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Autism in Saudi Arabia: Perspectives of parents and  
educational professionals

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By

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## **Abstract**

This study aimed to investigate the views of parents and educational professionals regarding the awareness of and the school provision for children with autism in Saudi Arabia. This study was also conducted to fill the gap in the literature concerning the awareness of and school provision for children with autism.

A mixed method was utilised in this study as data was collected both qualitatively and quantitatively. For the qualitative approach, semi-structured interviews were conducted with a total of 15 participants, specifically 10 parents and 5 senior educators. Furthermore, data was collected online from a Twitter account, where a total of 50 tweets that were relevant to the study were retrieved for research purposes. The qualitative data was analysed using coding themes. On the other hand, quantitative data was collected using a survey that was handed out to 242 educational professionals. This data was analysed using the SPSS statistical package.

The results confirm that a lack of awareness exists regarding children with autism in Saudi Arabia. Participants reported that this is a result of a variety of barriers that should be overcome in order to integrate children with autism in mainstream Saudi schools. These barriers include late or incorrect ASD diagnosis, lack of expertise in autism, lack of experience

among mainstream schoolteachers and a lack of training programme for teachers and parents alike. It is evident from the study findings that much can be done to improve the lives of ASD children and provide them with proper diagnostic services and school provision. Perhaps the most important finding of this study concerns improving societal awareness of children with autism, which was confirmed by both parents and educational professionals. In addition to this investigation, recommendations for future research were identified, such as increasing sample sizes or directly asking children with autism about their views.

# Table of Contents

<b>Abstract</b> .....	<b>II</b>
<b>Table of Contents</b> .....	<b>IV</b>
<b>List of tables</b> .....	<b>VIII</b>
<b>List of figures</b> .....	<b>IX</b>
<b>Declaration</b> .....	<b>X</b>
<b>Dedication</b> .....	<b>XI</b>
<b>Acknowledgements</b> .....	<b>XII</b>
<b>1.1 Introduction</b> .....	<b>2</b>
<b>1.2 The research context</b> .....	<b>3</b>
1.2.1 Personal motivation.....	3
1.2.2 <i>Identifying the problem</i> .....	7
<b>1.3 Literature review</b> .....	<b>9</b>
1.3.1 Brief overview .....	9
1.3.2 Gap in the literature .....	11
<b>1.4 Methodology and methods</b> .....	<b>15</b>
<b>1.5 Research aims and objectives</b> .....	<b>18</b>
<b>1.6 Study significance and outcomes</b> .....	<b>20</b>
<b>1.7 Structure of the thesis</b> .....	<b>21</b>
<b>2.1 Introduction</b> .....	<b>25</b>
<b>2.2 Background of Saudi Arabia</b> .....	<b>26</b>
2.2.1 Saudi Arabia map .....	26
2.2.2 Saudi Arabia’s legal and regulatory systems.....	29
2.2.3 Population .....	30
<b>2.3 Education system</b> .....	<b>31</b>
<b>2.4 Special educational needs</b> .....	<b>35</b>
2.4.1 Historical view.....	36
<b>2.5 Conclusion</b> .....	<b>38</b>
<b>LITERATURE REVIEW</b> .....	<b>40</b>
<b>3.1 Introduction</b> .....	<b>40</b>
<b>3.2 Definitions for this research</b> .....	<b>44</b>
3.2.1 Autistic spectrum disorder .....	45
3.2.2 Autism awareness.....	48
3.2.3 School provision (i.e. educational provision) .....	50

