another problem is that parents of pupils with ASD at the private school reported that their interactions with staff are limited, and staff reported that this is either discouraged or that it is not their responsibility to communicate with parents. As such, it can be suggested that a lack of staff reporting beyond the resources room, and a lack of communication between staff and parents, could be rectified through improved inclusive practice, which would emphasise greater levels of staff support for pupils with ASD at all times of the school day, and better communication with parents, so that their wishes are known and they can provide key insights about the needs of their children. This can be achieved through regular resources between

teaching and resources staff and the implementation of a clear school strategy for addressing the needs of pupils with ASD.

The observations at the private school revealed that the pupil observed (Gaida) is very attentive in class and able to cope with changes in routine. However, the fact that she is in an inclusive classroom with a child with very different special needs could be a problem. On one occasion, it was observed that Gaida became disturbed by the loud behaviour of a pupil in the same class with a behavioural disorder, putting her hands on her ears when the pupil spoke. Non-SEN pupils in the class made efforts to calm Gaida down on these occasions. This example highlights the problems that can arise when dealing with diverse disabilities and special needs in one class. This can be challenging for teachers, as well as being challenging and unsettling for pupils. One common solution to this problem is to provide all pupils with SEN with a support assistant to help them in class. However, this solution can discourage inclusion, making the pupil with SEN over-reliant on their assistance and alienating them from their peers (Bottcher and Dammeyer, 2016). In this case, it could be suggested that staff need to pay more attention to the specific disabilities of pupils in one class and separate pupils who have disabilities with needs that are difficult to accommodate in one classroom.

The challenge of inclusion at the public school may have arisen because Noha's disabilities are clearly more severe than Gaida's. Noha does not make eye contact when speaking and requires a considerable degree of support from fellow pupils, both during lessons and to participate in structured and unstructured social activities. Also, Noha does not ask for help when she does not understand what is going on,

but only when she feels bored. At these times, she says that she wants to go to sleep or to go home. Kaweski (2011) explains that behavioural challenges presented by pupils with ASD are often situational in nature. The behaviour of individuals with ASD changes from setting to setting depending on environmental, social and personal factors:

> *Pupil behaviour fluctuates based on the presence or absence of certain people, class expectations, and structure, and the comfort level of the classroom setting* (Kaweski, 2011, p. 80).

Kaweski (2011) suggests that alternations to settings can improve pupil behaviour. This may well be the case at both the private and the public school as it may be that Gaida and Noha are uncomfortable with the formal teaching style used in mainstream Saudi primary schools. As such, teachers may need to make more specific efforts to relate to and engage with pupils with ASD to make them more comfortable and more receptive to the demands of the classroom routine. This could be achieved through changing the classroom routine and experimenting to find which routines and teaching methods best address the needs of pupils with ASD in the mainstream classroom.

5.5.2 Relationship between pupils with ASD and their non-SEN peers

Non-SEN pupils at the public school described themselves as feeling 'compassionate' towards pupils with ASD and viewed themselves as 'serving' them. Whilst it is commendable that non-ASD pupils want to help pupils with ASD, it does seem that pupils are very aware that there is a difference between ASD and non-ASD pupils. Non-ASD pupils at the public school also expressed the belief that if pupils with ASD remained at special schools they would hurt one another.

Additionally, non-ASD pupils at the public school expressed the opinion that it would be difficult to admit pupils to the school if they had a severe case of ASD.

At the private school, the parents of pupils with ASD reported that one of the factors preventing effective inclusion is that their child had a higher academic attainment at their specialist centre, although their social skills had improved since attending a mainstream school, indicating that the private school needs to work on how they approach the education of pupils with ASD. Non-SEN pupils at the public school reported that it is hard to include pupils with severe disabilities. Aldabas (2015) observes that at present, the Saudi Ministry of Education recommends that only the needs of mild to moderately disabled pupils should be addressed in mainstream schools, indicating that this is unlikely to be a problem in the foreseeable future. A more serious preventative factor in implementing inclusive practice at the public school was identified by the observations and a specialist teacher who observed that one disadvantage of inclusion is that pupils become over-caring and teachers are unaware that this is taking place. This problem can be attributed to lack of teacher and staff support for inclusion. This is a problem as over-caring and over-attention to the needs of pupils with ASD may negatively impact on the ability and attainment of non-ASD pupils with regard to classroom tasks (Dyson et al., 2004); although a study into this subject by Block and Zeman (1996) indicates that the all-round educational attainment of non-SEN pupils studying in classrooms alongside pupils with SEN is likely to remain unaffected. Hence, the study by Block and Zeman (1996) suggests that the educational attainment of non-ASD pupils at the private school should not be affected by the presence of pupils with ASD in mainstream classrooms.

The pupil with ASD in the private school being observed (Gaida) appeared to struggle with some aspects of mainstream classroom activities. For example, Gaida did not know how to go about writing down homework assignments at the end of class and was helped in this task by other pupils. The pupil observed at the public school (Noha) also struggled with some areas of mainstream classroom activities, relying on other pupils to understand the classroom routine and prepare for lessons. It is clear that non-ASD pupils at both the private school and the public school are very supportive of the pupil with ASD and liked having her in their class. Non-SEN pupils in the class encouraged Gaida to interact with others and supported her when she needed help and additional assistance. For example, in the classroom, Gaida was sat next to a gifted pupil who assisted her by making sure she had the right materials for the lesson and was reading from the right page in class. At the public school, Noha was aided by her non-SEN peers in the classroom who reminded her when she needed to recite from the Qur'an, and as pupils must move around the school during the school day for subject lessons, they guided Noha to do this as she was not inclined to do so on her own.

It was observed that one major preventative factor towards inclusion at the public school is that Noha's peers clearly appeared to be over caring. For example, they were constantly checking on her and they would pack her bag for her. The researcher organised a game when the teacher was absent, but Noha did not want to play and withdrew. To entice Noha back, her peers suggested that they should play her favourite game, noughts and crosses, and let Noha win to keep her happy. Although the efforts of non-ASD pupils to support Noha are commendable, there is

some concern that the effort they are making may negatively impact on their own education or discourage Noha from making further progress.

It has been suggested by Snow (2015) that overdependence on auxiliary staff assistance can prevent pupils with ASD from developing a strong personal identity. On the other hand, establishing strong social connections between pupils with ASD and their non-SEN peers' helps with the personal development and progress of pupils with ASD (Snow, 2015). But in Noha's case, she is mainly supported by pupils three to four years younger than herself when it has been found that pupils with ASD are more likely to benefit from the support of an older peer (Snow, 2015). What is going on between Noha and her non-SEN peers seems to be an informal kind of peer tutoring. In the United States, this kind of pupil to pupil support was formalised by Project PEOPEL which began in 1980 and allows for one-to-one instruction and intervention by non-SEN pupils to help their disabled peers (Lieberman and Houston-Wilson, 2009). However, this programme is structured and regulated. What is going on at the public school is entirely arranged and organised by Noha's classmates. The situation appears to have occurred because Noha's classmates want to help their ASD peer. It has occurred because Noha requires additional support in the classroom and at break time, which should be provided by auxiliary staff. In Saudi Arabia, such support services for disabled pupils are not provided unless parents are willing to pay for them (Alquraini, 2014). As such, the observations made of Noha highlight a real problem with implementing inclusion in Saudi Arabian schools: funding. This is because if Noha did not receive such generous support from peers, she would really struggle to deal with learning in a mainstream school.

5.5.3 Potential Solutions

The literature relating to this subject of inclusion in Saudi Arabian schools highlights a number of themes. For example, Al-Mousa (2010) suggests that the mainstreaming of disabled pupils in Saudi Arabia is implemented in two ways: partial mainstreaming and full mainstreaming. In partial mainstreaming, special needs pupils will be taken out of certain lessons for special instruction in certain subjects when they are not at a similar level to the rest of the class (Al-Mousa, 2010). This development indicates that inclusion has been acknowledged as a workable and beneficial policy. However, despite such provisions for disabled pupils being put in place in Saudi Arabia, Almasoud (2011) explains that parents have complained that ASD charities often recommend that children with ASD be institutionalised. This suggests that parents continue to feel that not enough is being done to cater to the needs of pupils with ASD in mainstream schools. Similarly, this study found that auxiliary staff were not provided to assist pupils with ASD over the course of the school day. Also, Alquraini (2011) has stated that teachers may continue to be influenced by outdated cultural opinions of disability when they are dealing with disabled pupils. These kinds of outdated superstitions continue to prevail in Islamic culture and may explain the concerns brought up by parents and documented by Almasoud (2011). This shows that although Saudi Arabian policies towards inclusion are improving, common cultural conceptions of disability continue to be a barrier to implementing full inclusive policy. To attempt to mitigate this problem, it is recommended that more education is needed on disability in Saudi Arabia, aimed at all citizens, as a means of improving inclusion policy and implementation in general. In previous paragraphs, a government campaign on the facts about people with ASD was suggested as a potential solution to this problem.

Another problem identified by the study is that there is a general lack of understanding and implementation of IEPs. For example, observations at the schools indicate that teachers in mainstream classrooms and auxiliary staff in the resources room have little awareness of the IEPs of pupils with ASD. An IEP can be helpful for disabled pupils as they identify the child's specific needs and contain recommendations and strategies to ensure that the child has the support to achieve their full potential. Whilst Saudi Arabian schools are required to provide IEPs for disabled pupils by law, a study by Alquraini (2011) found that many problems exist in terms of how these IEPs are developed and implemented. According to Al-Herz (2008), such problems with IEPs have arisen because Saudi Arabian schools do not have the teams of multidisciplinary practitioners required to evaluate pupils. This means that there is no or little communication between special education teachers, all teachers involved with the child, auxiliary staff and parents (Al-Herz, 2008). Unfortunately, the research undertaken for this thesis indicates that these problems still prevail in Saudi Arabian mainstream primary schools. Because of poorly-implemented IEPs and sparse communication between staff involved with the care of the pupil with ASD and the parents, families and education professionals are unable to participate effectively with the school in helping them to determine the specific needs of pupils with ASD. Hence, the literature and the research indicate that there is a problem with implementing IEPs for pupils with ASD in mainstream Saudi Arabian primary schools. To mitigate this problem, it is recommended that teachers, parents and auxiliary staff work together to implement the IEP. Furthermore, this problem also highlights the general lack of additional support currently received by pupils with ASD in mainstream primary schools.

Because of the problems experienced by teachers and auxiliary staff when it comes to implementing inclusion, the evidence gathered from the interviews and observations indicates that the Saudi Arabian education system may benefit from the social model of disability, which holds that there is potential for all disabled people to be included in society, including mainstream education (Swain et al., 2004). Prior to the social model of disability being conceived by disabled academic Mike Oliver in 1983, a 'medical model of disability' was used to address the needs of disabled people (Barnes, 1991; Oliver and Sapey, 2006). According to Beith et al. (2005) and Bursztyn (2007), the medical model of disability views disabled people as being imperfect, and disability as something that must be cured. In accordance with the medical model of disability, individuals should be encouraged to 'act' or 'look' normal. Thus, the medical model of disability emphasises the condition that individual has defines them as a person, and treats people with impairments as victims and patients. For the reasons outlined above, disabled people were often denied access to mainstream education or a chance to gain employment. On the other hand, the emphasis of the social model of disability is not on the impairment the individual has, but the restrictive features of the environment in which they operate (Barnes, 1991).