<b>3.3 ASD and disability .....</b>	<b>51</b>
3.4 History of autistic spectrum disorder (ASD) .....	53
<b>3.5 Prevalence and diagnosis of autism in Saudi Arabia .....</b>	<b>56</b>
3.5.1 Prevalence .....	56
3.5.2 Diagnosis.....	58
<b>3.6 Parents’ views on the Saudi education system .....</b>	<b>61</b>
3.6.1 Parental voice .....	61
3.6.2 Family perspectives regarding school provision .....	66
<b>3.7 Special educational needs and inclusion.....</b>	<b>69</b>
<b>3.8 Teacher’s attitudes toward inclusion.....</b>	<b>75</b>
<b>3.9 Theoretical perspective .....</b>	<b>81</b>
3.9.1 General System Theory.....	82
<b>3.10 Summary.....</b>	<b>86</b>
<b>4.1 Introduction.....</b>	<b>89</b>
<b>4.2 Aim of the study.....</b>	<b>90</b>
<b>4.3 Research questions .....</b>	<b>90</b>
<b>4.4 Epistemological / analogical position .....</b>	<b>92</b>
4.4.1 Ontology.....	93
4.4.2 Epistemology.....	95
<b>4.5 Mixed methods.....</b>	<b>97</b>
<b>4.6 Methods .....</b>	<b>101</b>
4.6.1 Interviews.....	103
4.6.2 Questionnaires .....	107
4.6.3 Social media.....	110
<b>4.7 Sample.....</b>	<b>115</b>
4.7.1 Twitter data.....	118
4.7.2 Interview sample.....	119
4.7.3 Survey sample .....	120
<b>4.8 Data analysis.....</b>	<b>120</b>
4.8.1 Interview analysis:.....	121
4.8.2 Twitter analysis:.....	122
4.8.3 Survey analysis: .....	122
<b>4.9 Research Authenticity .....</b>	<b>123</b>
4.9.1 Validity and reliability.....	123
4.8.2 Triangulation .....	127
<b>4.10 Ethical considerations .....</b>	<b>129</b>
<b>4.11 Summary.....</b>	<b>133</b>
<b>5.1 Introduction.....</b>	<b>135</b>

<b>5.2 Twitter data .....</b>	<b>137</b>
5.2.1 ASD awareness .....	141
5.2.2 ASD diagnosis .....	149
5.2.3 School provision .....	153
5.2.4 ASD training programme for parents.....	156
5.2.5 General feedback.....	158
<b>5.3 Interviews with parents .....</b>	<b>161</b>
5.3.1 Background of the parent’s sample.....	163
5.3.2 Stories of diagnosis.....	165
5.3.3 Awareness .....	167
5.3.4 Parents’ views on school provision.....	169
5.3.5 Additional themes that arose in the interview data.....	172
5.3.5.1 <i>Fatigue and advice to other parents</i> .....	172
5.3.5.2 <i>Fear of the future</i> .....	174
5.3.5.3 <i>Siblings</i> .....	175
5.3.5.4 <i>Diet and medicine</i> .....	175
<b>5.6 Conclusion .....</b>	<b>176</b>
5.6.1 Twitter account data.....	177
5.6.2 Interview data .....	179
<b>6.1 Introduction:.....</b>	<b>182</b>
<b>6.2 Survey analysis.....</b>	<b>184</b>
6.2.1 General information: .....	185
6.2.2 Knowledge of autism results in the questionnaire.....	193
6.2.3 Belief scale results .....	195
6.2.4 Teachers’ opinion: .....	197
6.2.4.1 <i>Lack of awareness and experience</i> :.....	199
6.2.4.2 <i>Attitude toward inclusion</i> .....	202
6.2.4.3 <i>Professional’s suggestions</i> .....	205
<b>6.3 Senior educational semi-structure interviews .....</b>	<b>208</b>
6.3.1 Interviewee positions and experience.....	209
6.3.2 Inclusive practice on in Saudi Arabia .....	211
6.3.3 Views regarding awareness of autism on Saudi Arabia .....	215
<b>6.4 Conclusion .....</b>	<b>216</b>
<b>7.1 Introduction.....</b>	<b>218</b>
<b>7.2 Summary of the main findings.....</b>	<b>221</b>
<b>7.2 Key study results for consideration in Saudi Arabia .....</b>	<b>223</b>
7.2.1 Reality of awareness of autism .....	225
7.2.1.1: <i>Lack of awareness</i> .....	225
7.2.1.2 <i>Impact of a lack of ASD awareness</i> .....	229
7.2.2 Diagnosis centers .....	234
7.2.2.1 <i>Improved diagnosis services needed</i> .....	235
7.2.2.2 <i>Avoiding incorrect diagnoses</i> .....	238
7.2.2.3 <i>Possible resistance to receiving a formal diagnosis</i> .....	240
7.2.2.4 <i>Leaving the country to receive a diagnosis</i> .....	241

<b>7.3 Philosophical beliefs in and practical approaches to inclusive education .....</b>	<b>243</b>
7.3.1 School provision for children with autism in Saudi Arabia .....	244
7.3.1.1 <i>Inclusive practices</i> .....	245
7.3.1.2 <i>Segregation of schools by gender</i> .....	250
7.3.2 Parents’ and educational professionals’ views regarding inclusive education.....	252
7.3.3 Lack of experience among mainstream school teachers .....	256
7.3.4 Lack of training programme for both parents and teachers .....	259
<b>7.4 Conclusion .....</b>	<b>262</b>
<b>8.1 Introduction.....</b>	<b>265</b>
<b>8.2 Research framework .....</b>	<b>266</b>
<b>8.3 Summary of the main research findings .....</b>	<b>268</b>
<b>8.4 Contribution to knowledge .....</b>	<b>271</b>
8.4.1 For the education sector .....	272
8.4.2 For data collection methods .....	272
8.4.3 For society .....	273
<b>8.5 Study implications and recommendations.....</b>	<b>274</b>
<b>8.6 Study limitations and future suggestions.....</b>	<b>277</b>
8.6.1 Study limitations .....	277
8.6.2 Future recommendations .....	280
<b>8.7 Summary of the thesis .....</b>	<b>280</b>
<b>References.....</b>	<b>283</b>
<b>Appendix A.....</b>	<b>306</b>
<b>Appendix B .....</b>	<b>307</b>
<b>Appendix C .....</b>	<b>314</b>
<b>Appendix D.....</b>	<b>318</b>
<b>Appendix E .....</b>	<b>319</b>
<b>Appendix F .....</b>	<b>323</b>
<b>Appendix G.....</b>	<b>325</b>
<b>Appendix H.....</b>	<b>330</b>
<b>Appendix I .....</b>	<b>335</b>
<b>Appendix J.....</b>	<b>337</b>

## List of tables

Table 2.1 Population of Saudi Arabia.....	29
Table 5.1 Background of parents interviewed.....	163
Table 6.1: Level of education .....	185
Table 6.2: What is the gender of the school?.....	186
Table 6.3: What is your dominant teaching field?.....	188
Table 6.4 Have you participated in any specific training programmes for special educational need.....	195
Table 6.6 Knowledge of autism .....	197
Table 6.7 Knowledge of autism according to the school gender... 200	
Table 6.8 Senior Educator .....	209

## List of figures

Figure 2.1 Map of Saudi Arabia 1.....	25
Figure 4. 1 System Theory 1.....	83
Figure 4.2 Twitter account.....	115
Figure 5.2.1 Example 1 .....	142
Figure 5.2.2 Example 2 .....	142
Figure 5.2.3 Example 3 .....	147
Figure 5.2.4 Example 4 .....	147
Figure 5.2.5 Example 5.....	158
Figure 5.2.6 Example 6 .....	159
Figure 6.1: Educational attainment .....	183
Figure 6.2: Teaching fields .....	184
Figure 6.4: Dominant teaching fields .....	189
Figure 6.5 Training programme .....	190
Figure 6.6 Have you had student in class .....	192
Figure 6.7 Gender of school .....	193
Figure 6.8 Lack of knowledge.....	194

## **Declaration**

I confirm that this is my own work and the use of all material from other sources has been properly and fully acknowledged.'