The Social model of disability focuses on academic achievement as well as social inclusion. This is because if the social milieu of the child is limited, that may lead to the child experiencing further delays or differences, which will make them appear and in effect become more disabled. It is low expectations of disabled people and the resulting limitations imposed upon them that create secondary disabilities and make these individuals more disabled than they, potentially, could be (Dixon and Verenikina, 2007). As such, it is recommended that schools in Saudi Arabia need to

consider how they are approaching the inclusion of pupils with ASD. It seems that, from observing practice at the private and public mainstream primary schools in Riyadh that Saudi Arabian schools want pupils with ASD to fit seamlessly into the current system. However, to properly move from integration to inclusion, teachers and staff should be looking at ways in which they can adjust and adapt the system to help pupils with ASD flourish in a mainstream environment.

The social model of disability sees disability as a developmental process instead of a static condition, which should not be purely defined on the basis of the defects and problems of the disabled child (Rodina, 2007). In this vein, quantitative diagnostics are ineffective, as that approach effectively seeks to quantify the disability rather than treating it on a case-to-case basis (Rodina, 2007). Due to these theories, inclusion emphasises the importance of educating disabled children on an individual basis within the mainstream education system. This shows that inclusion can be seen as a means through which the disabled child may be able to reach their full potential and function well in mainstream society. Therefore, it can be suggested that inclusion as an educational policy is a means of including disabled pupils within mainstream society as well as encouraging them to fulfil their intellectual potential. Furthermore, it should be noted that inclusion should be approached from a view to helping the pupil with ASD reach their full potential in a mainstream environment, rather than by putting a pupil with ASD in a mainstream school and forcing them to adapt to that environment without the necessary help and adjustments.

6   Chapter 6: Conclusion

6.1 Introduction

The concluding chapter first presents the key findings of the research undertaken into the inclusion of pupils with ASD in two mainstream primary schools in Saudi Arabia. The following sections present the strengths limitations of the research, the recommendations that have resulted from this research, and the contribution this research has made to existing research and knowledge on this topic. Following this, a final summary of the research will be presented.

6.2 Summary of Findings

6.2.1 How are pupils with ASD currently being included in mainstream Saudi primary schools?

In terms of how pupils with ASD are included in mainstream Saudi Arabian primary schools, the observations indicate that teachers in both the public and private school include pupils with ASD in mainstream classroom activities; however, the interview data with staff at the private school reveals that they find it difficult to include pupils with ASD despite current policy because of teacher shortages. The interview data indicates that teachers at the public school feel that they also need more resources, in terms of auxiliary staff and more support from other members of staff, to improve inclusive practice. Non-SEN pupils at the private school reported that their teachers tend to focus on the pupils with ASD, but they feel that this does not affect their education. A pupil with ASD at the private school reported that the teachers treat them the same way as other pupils. Non-SEN pupils at the private school were keen

to help out their ASD peers and help them to integrate; inviting them to play with them and helping them make sensible choices at lunchtime. The non-SEN pupils interviewed at the private school reported that they consider the pupils with ASD to be their friends and that they enjoy playing with them.

In regard to how pupils with ASD are currently included in these two Saudi Arabian mainstream primary schools, it seems that integration has taken place, but not full inclusion of pupils with SEN. This is because to receive additional support, pupils with ASD must be sent to the resources room. However, pupils with ASD at both the public and private school do not receive support from specially trained staff in the classroom or during unstructured periods of the school day, meaning that they sometimes struggle to participate in activities in the classroom and the playground.

6.2.2 What are the opinions and perspectives of parents, teachers, non-SEN pupils and staff regarding the inclusion of pupils with ASD in Saudi Arabian primary schools?

The interview and observation data indicates that parents, teachers, staff and non-SEN pupils view the inclusion of pupils with ASD as a positive development. During the interview process, the parents of pupils with ASD expressed the belief that inclusion has improved their children's social development through exposure to pupils without SEN. Also, parents of non-ASD pupils felt that interacting with pupils with ASD has given their children increased awareness and tolerance of the condition. However, whilst parents of non-SEN pupils are comfortable with the presence of pupils with ASD at the school, they are concerned that their own children might be ignored because teachers may have to prioritise the needs of the

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pupils with ASD, reporting that their children felt envious when more attention was paid to pupils with SEN. Thus, whilst most parties from both the public and private school view inclusion as a positive development, there are some concerns that the needs of pupils with ASD might divert time and resources away from non-SEN pupils.

6.2.3 What lessons can be learned from those schools which have adopted inclusive practices?

In terms of what lessons can be learned from schools which have adopted inclusive practice, communication and flexibility have both been found to be important. The interviews suggested that communication between parents of pupils with ASD and members of staff could play an important role in implementing inclusive practice. The study also indicated that non-SEN pupils are encouraged to develop tolerance in inclusive environments. In addition, another lesson from the research is that good inclusive practice can be achieved through encouraging pupils with ASD to participate in class and in both structured and unstructured activities at school.

6.2.4 What are the preventing factors and barriers to implementing an inclusive approach to education in Saudi Arabia (particularly pupils with ASD)?

One barrier to inclusion discovered through the study is that teachers lack training in inclusive practice or how to teach and interact with pupils with ASD. Whilst teachers accommodate pupils with ASD in the classroom and encourage them to participate in class, it seems that they sometimes have little understanding of how the general curriculum could be applied to pupils with ASD or their specific needs. Another

barrier identified by the study concerning the inclusion of pupils with SEN, is the lack of auxiliary staff available to assist pupils with ASD in class, or help them interact in the playground and during periods of unstructured activity. Although pupils with ASD receive additional support in the resources room from specialist teachers, this support does not continue in areas of the school outside the resources room, and means that pupils with ASD are sometimes excluded from activities in the mainstream classroom.

Because assistance is not provided by the education authority, parents of pupils with ASD either pay for an assistant to work with their child, or the pupil with ASD is left to their own devices. In the latter case, it seems that non-SEN pupils (particularly at the public school) felt it is their responsibility to offer extra assistance to the pupil with ASD. This concern of non-SEN pupils for pupils with ASD may be viewed as commendable; however, this situation may be problematic, as it may lead to non-SEN pupils feeling responsible for their peers instead of relating to them on an equal level. As such, a lack of extra staff support would seem to be a barrier to inclusion in these two Saudi Arabian primary schools.

6.3 Strengths of the Research

A strength of the research is that it involved a range of individuals who play a crucial role in the two Saudi Arabian mainstream primary schools, and either interact with or have had their actions impacted by pupils with ASD. By using both interviews and observations, the study has been able to examine the participants' perspectives and their thoughts on inclusion, and compare these to what was observed within the two schools regarding the reality of inclusion. The observations are a particular strength

of the research as they allowed the researcher to directly observe the relationships that had developed between pupils with ASD, non-SEN pupils, teachers and auxiliary staff, which has allowed for a fuller understanding of how inclusion has been implemented in Saudi Arabian mainstream primary schools.

6.4 Limitations of the Research

There are some limitations to this research. First, the research only focuses on girls' schools, meaning that only female pupils and staff participated in this study. This could be problematic, as the caring behaviour displayed by non-SEN pupils might be influenced by their gender rather than cultural and social expectations. In terms of research into ASD, this is problematic as girls with ASD tend to exhibit less social impairment than boys with the disorder (Hubbard, 2010). Furthermore, some research indicates that girls and boys diagnosed with ASD have different patterns of development. For example, Hubbard (2010) notes that boys with ASD tend to have more serious social and communication problems early in life, whilst girls with the same condition are more likely to display social and communication problems during adolescence. As such, it can be suggested that the failure to investigate the inclusion of male pupils with ASD in Saudi Arabian primary schools means that it is not possible to use this study to understand how boys with ASD (who may display more serious social and communication problems) would experience inclusion in a mainstream Saudi Arabian primary schools. Another reason why this issue has the potential to limit the value of this research is that, historically, male and female pupils have been educated in separate institutions in Saudi Arabia. A consequence of this division has been that different, unequal provisions have been made for female pupils compared with male pupils. For example, studies have found that more

special education institutions were created for female pupils than male pupils between 1994 and 2007 (Al-Mousa, 2010). This evidence indicates that there are differences in education provisions made for female pupils and male pupils in Saudi Arabia. Consequently, focusing only on female pupils limits the potential applicability of this study.

Because of the diverse nature of the sample, researchers are unable to use purposeful sampling to make generalisations about the total population as the research is not representative (Sharma, 1997; Rajamanickam, 2001). Another limitation of the research is that only mothers of pupils with ASD participated in the interview stage of the study, but not fathers. Although there were no theoretical or practical objections to fathers participating in the study, during the period the research took place no fathers of pupils with ASD or non-SEN pupils were available to participate in the interviews. Lack of participation by fathers of pupils with ASD could potentially be problematic, as differences have been identified in how mothers and fathers respond to a child with ASD. For example, Hastings (2003) and Hastings and Brown (2002) both report that mothers of children with ASD reported higher stress levels than fathers of children with ASD. These findings indicate that mothers of children with ASD are more likely to view the anti-social aspects of their child's behaviour as upsetting (Volkmar et al., 2014). It could also be the case that higher stress levels and a tendency to become negatively fixated on the anti-social aspects of ASD, may affect how mothers view their child and, in consequence, affect how they view their child's response to inclusion in a mainstream school. As such, the perspectives of fathers may have offered a different view of these issues.

A further limitation of the research is that it was only carried out in Riyadh and has not considered the inclusion of pupils with ASD elsewhere in Saudi Arabia. Riyadh is the capital of Saudi Arabia and, as such, is perhaps more advanced in terms of education and social and welfare provision than other parts of the country. There are considerable differences in urban and rural development in Saudi Arabia, as more urbanised areas of the country such as Riyadh, the Eastern Province and Mecca have benefitted from oil-financed development (Hertog, 2015). The north of Saudi Arabia is more sparsely populated than the south, and many rural areas are less developed and less likely to have adopted an inclusive education policy.

6.5 Recommendations

Several recommendations can be made as a result of this study:

- Observations of pupil behaviour at the private and public schools revealed that non-SEN pupils are very accepting of inclusion. However, more effort could be made by staff to encourage pupils with ASD to integrate socially, if they wish. The observations revealed that pupils with ASD sometimes struggle or are disinclined to socialise with their peers during unstructured periods of the school day, unless persuaded to do so, and this may have been due to lack of encouragement and perceived opportunities.

- It may be useful for pupils with ASD to receive additional support from auxiliary staff throughout the school day so that they would be more likely to spend less time in the resources room separated from their non-SEN peers.

- It was apparent that teachers have little understanding as to how the curriculum may be implemented in regard to the inclusion of pupils with ASD.

On one occasion, the parent of a pupil with ASD reported that they were allowed to make up the questions for their child's exam paper. It could therefore be recommended that all teachers working at inclusive schools receive additional training in how to teach pupils with ASD.

- Finally, data gathered from both the interviews and the observations has raised concerns that non-SEN pupils at the public school appear to feel that they are responsible for helping out and addressing the needs of the pupil with ASD in their class. This finding has been attributed to a lack of additional staff support and help being provided for pupils with ASD. Therefore, it is recommended that the educational authorities finance auxiliary staff to address the additional needs of pupils with ASD in the classroom and during unstructured periods of the school day.