Manar Alarfaj.....

## **Dedication**

I dedicate this work to all children with autism spectrum disorder and their parents...

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# CHAPTER ONE: INTRODUCTION

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## **1.1 Introduction**

This study examines Autistic Spectrum Disorder (ASD), specifically autism, focusing on the views of parents and professionals on their awareness of and the school provision for children with autism in the Kingdom of Saudi Arabia (KSA). This introduction broadly outlines the chapters within this thesis and presents all the aspects covered by this research. It then clarifies the research context and the author's personal motivations. In addition, it identifies the problem of interest and gaps in the existing literature. Moreover, a brief literature review and a description of the methods used in this study are provided, and the aim of the thesis, its scope, and its intended outcomes are introduced. Finally, an outline of the structure of the thesis clarifies how this thesis is organised.

For this study, the researcher conducted interviews with parents and educational professionals to investigate the social phenomena related to children with autism, in particular how context informs what and how educational professionals and parents know. The thesis surveys the current

knowledge concerning children with autism in Saudi Arabia, Riyadh in particular, and covers existing literature in terms of school provision. Research data was collected from the parents of children with autism and from the perceptions of education professionals working in mainstream schools and at the Saudi Ministry of Education in its special educational needs department. The study also analysed and discussed the collected data and provided a conclusion and recommendations.

## **1.2 The research context**

### **1.2.1 Personal motivation**

The researcher has held an increasing interest in special educational needs, particularly in educating children with autism, since completing her undergraduate degree. Throughout her studies, she has noticed that autism is hardly known in Saudi Arabia, especially as special education is a relatively new area of study in Saudi Arabia, and very few graduates study special needs education. Since 2003, very few students have specialised in studying autism. Moreover, since 2003, not all fields of learning support have been offered for study as most fields of study that were available at that time concerned working with those with Downs Syndrome, the deaf, the blind, and those with learning difficulties. In addition, it appears that few people

are aware of the importance of this area and the specialties within it, as well as the need for more graduates who study special needs education. Consequently, the families of children with special needs struggle to find assistance for themselves and their children. Typically, parents seek a diagnosis and early intervention, as well as accessing their child's right to an education by finding suitable schools or centers. Recently, some private schools have opened in KSA that specialise in supporting children with special needs. However, these are costly options, and middle-class families cannot necessarily afford to send their children to these schools. This was difficult for the researcher to come to terms with, as it is difficult to see families of children with disabilities struggling to find support.

More importantly, the potential reason behind choosing this topic is the researcher's cousin who has ASD and is struggling immensely, especially as those around her are unable to understand why she is different and how to act around her. The researcher discovered that her cousin requires help and that her differences made her special. Therefore, the researcher decided to study special needs education and upon completing the first semester, discovered that her cousin has a different attitude and different way of thinking. However, it appeared that people do not know exactly why she is

struggling, especially with strangers and schools. At a late stage, her parents discovered autism and they felt that their daughter displayed the same symptoms and decided to seek a diagnosis. This was the most difficult experience that my aunt and her husband faced at that time especially due to their lack of awareness and knowledge of autism. This is the researcher's personal experience, but it is unknown whether it is limited to my own experience or if it is a widespread issue.

Subsequently, the researcher completed a Master's degree on the subject of inclusive education, which led to the discovery of a lack of awareness about children with autism in KSA, especially among teachers working in mainstream schools. The author's Master's dissertation was conducted in Riyadh, and investigated teachers' attitudes towards inclusion. The findings of this study highlighted multiple concerns of teachers working in mainstream schools with respect to the inclusion of children with disabilities (Alarfaj, 2012). These concerns related to the nature of these disabilities, training programmes and to the support and resources available. The issue that arose from the researcher's Master's research encouraged her to further study whether or not teachers are aware of children with autism and their views regarding school provision for those children. In particular, the

researcher wanted to determine if teachers are aware of the needs that children with autism have.

Due to interest in this area, the researcher also follows Twitter accounts relating to children with special needs, especially autism. The majority of these accounts are created by parents or special education teachers and reflect an interest in special needs education or autism, in particular within Saudi Arabia. Some accounts include biographical information, i.e. some account holders may have a child with autism. Frequently, parents with these accounts tweet about their concerns and express a need to provide a good quality of life for their children. Additionally, these parents also mention how lack of awareness of autism affects life with their children. Parents also pose many questions on these accounts about diagnosis and the value of early intervention, with the aim of receiving answers from specialist educators or sociologists. Another commonly raised query on these accounts relates to the value of children with autism attending private schools and preferences for inclusion.

These exchanges have drawn the researcher's attention to this area and have highlighted the importance of trying to combine both parental and

professional perspectives in exploring the awareness of and school provision for children with autism in Saudi Arabia.

The following section identifies the problem central to this research and the research gap that this study will address.

### **1.2.2 Identifying the problem**

Based on the data collected from Twitter, the researcher recognised that, of the many concerns parents expressed, awareness of autism and appropriate provision in schools were the most predominant. Lack of awareness in schools may also commonly result in late diagnoses and make it difficult for parents of children with autism to find help and to allow for early intervention.

For several years, children with autism have been recognised as a group requiring school assistance in developing countries (Ozand, et al., 2033). This research identified an ongoing need to improve the services available in KSA as the number of children diagnosed with autism is increasing worldwide. According to Bishop, Whitehouse, Watt, and Line (2008), the rate of autism diagnoses has risen remarkably, especially in the past three

years. As a result of this increase, some researchers have argued that children with autism and their parents should receive immediate and extensive support services (Dardas & Ahmad, 2014). Furthermore, Park and Chitiyo (2011) highlighted the need for increased attention from the public towards children with autism, as a result of promotional activities initiated by governments and non-governmental organisations. This growth in interest emphasises the benefits of conducting a study at this time to attain an understanding of the scope of autism awareness in Saudi Arabia. This understanding may in turn lead to increased awareness and educational services and may benefit society by furthering an understanding of children with autism.

Awareness of and school provision for children with autism is a key issue that the researcher has identified for exploration. Thus, this study explored the opinions of parents and the challenges they face. In addition, this thesis explored the level of parental awareness, and that of society, and how this affects both their lives with their children and school provision, such as whether parents choose to educate their children privately or in mainstream schools. The research also highlighted teachers' perspectives, and the Saudi

Ministry of Education's view and plan, in order to understand and improve the situation.

The following section details how this study will address a gap in the existing literature.

## **1.3 Literature review**

### **1.3.1 Brief overview**

Autism and related conditions cannot be diagnosed using medical tests. Therefore, diagnosis of these complex disorders still relies on behavioral features defined by classification systems such as the DSM (Diagnostic and Statistical Manual; American Psychiatric Association) and the International Classification of Diseases (ICD; World Health Organization) (Vivanti et al., 2013, p. 258).

Much controversy exists concerning the lately proposed comprehensive category of Autism Spectrum Disorder (ASD), which includes previously distinct disorders, such as Asperger's syndrome, autism disorder, and pervasive developmental disorder (Bedrossian, 2012). With the exception of high-functioning individuals, such as those with Asperger's syndrome, this revised definition was intended to limit the number of behaviours that must

be present to justify a diagnosis of autistic disorder (Etcarr, 2012). However, despite disputes surrounding this term, it is necessary to acknowledge that the current definition of autism may have influenced a level of awareness of ASD in Saudi Arabia and worldwide (Matson & Kozlowski, 2011). A key issue that is raising some apprehension is that changes in diagnostic definitions could influence our ability to monitor changes in autism prevalence rates over time (Vivanti et al., 2013). However, as reasons for the apparent current increase in autism prevalence are still under debate, the introduction of more stringent criteria may allow for a more rigorous test of changes in prevalence (ibid). These may serve to better define ASD and how it may affect the level of awareness of children with autism.