6.6 Research Contribution

This study has examined the inclusion of pupils with ASD in two Saudi Arabian schools in a different way to previous studies, as research questions one and three have enabled the consideration of how inclusion is implemented in Saudi Arabian primary schools. By way of contrast, previous studies have focused on statistics and policy concerning the inclusion of pupils with ASD in Saudi Arabian mainstream primary schools, rather than how inclusion is implemented. For example, Al-Mousa (2010) explored statistics and provisions made for pupils with SEN in mainstream Saudi Arabian schools, whilst Aldabas (2015) looked at the history and evolution of provision for pupils with SEN in Saudi Arabia. Whilst it is important to consider and evaluate official government policy concerning inclusion, such an emphasis fails to

touch on the practical side of actually implementing inclusion and taking the needs of all individuals involved into consideration.

The study has contributed to the current knowledge on the inclusion of pupils with ASD in Saudi Arabian primary schools through exploring how inclusion affects non-SEN peers, the parents of both pupils with ASD and non-SEN pupils, and other members of school staff. By including a wide range of participants, the study has identified the key strengths and weaknesses of current inclusion policy and practices in Saudi Arabian primary schools. For example, inclusion was found to have been implemented in the mainstream classroom at both the private and public school, with teachers encouraging pupils with ASD to contribute to lessons, and non-SEN pupils making an effort to support their ASD peers. However, teachers were found to be disinclined to pay much attention to the special curriculum issued to pupils with ASD, and auxiliary staff in the resources room did not appear be aware of how they could approach the needs of pupils with ASD. Furthermore, pupils with ASD did not receive extra (and often needed) support in the classroom or during unstructured periods of the school day from auxiliary staff. Because of this, non-SEN pupils, especially at the public school, felt obliged to offer extra support to pupils with ASD. These insights and recommendations on to how to mitigate these difficulties by implementing inclusion would not have come about unless the study had involved participants from all areas of school life.

Brown (2005) believes that inclusive thinking differs from inclusive practice- a point that can be applied to this research. Whilst it seems that inclusion has had a profound influence on the Saudi education system in recent years, as illustrated by

Almasoud (2010; 2011), Al-Mousa (2010) and Aldabas (2015), this research seems to indicate that although pupils do participate in mainstream activities in the schools, they receive minimal support from auxiliary staff which might ensure that they get the most out of the mainstream educational activities they are participating in. Therefore, this study has shown how the Saudi Arabian education system should aspire to encourage the further inclusion of pupils with ASD in the classroom and the playground as a part of inclusive practice. This could be achieved if teachers and auxiliary staff received training to address lack of knowledge and awareness of ASD in mainstream primary schools.

One contribution this thesis has made to existing research is unintended. That is because the research focused on two girls-only schools, meaning it has contributed to the knowledge of how inclusion has been implemented to provide for the needs of female pupils with ASD in mainstream Saudi Arabian primary schools. Such knowledge is particularly useful and relevant, as previous research into the Saudi education in general indicates that it continues to treat female pupils differently to male pupils (Alsuwaida, 2016). Previous studies have found that inclusion has been more effectively implemented for male pupils with SEN, than female pupils in Saudi Arabia. Hence, the research shows how Saudi Arabia addresses the education of female pupils with SEN. In general, the research has also identified the importance of staff assistance for pupils with ASD in the mainstream education system and how the practice of inclusion may particularly benefit pupils with ASD being educated in a mainstream, all-female environment.

The results of this research indicate that pupils with ASD are included in academic and unstructured activities in mainstream Saudi Arabian primary schools. Parents, teachers, non-SEN pupils and staff generally view inclusion in a positive light, and non-SEN pupils, in particular, have enthusiastically embraced inclusion. The adoption of inclusive practice involves the active participation of pupils with ASD in both structured and unstructured periods of the school day, and effective communication between the parents of pupils with ASD and staff. However, it seems that pupils with ASD need to receive more support from auxiliary staff to participate more effectively in school life, and there are problems with communication between parents of pupils with ASD and teaching staff in terms of how teachers and auxiliary staff implement IEPs. This study contributes to current international understandings of the inclusion of pupils with ASD as it shows how inclusion of pupils with ASD can provide opportunities for non-SEN pupils to care for the needs of these pupils.

6.7 What I have learnt

I have learnt a great deal over the period of studying for my PhD. I have found that how I approach and undertake research has changed considerably during this period; previously, I would have looked for conclusions in the literature, but undertaking interviews and observations into the subject of the inclusion of pupils with ASD in mainstream schools has shown me that observing how inclusion is implemented is important, as it has given me a unique insight into how it can benefit pupils with ASD and what can be done to improve inclusive practice in the schools I observed. One interesting aspect of the research is how willing non-SEN pupils are to support their SEN peers, yet this aspect of the inclusion process is often ignored in the literature. I also learnt that observations and interviews can offer a unique

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insight into the implementation of inclusion in a particular environment, and how it is dependent on the support that teachers and staff receive to implement it. In other words I learnt that implementing the inclusion of pupils with ASD in mainstream primary schools is not just about policy or desire- it is about supporting teachers and staff. Finally, from my research I learnt that inclusion does not just benefit pupils with ASD, but it also benefits non-SEN pupils as exposure to SEN children brings out their caring side and considerate qualities.

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Appendices

Appendix 1

Interview Example Analysis

Data from teachers in private school

1	**Q 1.2.i**	**What do you understand by the term 'special educational needs'?**			
2	**Category**	**Participants**	**Data**	**1st level code**	**2nd level code**
3	Understanding of SEN	T1, T2, T3, T4	Children with SEN have difficulties in learning or they have behavioural problems.	- Specific learning difficulty - Behavioural disorder	Types of SEN
4		T1, T5, T7	Children with disabilities those who have mental problems, they are deaf or blind, or they have physical disability which means they use wheelchair.	- Mental retardation - Deafness - Visual impairment - Physical disability	
5	**Q 1.2.ii**	**What do you know about the inclusion of children with autism in mainstream schools?**			
6	**Category**	**Participa**	**Data**	**1st level**	**2nd level**

	y	nts		code	code
7	Understanding the inclusion of autism	T1, T3, T7	I was thinking that inclusion apply only for specific learning difficulties, I did not know that there are mainstream schools that promote inclusion for children with autism.	No inclusion for autistic pupils.	The implementation of Inclusion for autism
8		T2	I thought inclusion means that one child with autism in one classroom that includes other non-autistics children. But I was surprised that the number of autistic children outnumbers non-autistics children.	Just one autistic pupil included with non-SEN pupils	-awareness of inclusion in private schools - inclusion in private school
9		T3	I heard of inclusion but I had no idea that inclusion dose exist in reality.	Teachers did not know	

				When I started working in this school I did not know that the school promotes inclusion for children with autism. But after working with children with autism I found working with them was very interesting. I realised that including autistic children in mainstream schools is something wonderful, successful and very interesting.	about inclusion	
10			T5	I was thinking that inclusion was only for very simple cases of autistic children and who are able to learn. When I was looking for a job in schools I found that inclusion	Inclusion for minor autistic cases. Inclusion was only in private school	

			was applied more in private school.		
11	**Q 1.2.iii**	**Is this a subject that interests you as a teacher?**			
12	**Categor y**	**Participa nts**	**Data**	**1st level code**	**2nd level code**
13	Teacher s' interests in inclusion of autistics children	T1	I learnt from non-autistics children how to deal with children with autism, also I learnt that I should develop my skills just like non- autistics children, they gained experience in dealing with children with autism.	Like working with autistic pupils. Rise in autism makes it important	Teachers' interests in inclusion for autistic children
14		T6	The prevalence of autism in the recent years makes it very important issue for that I started to do some research around autism and read more		

			about it on the net. Autism is a very important topic, before the inclusion there was no place for autistic children to learn but nowadays the inclusion is implemented in schools and also in society, even more the parents of autistic children feel satisfied that their children are being educated in their regular schools not in special schools for autism.	Parent satisfaction	
15	**Q 1.3**	**What is the current policy regarding inclusion in your school?**			
16	**Category**	**Participants**	**Data**	**1st level code**	**2nd level code**
17		T1	I have no idea if there is any policy for	SEN pupils' right.	Inclusion

	Inclusion policy		inclusion, but when we hold meetings with the Head Teacher, she says that children with SEN have rights and we should look after them.		policy - policy awareness -MoE policy
18		T4	When I started working in this school, I did not know that the school promotes inclusion for children with SEN, I noticed that from my own observation in the classrooms and form teachers as well. Maybe there was a meeting at the beginning of the school year and maybe I missed that meeting.	teacher did not know about the inclusion policy The work with the autistic in inclusion schools is compulsory for teachers.	-School policy -Head Teacher's decision
19		T7	Nobody has told me	Inclusion	

			anything about the inclusion policy when I started working in this school then by the time we get used to the inclusion.	policy awareness	
20		T2	I know that the inclusion policy is about to consider the individual differences amongst children.	Consideration of Individual differences.	
21		T3	The inclusion policy in our school is designed based on aims and educational plans for specific learning difficulties and autism.	School policy based on aims and educational plans	
22 23		T6	We held a meeting with the Head Teacher, she said there is some special categories of children who need help and support. Then she said	Inclusion policy based on head teacher's decision	

			if you need to know anything regarding those children, ask me. Also she said there is an inclusion policy in the school but she did not say anything about it.		
24	**Q 1.4**	**How confident are you in your ability to deal with children with special educational needs—in particular, with autistic children?**			
25	**Category**	**Participants**	**Data**	**1st level code**	**2nd level code**
26	Teachers confidence	T3	I can only deal with autistic children in academic aspects but regarding the social and behavioural aspects I cannot deal with them.	Dealing with autistics children only academically	Teacher awareness of dealing with autistics children
27		T4	When I joined this school, at the beginning it was very difficult to deal with	it was very difficult to deal with	-Teachers confidence

			autistic children even more I was thinking to leave the school. After two months I started to like the inclusion of children with SEN also I loved autistic children, I started to develop my skills, I realised that those children are very gifted and I felt very responsible for them. Also I felt that we should give them a chance to learn.	autistic children The confidence based on teacher's experience	-experience
28		T7	The beginning was very difficult, but after some time of joining this mainstream school, I became very confidant and I started to believe in myself.		
29	**Q 1.4.i**	**Have you been offered or encouraged to take up additional**			

		vocational training in accommodating children with special educational needs?		
30	**Category**	**Participants**	**Data**	**1st level code**	**2nd level code**
31	Teacher training	T1, T2, T3, T4, T6, T7	We never have been offered any training courses.	Training	Teacher training
32		T5	Yes I have been offered a compulsory training courses by the MoE and all the training courses were designed for specific learning difficulties. I never received any training for autism.		
33	**Q 1.4.ii**	**Does the inclusion policy pose problems for you, as a teacher?**			
34	**Category**	**Participants**	**Data**	**1st level code**	**2nd level code**
35	Problems regardin	T2	Although I refuse inclusion as I had no intention to teach children with SEN, I do	Refuse inclusion	Inclusion policy problems

	g the inclusion policy		not face any problems with the inclusion		
36		T1, T2, T3, T4, T5, T6, T7	We do not face severe problems with the inclusion of children with SEN. Maybe there is some few cases that confuse the teacher at the beginning but by the time the situation of dealing with children with SEN becomes very simple.	Level of disability

Dealing with SEN children | |
37	**Q 1.4.iii**	**Do you interact with children with special educational needs during mainstream classes or separately, on a one-to-one basis?**			
38	**Category**	**Participants**	**Data**	**1st level code**	**2nd level code**
39	Interaction	T1, T2, T3, T4, T5, T6, T7	In the classroom we all deal with children with SEN just like other non-SEN children.	Dealing with SEN children and non-SEN children in	Teacher/ pupil interaction in the

			Only the SEN teacher deals with them in special manners when she takes them to the resource room.	the classroom and resource room	mainstream classes Teacher/ pupil interaction in the resource room
40	Q 1.4.iv	**Do you have the approval of the school principal for your methods or are you autonomous?**			
41	**Category**	**Participants**	**Data**	**1st level code**	**2nd level code**
42	Teaching methods	T1, T2, T3, T4, T5, T6, T7	We have special curriculums from the Head Teacher but we have flexibility, we can adjust the curriculums to meet the children's needs. In some rare cases we ask the Head Teacher, but in general we are free to adjust the curriculums ourselves.	Special curriculums	Flexible curriculums

43	Q 1.5	Do the advantages of inclusion outweigh the disadvantages of inclusion?			
44	Category	Participants	Data	1st level code	2nd level code
45	Advantages of inclusion	T1, T2, T3, T4, T5, T6, T7	The advantages of inclusion exceed the disadvantages. Non-SEN children like children with SEN, they accept them, they help them and also they feel very passionate about dealing with them.	Cooperation between non-SEN children and SEN children	Pupils cooperation
46				Feelings towards SEN children	Feelings towards SEN children
			Autistic children compete other children in the classroom.	Competitions between autistics and non-autistics children	Competitions
47	disadvantages of	T4	In the early education stages (kindergarten), the number of the	High number of SEN pupils in the	Disadvantages of inclusion

	inclusion		pupils with SEN is very high, more than non-SEN children. This created disadvantage which is that other non-SEN children became enclosed.	classroom Non- SEN pupils became enclosed	
48	**Q 1.5.i**	**What have you gained from the inclusion teaching experience?**			
49	**Category**	**Participants**	**Data**	**1st level code**	**2nd level code**
50	Gained experience from inclusion	T3	I learnt what autism is, what AD/HD is and what specific learning difficulty is.	Gaining Knowledge	Inclusive teaching experience
51		T4	I realised that children with SEN are able to learn if they find the right place.	SEN pupils are able to learn.	- knowledgeable teachers
52		T5	My teaching skills improved also I realised that practice is totally different from what I studied at	Improving teaching skills.	- the ability of SEN to learn

			university. During my studies about SEN everything was theoretical.	Gained experience from the	- skills improvement
53		T7	I learnt from pupils without SEN how to deal with pupils with SEN	interaction between non-SEN and SEN pupils.	-social interaction
54		T1, T2, T3, T4, T5, T6, T7	We gained very good experience from working in this mainstream school. We have become very willing to work in mainstream schools and with children with SEN. Children with SEN are able to learn if they are provided with suitable learning environment and provision such as resource room, SEN teacher and training	Environment impact the success of inclusion	- facilities

			for teachers.		
55	**Q 1.5.ii**	**What are the disadvantages, on a day-to-day basis, of inclusion?**			
56	**Category**	**Participants**	**Data**	**1st level code**	**2nd level code**
57	Disadvantages of inclusion	T2	Sometimes the teacher does not feel satisfied about her performance because she does not see the outcomes of her work.	Weak teacher performance	Job satisfaction
58		T4	I am a maths teacher I face difficulty in time management. It is supposed that I should rely on the SEN teacher's suggestions but I do not feel satisfied. If there was a teacher assistant in the classroom, the satisfaction level would be increased.	Teacher does not feel satisfied about her performance Teacher assistant	Time management Teacher assistant
59		T1, T2,	We all need teacher		

		T3, T4, T6, T7	assistant in the classroom.		Unexpected behaviours
60		T7	Every day we see new behaviour. Sometime children with SEN run suddenly, sometime they throw themselves on the floor. I cannot expect all their behaviours.	Unexpected behaviours	
					Negative behaviour
61		T1, T2, T3, T4, T5, T6, T7	In the early education stages children sometimes gain inappropriate behaviours.	Non-SEN learn negative behaviour from SEN pupils	
					Classroom managemen t
62		T1, T2, T3, T4, T6, T7	We face difficulties in handling and controlling the pupils' behaviours, also managing the time in	Teacher cannot control the	

			Data	1st level code	2nd level code
			the classroom.	classroom	
63		T1, T2, T3, T4, T5, T6, T7	Sometimes it becomes very difficult to control and handle children with SEN.		
64	**Q 1.5.iii**	**What are the advantages, both for you as a teacher and for your pupils who do not have special educational needs?**			
65	**Category**	**Participants**	**Data**	**1st level code**	**2nd level code**
66	Advantages for teachers	T2	I learnt from inclusion that there is a different category of children who are very smart but they were ignored.	Teacher awareness about SEN	Awareness Interest
67 68		T4	I feel pleasure and achievement when I deliver knowledge to the pupils and they understand it.	Achievement with SEN pupils Experience Patience Interested in working with	Job stratification Experience

				SEN pupils	
69	Advanta ges for non- SEN pupils	T1, T2, T3, T4, T5, T6, T7	Non- autistics children have become very responsible for children with SEN, they love them very much and they feel happy about that.	Non-SEN pupils take the responsibility toward SEN pupils.	Responsibilit ies
				Non-SEN pupils become more aware of SEN pupils.	Awareness
					Acceptance
			Non- autistics children have become more acceptable for children with SEN.	Non-SEN accept SEN pupils.	
					Perception changed
			We realised how much the mothers of children with SEN suffer.	Non-SEN negative perception of SEN pupils has changed	

				Social inclusion
			Social inclusion of SEN and non-SEN pupils	
70	**Q 1.5.iv**		**What are the advantages and disadvantages for the child who has special educational needs?**	
71	**Category**	**Participants**	**Data**	**1st level code**	**2nd level code**
72	Advantages for children with SEN	T1, T2, T3, T4, T5, T6, T7	Children with SEN have become more confidants. They feel like they are included socially and academically. They read, write and play together with other children who don't have SEN.	Self-confident. Social and academic inclusion.	Confidence Social and academic inclusion

				SEN pupils imitate non-SEN positive behaviour.	Gain behaviour
			The child with SEN imitates the behaviour of non-SEN child.		
			The child with SEN competes non-SEN child in academic achievement.	SEN pupils compete with non-SEN pupils	Competitions
73	Disadva ntages for children with SEN	T1, T2, T3, T4, T5, T6, T7	Pupils with SEN are still isolated to somehow. Other non-SEN children bully children with SEN. Non-SEN pupils describe pupils with SEN like disabled so children with SEN feel upset.	SEN pupils are isolated SEN children are bullied by other children SEN children are upset	isolation of children with SEN Behavioural issues -bullying -self-esteem Support and provision
74		T4	I think the curriculums		

			do not meet the pupils' with SEN needs. Sometimes the subjects are a lot and sometimes the subjects are very few. As a teacher I do not have permission to teach the pupils less or more subjects.	Curriculums difficulty	
75	**Q 1.5.v**	**Research in the West, in particular the United States and the United Kingdom, indicate that inclusion is generally advantageous for children with special educational needs. Does your experience confirm this research?**			
76	**Category**	**Participants**	**Data**	**1st level code**	**2nd level code**
77	research on inclusion of SEN	T1, T2, T3, T4, T5, T6, T7	We all agree that inclusion is a successful procedure just like in the West but under some conditions such as training for teachers, limit the number of	Training the number of SEN pupils in the classroom	Conditions of inclusion

			pupils with SEN in the classroom and other conditions.		

Appendix 2

Interview schedules for study participants.

Interview I: Teachers

I.1 To begin, tell me a bit about your background.

    I.1.i   How long have you been teaching?

    I.1.ii   How long have you been teaching in this particular school?

    I.1.iii   What, if any, further education studies have you undertaken in addition to your teaching degree?

    I.1.iv   What made you decide to take up a career in primary education?

Do you have any experience of working with children with special needs, particularly ASD?

I.2   What do you understand by the process of 'inclusion' of children with special educational needs and how this is achieved?

    I.2.i What do you understand by the term 'special educational needs'?

    I.2.ii. What do you know about the inclusion of children with ASD in mainstream schools?

    I.2.iii. Is this a subject that interests you as a teacher?

    I.2.iv. If so, have you researched additional material to that supplied by the Ministry of Education? Where did you source this material?

I.3   What is the current policy regarding inclusion in your school?

I.3.i   Do you discuss the inclusion policy amongst yourselves, as teaching staff?

I.3.ii   Do you have additional specialist staff members been recruited to aid the existing staff?

I.4   How confident are you in your ability to deal with children with special educational needs—in particular, with children with ASD?

I.4.i Have you been offered or encouraged to take up additional vocational training in accommodating children with special educational needs?

I.4.ii   Does the inclusion policy pose problems for you, as a teacher?

I.4.iii.   Do you interact with children with special educational needs during mainstream classes or separately, on a one-to-one basis?

II.4.iv Do you have the approval of the school principal for your methods or are you autonomous?

I.5   Do the advantages of inclusion outweigh the disadvantages of inclusion?

I.5.i   What have you gained from the inclusion teaching experience?

I.5.ii   What are the disadvantages, on a day-to-day basis, of inclusion?

I.5.iii   What are the advantages, both for you as a teacher and for your pupils who do not have special educational needs?

I.5.iv   What are the advantages and disadvantages for the child who has special educational needs?

II.5.v. Research in the West, in particular the United States and the United Kingdom, indicate that inclusion is generally advantageous for children with special educational needs. Does your experience confirm this research?

Interview II: Auxiliary Staff

II.1   To begin, tell me a bit about your background.

II.1.i   Do you have a background in education or is your background primarily medical?

II.1.ii   What made you take up working with children with ASD/children with special educational needs?

II.1.iii   Do you work exclusively in this school or do you share your time amongst various schools?

II.2   What do you understand by the process of 'inclusion' of children with ASD?

II.2.i   Have you worked with children with special educational needs in a non-inclusive setting?

II.2.i   If so, do you think inclusion is advantageous for children with ASD special educational needs?

II.3   What is the current policy regarding inclusion in your school?

II.3.i   How were you recruited to work in a mainstream inclusive school?

II.3.ii   How easy/difficult have you found it to work with mainstream teaching staff?

II.3.iii   What is your experience of working with the parents of children with ASD special educational needs?

II.4   How confident are you in your ability to deal with children with special educational needs—in particular, with children with ASD?

II.4.i   Do you interact with children with special educational needs during mainstream classes or separately, on a one-to-one basis?

II.4.ii   Do you have the approval of the school principal for your methods or are you autonomous?

Interview III: Parents

III:1   To begin, tell me a bit about your background.

III.1.i   What profession do you exercise?

III.1.ii   Where do you live—house/apartment, urban/rural environment?

III.1.iii   How many children do you have?

III.2   What do you understand by the process of 'inclusion' of children with special educational needs?

III.2.i   Have you already heard the term 'inclusion'?

III.2.ii As a parent, what do you understand by the term 'special educational needs'?

III.2.iii Do you have a child with special educational needs?

III.2.iv Does anyone in your family have a child with special educational needs?

III.3 What is the current policy regarding inclusion in your school?

III.3.i Did the existence/non-existence of an inclusion policy influence your decision to send your child/children to this particular school? If so, how?

III.3.ii If your child does not have special educational needs, why did you choose an inclusive school?

III.4 Do you feel comfortable around children with special educational needs—in particular, with children with ASD?

III.4.i How do you think your school's inclusion policy affects children who do not have ASD?

III.4.ii Do you think parents should be consulted before transforming a non-inclusive school into an inclusive school?