Moving to the idea of school provision for children with autism, it should be noted that the 1994 signing of the Salamanca Statement (UNESCO, 1994) marked an international commitment to offer inclusive education for all children in mainstream schools. Therefore, to explore the realisation of this commitment in this study, the researcher concentrated on school provision for children with autism in Saudi Arabia to find out if these children attend mainstream schools. Looking at the latest global studies, in England, along with legislation against discrimination on the grounds of disability,

successive policies have been established to help school administrators plan and provide for the inclusion of these amendments to allow all children to receive an education (Glazzard, 2013). Elsewhere, the development of mainstream schools, which have a higher proportion of children with special educational needs, has been discussed in the literature review chapter.

The following overview of the literature outlines the gap the researcher has found in the literature.

### **1.3.2 Gap in the literature**

The difficulties and challenges of diagnosing children with autism in Saudi Arabia is one of the major issues raised in the literature (Almasould, 2011). In addition, late diagnosis of children with autism in Saudi Arabia can affect the lives of parents and children and delay early interventions. Moreover, the trend towards delayed intervention in Saudi Arabia is also speculatively in part because of limited access to services. As a result, sufficient diagnosis and assessment processes to determine the eligibility of students for special education and related services are not yet meeting demand in the KSA (ibid). Furthermore, there are a limited number of qualified professionals specialising in supporting children with ASD and autism, so parents are often unsure of where to go to find specialist doctors and therapists and are

reluctant to ask teachers for help. This intensifies the concern and distress among Saudi parents that is often associated with delays in diagnoses.

The literature review in Chapter 3 presents evidence that a diagnosis of autism remains a significant problem in the Western world and Arab countries, which might in part be explained by the changing definitions of and criteria for children with autism. The researcher made these assumptions based on her Masters dissertation and the limited research published about this topic in Saudi Arabia. Thus, it can be asserted that contemporary awareness of autism in Saudi Arabia is very low and only in the very early stages of development (Alquraini, 2011). As a result, the lack of knowledge about autism can result in undiagnosed children with autism attending mainstream schools without support, which suggests that their particular learning needs are not being met. Moreover, anecdotal evidence from the Twitter accounts reports the negative societal repercussions that often exist for families who have children with autism, as they tend to be more dependent than other disabled children. Consequently, the need to improve awareness of children with autism is vital, especially in mainstream schools (Almasould, 2011) and society more generally.

Briefly, another gap found in the literature in KSA concerns the fact that parents' lives can be affected in many different ways when they have a child with autism. In addition, caring for such children can be very difficult and demanding. Bader and Barry (2014) argue that families experience unique challenges when their children have autism, which can result in unmanageable behaviour that may be dangerous or aggressive. Therefore, it is necessary to teach parents adaptive skills and how to best support their child. Moreover, having a child with autism can disrupt family life and result in a number of economic, social, psychological and physical difficulties. However, having a child with autism does not inevitably have a negative effect on a parent's life (Byrne, 2013). This issue should be evaluated in context, as some researchers suggest that children with disabilities can engender feelings of shame and guilt, particularly in Arab societies (see chapter three section 3.5.1). Interestingly, a review of literature in this area revealed that Omani families that have children with autism are likely to prefer to go abroad in search of a good diagnosis and early intervention (Al-Farsi, et al., 2012). The need for early diagnoses and increased awareness among health professionals of the nature and impact of developmental problems in young children with autism is an important issue that parents have raised in such studies. Thus, the aim of this study is to explore the

issues that affect children with autism and their families, and to contribute to the literature regarding children with autism in Saudi Arabia.