III.4.iii If your child attends an inclusive school, do you feel that your child's teacher devotes too much of his/her time to children with ASD?

III.4.iv Do you feel that your child is advantaged/disadvantaged by attending an inclusive school?

III.4.v Is your child/children friendly with a child with ASD special educational needs? Has this child been invited to play with your child outside school hours?

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III.5   Do the advantages of inclusion outweigh the disadvantages of inclusion?

III.5.i If you have a child with special educational needs, how has being included in a mainstream primary school changed his/her school experience?

III.5.ii Has your child (without special educational needs) been affected by his/her classmates with special educational needs?

III.5.iii Has this effect been beneficial or otherwise?

Interview IV: Children

(NB: for the children's interviews, the standard questions are included only as prompts for the interviewer to remind him of the progression of the interview.)

IV:1   To begin, tell me a bit about your background.

IV.1.i   What age are you?

IV.1.ii What class are you in?

IV.1.iii Do you like going to school?

IV.1.iv Tell me a bit about your family—do you have brothers and sisters?

IV:2   What do you understand by the process of 'inclusion'?

IV.2.i   Do you know what ASD is?

Do you know what ASD is?

Do you know anyone with ASD?

Do you know what an inclusive school is?

Do you think children with ASD can go to an inclusive school?

Do you think any child can go to an inclusive school?

IV:3   What is the current policy regarding inclusion in your school?

IV.3.i We have just talked about how children can be ==different from one another.== Are there a diverse range of children in your class?

IV.3.ii If so, how do you feel about ==this child/these children?==

IV.3.iii Do you play with this child during recreation or at lunchtime? If not, why not?

IV:4 How confident are you in your ability to deal with children with special educational needs—in particular, with children with ASD?

IV.4.i Does your teacher treat him/her in other way to others in the class?

IV.4.ii Does he/she make it difficult to concentrate in class?

IV.4.iii Does he/she take the same classes as you?

IV.4.iv How would you feel if children with ASD joined your class?

IV.5 Do the advantages of inclusion outweigh the disadvantages of inclusion?

IV.5.i Do you think it is a good thing to ==have children with special needs, for example children with ASD and those with no special needs in the== same class? If so, why?

IV.5.ii What do you like most about your school and your class? Why?

Interview V: Parents of Children with ASD

V.1 First of all, I would like to ask few questions regarding your child:

V.1.i When and how did you get to know that your child is ASD?

V.1.ii How does your child cope up with his/her ASD special needs?

V.1.iii What kind of a school was initially attended by your child: special school or inclusive

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school?

V.1.iv Do you find the current school better than the previous school? If yes, in what respect?

V.1.v How long did it take for your child to adjust in the current inclusive school?

V.1.vi Is he/she comfortable with the teachers, peer-group and other staff of the school?

V.1.vii What problems does he/she face in the school?

V.1.viii To what extent is he/she able to cope up with the teaching-learning process followed in the school?

V.2 After knowing about your child, I would like to have your (Parents of Children with ASD) opinions regarding the inclusion of children with ASD in the mainstream schools:

V.2.i How did you get to know about the current inclusive school of your child?

V.2.ii What difficulties do you face as a parent of a child with ASD?

V.2.iii Are you satisfied with the current school in dealing with the needs of your child with ASD?

V.2.iv Do you talk/share your views with other parents regarding the policies and provisions for children with ASD?

V.2.v Are you in contact with some parents whose children have also been diagnosed with ASD?

V.2.vi Are you called from time to time by the school authorities to discuss the growth and needs of your child?

V.2.vii Are you a part of decision making or suggesting any changes in policies and provisions for special needs children?

V.2.viii What suggestions would you like to give to the school authorities regarding the inclusion process?

V.3 Last but not the least, I would like ==to have your observations on== different people regarding the inclusion of children with ASD:

V.3.i What kind of opinion is shown by teachers and staff towards the children with ASD in the current school?

V3.ii Out of the inclusive schools and special schools, which according to you can deal with the children with ASD more skilfully?

V.3.iii What is the opinion of head-teacher and management of current school towards the children with ASD?

V.3.iv What is the opinion of other children towards the children with ASD in the current school?

V.3.v What is the opinion of other parents towards the inclusion of children with ASD in the mainstream classrooms?

V.3.vi What is the opinion of parents of non-SEN children towards the parents of children with ASD?

V.3.vii Are the teachers of inclusive schools able to deal with teaching-learning needs of children with ASD?

V.3.viii Do the teachers follow the same curriculum approach for all children or different curriculum approach is being used for children with ASD?

Interview VI: Children with ASD

VI. 1 Tell me about yourself

VI. 1.i. How old are you?

VI. 1.ii. What class are you in?

VI. 1.iii. Do you like going to school?

VI. 1.iv. Tell me about your family. Do you have any brothers and sisters?

VI.2. Talk to me about what you do at school. Talk me through your school day.

VI.2.i. When you are in class, are you usually on your own or with a lot of other children?

VI.2.ii. Do you like the other children at school?

V1.2.iii. Do you have a best friend at school?

VI.3. Do you like the teachers at the school?

VI.3.i. Can you tell me who your teacher is? Do you like them? Why? Why not?

VI.3.ii. Do you work with other adults, apart from teachers at the schools?

VI.3.iii. Do you like your auxiliary staff? Why? Why not?

VI.3.iv. Do you feel that the teachers and auxiliary staff treat you the same as other children at the school? Why? Why not?

VI.4. Do you feel that everyone at school is nice to you? Why? Why not?

VI.4.i. Do others at school treat you differently from other children?

VI.4.ii. Do you find it easy to concentrate in class?

VI.4.iii. Are other children nice to you in class?

VI.4.iv. Are other children disruptive in class? Does this affect your concentration?

VI.4.v. Do you feel included in class?

VI.5. What do you think of inclusion? Do you like it? Why? Why not?

    VI.5.i. Do you like learning with a lot of other children? Why? Why not?

    VI.5.ii. what is the best thing about your school? Why?

    VI.5.iii. what is the best thing about your class? Why?

Interview VII: Educational Supervisors

VII. 1. To begin with, tell me a bit about your background

    VII.1.i. How long have you been working in education?

    VII.1.ii. Do you have previous experience as a teacher or as an auxiliary staff?

    VII.1.iii. Do you have any experience of working with children with special needs, particularly ASD?

VII.2. What do you understand about the process of inclusion in schools?

    VII.2.i. Have you worked in an inclusive school before? Do you think that they are better than non-inclusive schools?

    VII.2.ii. Do you think that inclusion is advantageous for pupils with special educational needs?

    VII.2.iii. Do you think inclusion works for pupils with ASD?

VII.3. What is your take on government policies regarding inclusion?

    VII.3.i. Do you feel that their policies on inclusion in schools are working? Why? Why not?

    VII.3.ii. Is an inclusive setting beneficial for all pupils, whether they have special needs or not? Why? Why not?

VII.3.iii. Do you feel that the present inclusive school system in Saudi Arabia is working for pupils with ASD? Why? Why not?

VII.4. Do you think that mainstream teaching staff have found it easy to work in inclusive schools? Why/Why not?

VII.4.i. Do you approve of the decisions made in regard to inclusion by the school?

VII.4.ii. Do you think you have a good relationship with other teaching staff?

VII.4.iii. Do you have any interaction with parents at the school? How do they feel about inclusion? Are there any differences in how parents or special needs and non-special needs pupils feel about inclusion?

VII.5. Do you feel that the advantages of inclusion outweigh the disadvantages?

VII.5.i. At the moment, do you have much interaction with special needs pupils in inclusive schools, particularly those diagnosed with ASD?

VII.5.ii. In Western nations, it has been found that inclusion is beneficial for special needs pupils? Do you agree that this is the case in Saudi Arabia?

Thank you very much for taking out time to answer these questions.

Appendix 3

Semi-Structured Observations

School Name…………………………………

Date:…………………. Place: Classroom -45 minutes

Objective 1

Semi-structured observation

Objective 1: To observe pupils with ASD interacting in mainstream classrooms

Objective 1	Who's Involved	How many	Comments
Makes eye contact			
Smile			
Tone of voice (loud, quiet)			
Engagement by participating in group work, discussion.			
Hand up when teacher ask the pupils			

The pupil with ASD volunteers to do the task comparing with non-SEN pupils			
The teacher accept the volunteer activity from the pupil with ASD comparing with pupils			
Pupils accept the pupil with ASD participation and listen to her.			

General comments:

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School Name…………………………………

Date:………………… Place: Playground-30 minutes

Objective 2

Semi-structured observation

Objective 2: To observe pupils with ASD in a social setting

Objective 2	Who's Involved	How many	Comments
Engagement by playing with others			
Attempt to guide the pupil with ASD			
The pupils ask the pupil with ASD to join them to play			
The pupils with ASD shake her head to accept or not			

General comments:

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School Name…………………………………

Date:…………………. Place: Playground and classroom -45 minutes

Semi-structured observation

Objective 3: Observe interactions between pupils with ASD and their non-SEN peers

Objective 3	Who's Involved	How many	Comments
Makes eye contact			
Smile			
Tone of voice (loud, quiet)			
Engagement by watching video and playing PlayStation together			
Pupils interact with each other by discussing the task and guiding each other.			

General comments:

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School Name……………………………………

Date:…………………. Place: classroom -45 minutes

Semi-structured observation

Objective 4: Observe classroom routine and to observe the reaction of pupils with ASD to any changes within it

Objective 4	Who's Involved	How many	Comments
Makes eye contact			
Smile			
Tone of voice (loud, quiet)			
Pupils with ASD respond to sudden change in the classroom (e.g., transition time in the classroom, lesson changeover, unexpected changes of staffing or subject/topic)			
The reaction of pupils and teachers towards the behaviour of pupil with ASD.			

Awareness of pupils with ASD of how much time is left in an activity.			

General comments

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School Name……………………………………

Date:…………………….

Place: be for and after the lessons in the classroom, during the break time, end of the school time, waiting the school bus -30 minutes.

Semi-structured observation

- Objective 5: Interactions of pupils with ASD, non-SEN pupils, and teaching staff in unstructured parts of the school day.

Objective 5	Who's Involved	How many	Comments
Makes eye contact			
Smile			
Tone of voice (loud, quiet)			
Guide pupils with ASD at play and their reaction			
Auxiliary staff, teachers, head teacher, education supervisor roles and responsibilities			

General comments

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School Name……………………………………

Date:…………………… Place: classroom -45 minutes: mathematics lesson

Semi-structured observation

Objective 6: Interactions between pupils with ASD and teachers

Objective 6	Who's Involved	How many	Comments
Makes eye contact			
Smile			
Tone of voice (loud, quiet)			
Teacher can make time balance between the pupils and pupils with ASD.			
Give the pupils with ASD the opportunity to participate in the class session			
Teacher feedback to the pupils with ASD			

Participation in the class session			
Teacher time division			
Pupils engagement with task at hand			
Assess individual educational plan, updates of plan and homework books for pupils with ASD, progress and attainment			(document review)

General comments

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School Name……………………………………

Date:…………………… Place: classroom and playground -30 minutes to 1 hour

Semi-structured observation

Objective 7: Interactions between pupils with ASD and other members of staff

Objective 7	Who's Involved	How Many	Comments
Makes eye contact			
Smile			
Tone of voice (loud, quiet)			
Engagement with task at hand.			

General comments

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School Name……………………………………

Date:…………………… Place: classroom -45 minutes: Reading and writing session

Semi-structured observation

Objective 8: Academic interaction between teacher and child with ASD.

Objective 9: Academic interaction between teacher and non-SEN pupils.

Objective 8 &9	Who's Involved	How many	Comments
Makes eye contact			
Smile			
Tone of voice (loud, quiet)			
Teacher can make time balance between the pupils and pupils with ASD			
Give the pupils with ASD the opportunity to participate in the class session			
Teacher feedback to the pupils with ASD.			

Participation in the class session			
Teacher time division			
Pupils engagement with the task at hand			
Assess individual educational plan, updates of plan and homework books for pupils with ASD, progress and attainment			(document review)

General comments

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School Name……………………………………

Date:………………… Place: classroom -45 minutes:

Semi-structured observation

Objective 10: Interactions between non-SEN pupils and teachers

Objective 10	Who's Involved	How many	Comments
Makes eye contact			
Smile			
Tone of voice (loud, quiet)			
Teacher can make time balance between the pupils and pupils with ASD.			
Give the non-SEN pupils opportunity to participate in the class session			
Teacher feedback to the non-SEN pupils			
Participation in the class session			
Teacher time division			

Pupils engagement with task at hand			

General comments

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School Name…………………………………

Date:…………………. Place: playground-30 minutes to 1 hour

Semi-structured observation

Objective 11: Interactions between non-SEN pupils and other members of staff

Objective 10	Who's Involved	How many	Comments
Makes eye contact			
Smile			
Tone of voice (loud, quiet)			
Teacher can make time balance between the pupils and pupils with ASD.			
Give the non-SEN pupils opportunity to participate in the class session			
Teacher feedback to the non-SEN pupils			
Participation in the class session			
Teacher time division			

Pupils engagement with task at hand			

General comments

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Appendix 4

Observation and interview procedure for the pilot study of the instruments.

School Name: Private school

Date: Place: free time in classroom

Objective 2

Semi-structured observation

 - Objective 2: To observe pupils with ASD in a social setting

Objective 2	Who's Involved	how many	comments
Engagement by playing with others	Pupils	7	4 non-SEN pupils, one with behaviour disorder, two pupils with ASD (the whole class)
Attempt to guide the pupil with ASD	Pupils	7	• They were playing Doctors and Nurses • Pupils with ASD were given the Doctor and Nurse roles
The pupils ask the child with ASD to join them to play	Pupils	7	One of the pupils had to explain to the pupils with ASD how to play the game

The pupil with ASD shake her head to accept or not	Pupils	7	Gaida (pupil with ASD) shock her head and said: "Yes I can be the nurse"

General comments:

Gaida's friend explained to her how to play her role as a nurse and give patients injections. Gaida shock her head and said: "I understand."

All the pupils were playing together comfortably.

Gaida stops playing and goes back to her seat.

Her friends didn't not ask her why she left.

Suddenly, they stopped playing and went to check on Gaida. They found her drawing something and complimented her.

Interview: Children

(NB: for the children's interviews, the standard questions are included only as prompts for the interviewer to remind him of the progression of the interview.)

To begin, tell me a bit about your background.

1-What age are you? 10 years old

2-What class are you in? 4th grad

3-Do you like going to school? Yes, i enjoy coming to school everyday

4-Tell me a bit about your family—do you have brothers and sisters? I have one brother and my parents.

5-What do you understand by the process of 'inclusion'? I don't understand what's inclusion is

6-Do you know what ASD is? I don't know what is ASD is but I know that Gaida and Reema find it default to learn, I think that's ASD.

7- Do you know what ASD is? No i don't know

8-Do you know anyone with ASD? No I don't know, but i know what inclusion means

9-Do you know what an inclusive school is? Yes, they are entitled to go to school

10-Do you think children with ASD can go to an inclusive school? Yes

11-Do you think any child can go to an inclusive school? I remember my mum saying that my school has pupils with learning difficulties and ASD, and has few non-SEN children

IV:3   What is the current policy regarding inclusion in your school?

12- We have just talked about how children can be different from one another. Are there a diverse range of children in your class? Yes, two with learning difficulties and two gifted pupils.

13- If so, how do you feel about this child/these children? Yes I like them, but sometimes I feel it's difficult when they ask me frequently during the day

14-Do you play with this child during recreation or at lunchtime? If not, why not? Yes sometimes we play together, and we frequently chat

15-How confident are you in your ability to deal with children with special educational needs—in particular, with children with ASD? I think it's normal not difficult and I frequently play with them

16-Does your teacher treat him/her in other way to others in the class?

I don't know, I didn't notice but normally there is no difference

17-Does he/she make it difficult to concentrate in class? No, it's not difficult

18-Does he/she take the same classes as you?

No I don't go to the Leaning Aide room, but I used to go there when I was in the 1st grade, my friends with difficulties learning usually go to the Learning Aide room

19-How would you feel if children with ASD joined your class? No problem

20-Do the advantages of inclusion outweigh the disadvantages of inclusion? I like them and I enjoy playing with them, because I want God to reward me with good deeds

21-Do you think it is a good thing to have special needs children, for example children with ASD and those with no special needs in the same class? If so, why? Yes, it's a good thing, we like each other and play with each to earn rewards from God

22-What do you like most about your school and your class? Why? I like my school, teachers and friends, because we play and chat together everyday

Interview: Teachers

To begin, tell me a bit about your background.

1) How long have you been teaching? 9 years of teaching experience

2) How long have you been teaching in this particular school? less than one year

3) What, if any, further education studies have you undertaken in addition to your teaching degree? workshop in ICT

4) What made you decide to take up a career in primary education? I didn't pick the job, but I had to since my daughter attends this school

5) Do you have any experience of working with children with special needs, particularly ASD? No experience, I've gained some experience from working in this school

6) What do you understand by the process of 'inclusion' of children with special educational needs and how this is achieved? I only know inclusion refers to the inclusion of non-disabled children with disabled children in one classroom; one disabled pupil and the rest are non-disabled.

7) What do you understand by the term 'special educational needs'?

 The first time I heard of inclusion is since I joined this school. I knew that children with ASD go to special ASD schools, but not mainstream schools.

8) What do you know about the inclusion of children with ASD in mainstream schools? Yes, this topic is important to me, because 'ASD' is now wide-spread. I have learnt from non-disabled children how to work with children with ASD and improve my skills.

9) Is this a subject that interests you as a teacher? Yes this topic important to me, but I wasn't offered any workshops and didn't look for workshops because I don't have time.

10) If so, have you researched additional material to that supplied by the Ministry of Education? Where did you source this material?

11) What is the current policy regarding inclusion in your school? No one told us about the policy of inclusion in this school, but we have adapted to the environment in this school.

12) Do you discuss the inclusion policy amongst yourselves, as teaching staff? We generally discuss it, but not officially.

13) Do you have additional specialist staff members been recruited to aid the existing staff? Yes, we have support from special teachers from the Learning Aide department, they give disabled children face-to-face support.

14) How confident are you in your ability to deal with children with special educational needs—in particular, with children with ASD?

 In the beginning it was difficult, but with more interaction with the pupils I feel more confident than before.

15) Have you been offered or encouraged to take up additional vocational training in accommodating children with special educational needs? No, but If get an offer I will accept it.

16) Does the inclusion policy pose problems for you, as a teacher? In the beginning it was difficult, but after socialising with children with ASD it became easy.

17) Do you interact with children with special educational needs during mainstream classes or separately, on a one-to-one basis? Yes, generally, but rarely face to face.

18) Do you have the approval of the school principal for your methods or are you autonomous? The school provides me with the curriculum provisions, but I have my own method of teaching it.

19) Do the advantages of inclusion outweigh the disadvantages of inclusion? The positives outweigh the negatives.

20) What have you gained from the inclusion teaching experience? I have learnt from pupils how to work with disabled children.

21) What are the disadvantages, on a day-to-day basis, of inclusion? Controlling disabled pupils is the hardest part of teaching, disabled children are the hardest to control. The reason for this, is because the behaviour of disabled children changes every day, for example, they suddenly cry and fall down.

22) What are the advantages, both for you as a teacher and for your pupils who do not have special educational needs? I learnt from inclusion that some pupils have

different abilities; some of them are intelligent and some are gifted. Those pupils were neglected, because of their disability. Pupils feel that they have a responsibility to look after and support their disabled classmates.

23) What are the advantages and disadvantages for the child who has special educational needs? The negatives include the fact that disabled children feel annoyed most of the time (put their fingers in their ears), and sometimes cry. The positives include the fact that the feel a sense of accomplishment.

24) Research in the West, in particular the United States and the United Kingdom, indicate that inclusion is generally advantageous for children with special educational needs. Does your experience confirm this research? Yes, I agree.

Appendix 5

Interview Rationale

Question(s)		Rationale (why do you think it is important to ask each interview question)
Who? (e.g., teacher, assistant, parent, child)	Question Number (e.g., 2a, 3d)	
Teacher	I.1.i-iv	Research into conducting successful interviews emphasises how important it is to open the interview with non-challenging and open-ended questions that will tell the interviewer as much as possible about the participants.
Auxiliary staff member	II.1.i-iii	See above
Parent	III.1.i-iii	See above
Child	IV.1.i-iv	See above
Child with ASD	VI. 1.i-iv	See above
Educational Supervisor	VII.1.i-iii	See above

Teacher	I.2i-ii	To identify the extent to which teachers are informed about inclusion or have sought to inform themselves about inclusion
Auxiliary staff	II.2.i-ii	Auxiliary staff members' experiences of inclusive and non-inclusive education are very important to establish the extent to which children with ASD are welcomed into mainstream schools and the extent to which facilities are put in place for mainstream schools to employ auxiliary staff.
Parent	III.2.i-iv	To identify the extent of parents' pre-existing knowledge or judgements/bias about SEN/children with ASD.
Child	IV.2.i-ii	To what extent to mainstream primary schoolchildren come into contact with children with ASD?

Child with ASD	VI.2.i-iii	To evaluate the extent to which children with ASD come into contact with their mainstream peers whilst learning
Educational Supervisor	VII.2.i-iii	To evaluate educational supervisors understanding and experience of inclusion.
Teacher	I.3.i-iii	To discover impact of inclusion as a policy on teachers in the inclusive schools.
Auxiliary staff	II.3.i-iii	How easy is it to recruit auxiliary staff for inclusive schools? Is the recruitment of auxiliary staff a barrier to schools adopting an inclusive programme?
Parent	III.3.i-iii	To what extent are parents' attitudes influencing (positively or negatively) policymakers' adoption of inclusion?
Child	IV.3.i-iii	To what extent are children with ASD being included in the classroom and extracurricular activities (such as recreation) of their peers?

Child with ASD	VI.3.i-iii	Looks at the extent to which children with ASD are being included in extracurricular activities and whether these pupils feel they are 'different.'
Educational Supervisor	VII.3-i-iii	Aims to assess the attitudes of educational supervisors to government policies regarding inclusion and whether they believe they are working.
Teacher	I.4.i-ii	To establish what, if any, additional training is being offered to teachers in inclusive schools and the effect that changing a school's policy to one of inclusion would have on its teaching staff.
Auxiliary staff	II.4.i-ii	To establish the day-to-day practice of working with children with ASD in mainstream classes.

Parent	III.4.i-v	What are the actual effects of inclusion on non-SEN children and how are these effects viewed by their parents. Is the parental lobby preventing the widespread adoption of inclusion.
Child	IV.4.i-iii	Are the effects, if any, of inclusive classes on non-SEN children adverse or beneficial? How do these children and their parents react to the presence of children with ASD in the class?
Child with ASD	VI.4.i-v	Assessing how children with ASD feel in class. As non-SEN children may see them as a disruptive presence it is important to gage whether pupils with ASD realise this, or whether there is no problem.
Educational Supervisor	VII.4i-iii	Looks at whether staff found it easy to adapt to inclusion and what impressions the school has over parents' feelings about it.

Teacher	I.5.i-iv	Do the benefits of inclusion outweigh the disadvantages? Are these benefits consequential enough to promote a more convincing adoption of inclusion on the part of the Ministry of Education?
Auxiliary Staff	II.5.i	Is enough being done to make inclusion a genuinely beneficial experience for children with ASD?
Parent	III.5i-iii	Is the inclusive experience sufficiently positive for children and their families to warrant an increase in inclusion or does more need to be done on a level of individual schools before the policy can legitimately be adopted throughout the Kingdom?
Child	IV.5.i-ii	The responses of the sample children attending the inclusive school will be particularly enlightening as to the positive or negative effects of inclusion.

Child with ASD	VI.5.i-iii	It is important to discover whether children with ASD feel that they benefit from inclusion and whether they feel settled in an inclusive environment.
Educational Supervisor	VII.5.i-ii	Aims to address whether educational supervisors see inclusion as beneficial and how much contact they have had with pupils with ASD
PARENT OF CHILD WITH ASD	V.1.i – viii	It is important to ask such questions because the first step whilst dealing with the children with ASD is to know the child.
PARENT OF CHILD WITH ASD	V.2.i – viii	It is important to ask such questions to know about the opinions of the parents of the children with ASD and also the barriers faced by them.

PARENT OF CHILD WITH ASD	V.3.i – viii	It is important to ask such questions to know about the attitudes and skills of different people related to the children with ASD (as per the views of parents of children with ASD)

Appendix 6

Observation Rationale

Objective	Location & Length	Creative Method	Structured /Unstructured	No. of Individuals Involved
1-to observe pupils with ASD interacting in mainstream classrooms	Classroom 45 minutes	Evaluating interactions between pupils with ASD and others and involvement of pupils with ASD in class, for example, how often do they volunteer (put hands up, etc.) (Littleton and Howe, 2010).	Unstructured	1 pupil with ASD, all pupils in class, one teacher, one member of auxiliary staff.
2-to observe pupils with ASD in a	Playground 30 minutes	Looking for interactions and if/how	Unstructured	2 pupils with ASD, two non-SEN pupils, one

social setting		pupils with ASD engage in different types of play.		member of auxiliary staff.
3-Observe interactions between pupils with ASD and their non-SEN peers.	Classroom, playground 45 minutes	Thomson (2008) suggests that looking at body language can reveal the hidden feelings and emotions of the subjects. In this context, these were used to evaluate how the participants feel about interactions with each other.	Unstructured	1 pupil with ASD, five non-SEN pupils.

4-Observe classroom routine and to observe the reaction of pupils with ASD to any changes within it.	Classroom, 45 minutes	Observing children's behaviour during an art session. Thomson (2008) explains that art is a good way of evaluating how children experience and engage with the world, as it allows for creativity and spontaneity.	Structured	1 pupil with ASD, five non-SEN pupils, one teacher, one member of auxiliary staff.
5-Interactions of pupils with ASD, non-SEN pupils, and teaching staff in	Before and after lessons in the classroom, during breaktimes	Observation of both pupils with ASD and non-SEN pupils 'free play,' that is,	Unstructured	1 pupil with ASD, five non-SEN pupils, one teacher, one auxiliary staff, one head

unstructured parts of the school day.	and end of the school day. Half an hour.	unstructured play (Thomson, 2008: 25).		teacher, one educational supervisor.
6-Interactions between pupils with ASD and teachers	Classroom, 45 minutes	Organised play between teachers and pupils with ASD. Theodorou and Nind (2010) explain that organised play is a useful means of promoting interactions between pupils with ASD and members of staff.	Structured	1 pupil with ASD, five pupils, one teacher.
7-Interactions between	Classroom, playground,	Organised play between	Structured	1 pupil with ASD, one pupil, one

pupils with ASD and other members of staff	assembly Half an hour to one hour	pupils with ASD and other members of staff (i.e., auxiliary staff), general interactions. Playing puzzles with others.		member of auxiliary staff, one head teacher, one educational supervisor.
8-Academic interaction between teacher and pupil with ASD	Classroom, 45 minutes		Unstructured	1 pupil with ASD and one teacher.
9-Academic interaction between teacher and non-SEN pupils	Classroom, 45 minutes		Unstructured	3 non-SEN Pupils and one teacher
10- Interactions between non-	Classroom, 45 minutes	Organised play, such as craft or games	Structured	5 non-SEN pupils, one teacher.

SEN pupils and teachers		between non-SEN pupils and teachers.		
11-Interactions between non-SEN pupils and other members of staff.	Classroom, playground, assembly Half an hour to one hour	Organised play, such as craft or games between non-SEN pupils and other members of staff.	Structured	5 non-SEN pupils, one auxiliary staff, one head teacher, one educational supervisor.

Objective	Measurement of social inclusion, academic inclusion (by how many times each measure takes place + written account of each measure	Research Questions (s) Addressed	Rationale	Evidence to support the observation (Literature)
1-to	Engagement	3 & 4	It is important to	This observation

observe pupils with ASD interacting in mainstream classrooms	with teacher(s), staff and fellow pupils. 1-Body language, tone of voice (for teachers, auxiliary staff only), how often both pupils with ASD and non-SEN pupils raise their hands		observe the activity of pupils with ASD in mainstream classrooms to gauge whether they have been successfully included in that environment and how others (i.e., non-SEN pupils, teachers and auxiliary staff) respond to pupils with ASD.	objective is based on Theodorou and Nind's (2010) study which relied on observations of pre-school children with ASD in mainstream nursery schools. Almasoud (2011) expressed concerns that pupils with ASD have not been properly included in Saudi Arabia's mainstream education system. However, Alquraini (2011, p. 1) notes that inclusion of disabled pupils has undergone a 'dramatic period of improvement' in recent years.

| 2- to observe pupils with ASD in a social setting | Engagement in play with others, whether non-SEN pupils and auxiliary staff attempt to guide pupils with ASD. The Non-SEN pupils ask the pupil with ASD to join them in play, the pupil with ASD shakes her head to accept or not. | 4 | Socialisation is an important aspect of inclusion. Therefore, if it works then inclusion should be a means of improving the difficulties children with ASD experience when socialising with their peers. | Pope-Edwards (2005) observed that play takes on different forms such as creative play, role play, and play with rules. It will be interesting to see what kinds of play pupils with ASD engage in and whether they are interacting with their non-SEN peers. Frith (2008) explains that children with ASD experience difficulties with social interaction, so it will be important to address whether inclusion can mitigate such difficulties. |

3-observe interactions between pupils with ASD and their non-SEN peers	Watching video, computer or PlayStation. The children interact with each other by discussing the task and guiding each other.

Accepting each other by engagement with others, body language and tone of voice. | 4 | These observations aim to directly assess whether pupils with ASD are forming strong bonds with their non-SEN peers or whether these peers have rejected them socially, through observing how participants interact with those around them, noting body language and tone of voice. If the former has happened, this is a good indication that inclusion works. | Humphrey (2008) explains that those with ASD experience difficulties when it comes to understanding visual cues, so this can make socialising challenging. |
| 4-observe classroom routine and to | Engagement with others, body language, tone of voice, | 3 & 4 | As those with ASD struggle to cope with change, it is important to | Siegel (1996) observes that children with ASD tend to be sensitive |

| observe the reaction of pupils with ASD to changes within it | attention both pupils with ASD and non-SEN pupils pay to the task at hand. | | evaluate how those around them respond to this and tackle any challenging behaviour. Attempts will be made to observe whether the pupils with ASD cope well with transition times in the classroom, such as lesson changeover, unexpected changes of staffing or subject/topic. It will also be observed whether changes are planned or not, through elements such as visual timetables, timers | to changes in routine and often do not cope well with unexpected changes. Wragg et al. (1996) found that observations of classroom activity could be biased by teachers creating show lessons, designed to ensure that their professional position would not come under scrutiny. Observing changes in classroom routine would be a good way of ensuring that this does not happen in this study. |

			used to help a child with ASD become more aware of how much time is left to complete an activity.	
5- interactions of pupils with ASD, non-SEN pupils and teaching staff in unstructured parts of the school day	Engagement with others, body language, tone of voice, whether non-SEN pupils guide pupils with ASD at play, and the reaction of pupils with ASD to such guidance.	4	It is important to evaluate whether pupils with ASD are likely to interact with others in periods where they are not taking part in pre-planned activity.	Field (1981) noted that handicapped children tend to interact more with both handicapped and non-handicapped peers during non-structured activity.
6- interactions between pupils with ASD and teachers	Engagement with others, body language, tone of voice, extent to which pupils are	4	It is important to analyse how pupils with ASD interact with their teachers to ensure that they are being properly	Theodorou and Nind (2010) observed that pupils with ASD benefit from positive interactions with their teachers. Almasoud

	engaged with task at hand. Play by counting, for example, shopping cashier by changing the players rules with pupils. How the teacher divided her time and attention for the pupil with ASD and non-SEN pupils (positive or negative).		included in classroom activity, and if the teacher can make time to balance between the needs of pupils with ASD and non-SEN pupils.	(2010; 2011) has expressed concerns that teachers lack the training to work with pupils with ASD and that parents feel that not enough is being done to implement inclusion of pupils with ASD in Saudi Arabia's mainstream education system.
7- interactions between pupils with ASD and	Engagement with others, body language, tone of voice, extent to which	4	It will be important to consider how pupils with ASD interact with other members of staff in	Theodorou and Nind (2010) have expressed the opinion that inclusion of pupils with ASD

other members of staff	pupils are engaged with the task at hand.		general, and whether such interactions lead to successful inclusive practice.	should be encouraged through tools such as organised play. Also, see above.
8- academic interaction between teacher and pupil with ASD	How much time the teacher gives the pupil with ASD to help her during the lesson. Feedback from the teacher.	3,4	To assess Individual Education Plan (IEP), updates of plan and homework books for pupils with ASD. Progress and attainment (document review).	Theodorou and Nind (2010) observed that pupils with ASD benefit from positive interactions with their teachers. Almasoud (2010; 2011) has expressed concerns that teachers lack the training to work with pupils with ASD and that teachers lack the training to work with pupils with ASD and that parents feel that not enough is being done to implement inclusion of pupils

				with ASD in Saudi Arabia's mainstream education system.
9- academic interaction between teacher and non-SEN pupils.	How much time the teacher gives to the non-SEN pupils to help them during the lesson. Feedback from the teacher.	3, 4	To assess IEP, updates of plan and homework books for non-SEN pupils to chart child's progress and attainment (document review).	See above.
10- interactions between non-SEN pupils and teachers	Engagement with others, body language, tone of voice, extent to which pupils are engaged with task at hand.	4	Analysis of interactions between non-SEN pupils and their teachers will reveal if teachers treat pupils with ASD and non-SEN pupils differently, and if any differences in treatment are discriminatory or	Nichol (2008) states that research has found that, in general, teachers favour compliant, well-behaved pupils. Alquraini (2011) explains that negative bias still exists towards those with disabilities in Islamic countries

			not. These observations will explore what types of behaviour tend to be categorised as 'well behaved' and 'compliant' and in what ways behaviour that is typical of learners with ASD might be constructed as 'non-compliant' and disruptive.	such as Saudi Arabia for religious and cultural reasons. It will be interesting to find whether these inherent biases could lead to variations in how teachers treat pupils with ASD compared to non-SEN pupils.
11- interactions between non-SEN pupils and other members of staff	Engagement with others, body language, tone of voice, extent to which pupils are engaged with task at hand.	4	Similar to the scenario above, comparing the interactions between pupils with ASD and non-SEN pupils with other members of staff will show whether any discrimination has	See above.

			taken place and whether inclusion has been effective.	

Appendix 7: Ethical Approval

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Graduate School of Education

Certificate of ethical research approval

MSc, PhD, EdD & DEdPsych theses

To activate this certificate you need to first sign it yourself, and then have it signed by your supervisor and finally by the Chair of the School's Ethics Committee.

For further information on ethical educational research access the guidelines on the BERA web site: http://www.bera.ac.uk/publications and view the School's Policy online.

READ THIS FORM CAREFULLY AND THEN COMPLETE IT ON YOUR **COMPUTER** (the form will expand to contain the text you enter). DO **NOT** **COMPLETE BY HAND**

Your name: MAHA Binhayyan

Your student no: 600054503

Return address for this certificate: 7 Herm Close, Islewworth, London, TW7 4RH

Degree/Programme of Study: PhD

Project Supervisor(s): Jane Seale/Hannah Anglin-Jaffe

Your email address: Mahabinhayyan@hotmail.com

Tel: 07919153071

I hereby certify that I will abide by the details given overleaf and that I undertake in my thesis to respect the dignity and privacy of those participating in this research.

I confirm that if my research should change radically, I will complete a further form.

Signed: MAHA BIN HAYYAN.................................date: 5/2/2015

Chair of the School's Ethics Committee
updated: March 2013

Certificate of ethical research approval

TITLE OF YOUR PROJECT:

To what extent are children with autism included in Saudi Arabia's mainstream primary schools?

1. **Brief description of your research project:** This research based on answering four research questions which are:

To what extent are autistic children currently included in mainstream Saudi primary schools?
What are the opinions and perspectives of parents, teachers, non-SEN children and staff regarding inclusion (in particular Autistic children) in the Saudi primary schools?
What lessons can be learned from those schools which have successfully adopted inclusive practices?
What are the preventing factors and barriers to implement the totally inclusive approach to education in Saudi Arabia (particularly autistic children)?

1. **Give details of the participants in this research (giving ages of any children and/or young people involved):**

The case study will be three primary inclusive (mainstream) schools in Riyadh the capital city of Saudi Arabia, the people who will involved in this research are : teachers, auxiliary staff, head teachers, educational supervisors, non-autistic pupils, autistic pupils, parents of autistic pupils, parents of non-autistic pupils. the pupils age range from 6 years to 11 years.

For each school case study I will:

- Administer a questionnaire to: parents of autistic children, parents of non-autistic children, teachers of children with SEN, teachers of children without SEN, head teachers, auxiliary staff and education supervisors. (see attached draft questionnaires)
- Conduct an interview with: parents of autistic children, parents of non-autistic children, teachers of children with SEN, teachers of children without SEN, head teachers, auxiliary staff and education supervisors.(see attached draft interviews)
- Conduct observations of autistic children interacting with non-autistic children and teachers in a range of academic and social settings (see attached observation schedules).
- Analyse school documents that refer to the teaching/inclusion of autistic children

Chair of the School's Ethics Committee
updated: March 2013

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Give details (with special reference to any children or those with special needs) regarding the ethical issues of:

3. informed consent: Where children in schools are involved this includes both head teachers and parents). Copy(ies) of your consent form(s) you will be using must accompany this document. a blank consent form can be downloaded from the GSE student access on-line documents: Each consent form MUST be personalised with your contact details.

For the questionnaires, a brief overview of the project is given at the beginning of the questionnaire. consent is given if the participant complete the questionnaire. There is no compulsion to complete the questionnaire and non-completion is assumed to indicate dissent.

For the interviews and observations, I have created an information sheet and a consent form for participant and parents) For the children (with or without special needs) I have created a very abbreviated version and will read the information sheet as well as provide some visual (pictoral) aids. I am still working on this more accessible version but can provide a copy on request.

4. anonymity and confidentiality : The participants are not required to write their names or their contact details. All the data will be treated confidentiality and pseudonyms will be used in any reporting of the data. All the data will be saved on a protected laptop with a password, atn the end of the research the data will be destroyed.

5. Give details of the methods to be used for data collection and analysis and how you would ensure they do not cause any harm, detriment or unreasonable stress: The data collection methods are : questionnaire, interview, observation in the class room and play ground, and documents analysis. In case of the stress , if any participant feel stress they can withdraw from the research without giving a reason.

6. Give details of any other ethical issues which may arise from this project - e.g. secure storage of videos/recorded interviews/photos/completed questionnaires, or special arrangements made for participants with special needs etc.

In the interview with the autistic pupils, their parents will attend the interview with them to help aid with communication and deal with any unexpected reactions. During the observations in the class room and play ground the teachers and staff will help me to deal with autistic pupils. In addition, the simple language with some visual aids will be used to explain the research for autistic pupils. In order to reduce the stress to the autistic pupils I will familiarise myself to them by staying a long time with them in the class room, play ground and being a volunteer teacher assistant during the period of observation in the school.. I will play with them their favourite game in order to make them interact and respond to my questions easily. Usually the autistic pupils who have included in the mainstream schools have low level of difficulty in communication, but I will deal with each autistic child on a case by case basis .In addition, I will provide an information sheet about my research for all pupils.

7. Give details of any exceptional factors, which may raise ethical issues (e.g. potential political or ideological conflicts which may pose danger or harm to participants):

This form should now be printed out, signed by you on the first page and sent to your supervisor to sign. Your supervisor will forward this document to the School's Research Support Office for the Chair of the School's Ethics Committee to countersign. A unique approval reference will be added and this certificate will be returned to you to be included at the back of your dissertation/thesis.

Chair of the School's Ethics Committee
updated: March 2013

N.B. You should not start the fieldwork part of the project until you have the signature of your supervisor

This project has been approved for the period: 1.03.2015   **until:** 28.02.2016

By (above mentioned supervisor's signature):

...... ~Slade .... **date:** ....9.2.15............

*N.B. **To Supervisor:** Please ensure that ethical issues are addressed annually in your report and if any changes in the research occur a further form is completed.*

GSE unique approval reference:.......D|14|15|24.............................

Signed:..**date:**...24/2/15............Chair
of the School's Ethics Committee

GRADUATE SCHOOL OF EDUCATION

To what extent are children with autism included in Saudi Arabia's mainstream primary schools?

CONSENT FORM: participants' parents / guardians

I have been fully informed about the aims and purposes of the project.

I understand that:

there is no compulsion for my daughter / son to participate in this research project and, if s/he does choose to participate, s/he may at any stage withdraw their participation

I have the right to refuse permission for the publication of any information about my daughter / son

any information which my daughter / son gives will be used solely for the purposes of this research project, which may include publications or academic conference or seminar presentations

if applicable, the information, which my daughter / son gives, may be shared between any of the other researcher(s) participating in this project in an anonymised form

all information my daughter / son gives will be treated as confidential

the researcher(s) will make every effort to preserve my daughter's / son's anonymity

.... (Date)

(Signature of parent / guardian)

....

(Printed name of parent / guardian)

One copy of this form will be kept by the participants' parent or guardian; a second copy will be kept by the researcher(s)

Contact phone number of researcher(s): **0565511449**

If you have any concerns about the project that you would like to discuss, please contact:

Email : mahabinhayyan@hotmail.com
OR

....

* when research takes place in a school, the right to withdraw from the research does NOT usually mean that pupils or students may withdraw from lessons in which the research takes place

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GRADUATE SCHOOL OF EDUCATION

INFORMATION SHEET FOR PARTICIPANTS

To what extent are children with autism included in Saudi Arabia's mainstream primary schools

Dear [parent, teacher, head teacher, auxilliary staff]

I am studying for a doctorate at the University of Exeter in the UK. I am conducting a research project for my degree. The aim is to consider the extent to which children with autism are included in mainstream primary school education in Saudi Arabia.

What is the project about?

This research will attempt to find out to what extent are autistic children currently included in mainstream Saudi primary schools, and what are the opinions and perspectives of parents, teachers, non-SEN children and staff regarding inclusion (*in particular Autistic children*) in the Saudi primary schools. In addition the research will seek to identify what lessons can be learned from those schools which have successfully adopted inclusive practices, and the preventing factors and barriers to implement the totally inclusive approach to education in Saudi Arabia (particularly autistic children).

What will participation involve?

I am seeking to recruit a number of different participants to the study including: teachers, auxiliary staff, head teachers, educational supervisors, non-autistic pupils, autistic pupils, parents of autistic pupils, parents of non-autistic pupils, the pupils age range from 6 years to 11 years. Each participant will be asked to:

- Complete a questionnaire: this should take 15-20 minutes to complete
- Take part in an interview which should take between 30-40 minutes. This interview will be recorded to assist with data analysis.

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GRADUATE SCHOOL OF EDUCATION

- In addition, I will be observing children in the school over a period of 3 weeks. During these observations I will be making brief notes, but the children and teachers do not need to do anything different, or engage with me at all during these observations.

Withdrawing

Participation is completely voluntary. Should you wish to withdraw from the study you may request to do so at any stage. If you decide not to take part there will be no disadvantage to you of any kind

What will be done with my data?

Anonymity: Identities will be protected. When the data are analysed and reported, they will be completely anonymised so that participants' identities are protected. All activities will be conducted in accordance with the British Educational Research Association's, and the University's, ethical guidelines.

Dissemination: Ultimately, the project will be written up and submitted as a thesis for the degree of doctor of philosophy (PhD) at the University of Exeter. Further to this, data may be presented at conferences and published in academic journals and texts. Copies of these outputs will be made available to all participants upon request.

If you have any questions about the project that you would like to discuss please do contact me.

Kind Regards

Maha BinHayyan

Contact phone number of researcher(s): 0565511449
Email: mahabinhayyan@hotmail.com

UNIVERSITY OF
EXETER

GRADUATE SCHOOL OF EDUCATION

To what extent are children with autism included in Saudi Arabia's mainstream primary schools

CONSENT FORM

I have been fully informed about the aims and purposes of the project.

I understand that:

there is no compulsion for me to participate in this research project and, if I do choose to participate, I may at any stage withdraw my participation and may also request that my data be destroyed

I have the right to refuse permission for the publication of any information about me

any information which I give will be used solely for the purposes of this research project, which may include publications or academic conference or seminar presentations

if applicable, the information, which I give, may be shared between any of the other researcher(s) participating in this project in an anonymised form

all information I give will be treated as confidential

the researcher(s) will make every effort to preserve my anonymity

....
(Signature of participant)   (Date)

....
(Printed name of participant)

* when research takes place in a school, the right to withdraw from the research does NOT usually mean that pupils or students may withdraw from lessons in which the research takes place

Data Protection Act: The University of Exeter is a data collector and is registered with the Office of the Data Protection Commissioner as required to do under the Data Protection Act 1998. The information you provide will be used for research purposes and will be processed in accordance with the University's registration and current data protection legislation. Data will be confidential to the researcher(s) and will not be disclosed to any unauthorised third parties without further agreement by the participant. Reports based on the data will be in anonymised form.

Revised March 2013