In terms of school provision, which is the second focus of this study, 60% of these children live at home and do not regularly attend school (Almasoud, 2011). This is, in part, due to the barriers in offering inclusive education, which include teachers' attitudes, common curricular constraint in the educational system, educational issues and conceptualisation of teachers' and pupils' roles within the system. However, another study concluded that the provision of services for those with "special educational needs" in Saudi Arabia has recently experienced a period of dramatic improvement (Al-Ajmi, 2005) not necessary for children with autism.

However, the inclusion of students with disabilities is still in its initial stages in Saudi Arabia. As a result, this thesis highlights the gaps in school provision for children with autism, in particular the extent of the changes necessary to meet the Saudi legislative requirement of "education for all" which state in the Salamanca agreement that Saudi Arabia has signed in. In addition, the Literature Review (see Chapter three, section 3.7) identified the fact that teachers' views on inclusion and their overall attitude toward

children with disabilities seems negative (Abed, et al., 2014). This might result from a general lack of awareness and knowledge regarding children with disabilities and how they can be provided for in the context of education.

A summary of the literature review and the gaps in the research was discussed here and the complete Literature Review can be found in chapter 3.

## **1.4 Methodology and methods**

This section summarises the methods pursued to address the research gaps identified in the literature review. For this study, the researcher adopted a mixed methods approach to accomplish the research aims. While many books and articles discuss this approach, one of the most prominent scholars on this topic is Creswell (2014, p. 3), who explains that the application of a mixed methods approach in research begins when “a study tends to be more qualitative than quantitative or vice versa”, and that its selection depends on the research questions. According to Johnson, Onwuegbuzie, and Turner (2007, p. 113), “mixed research...starts with researchers and methodologists who believe both qualitative and quantitative viewpoints and

methods were useful as they addressed their research questions”. However, the most fundamental aspect of any research project is that research methods should be identified that enable a thorough examination of its research questions (Johnson & Onwuegbuzie, 2004). Several definitions of the use of mixed methods exist in the literature. In general, this term is defined as “empirical research that involves the collection and analysis of both qualitative and quantitative data” (Punch, 2009, p. 288). An important point should be made that mixed methods research approaches are becoming increasingly popular, primarily because they can yield a more complete understanding of research problems (Molina-Azorin, 2012).

Moreover, mixed methods approaches are appropriate when neither quantitative nor qualitative methods alone can wholly capture the trends and details of the phenomenon under study when employed independently (Creswell, Fetters, & Ivankova, 2004). However, the methods employed must be free from analogical and epistemological assumptions, and decisions about which methods to use at what point in a given research design must be directed by the research questions (Lieberman, 2005). The potential benefits of mixed methods research include that they allow for comprehensive findings, increase confidence in results, increase the validity

of conclusions, and offer a more insightful understanding of the phenomena underlying an investigation.

In order to collect a sufficient amount of data, quantitative methods were used in this study to investigate the opinions of both parents of autistic children and educational professionals about the awareness of and school provision for children with autism in Saudi Arabia. These research methods were employed with the intent of capturing the knowledge of parents of autistic children and educational professionals.

Before concluding this section, it is important to explain that three methods were used in this research that combined qualitative and quantitative methodologies. The first method, a qualitative one, is a research interview. The researcher carried out five interviews with educational professionals working in the Saudi Ministry of Education's special education department and 10 interviews with parents of children with autism. The second method employed in this research, a quantitative method, was obtaining survey data. The researcher collected 242 surveys from teachers working in mainstream schools. The third method used was a qualitative method, namely data collection via social media. In this case, a Twitter account was set up as an

online access point to allow the researcher to tweet questions and gather responses from families. A detailed explanation of the choice of research methodology and methods and the data analysis process is outlined in Chapter 4.

## **1.5 Research aims and objectives**

The aim of this study is to understand the phenomenon of autism and its impact on parents as well as professionals. Moreover, families of children with ASD do not have a voice so this study aims to give them a voice to share their feelings and views, and to fill the gap in literature. It was also noticed that most of the existing literature is very much about countries other than Saudi Arabia and about professionals' views, not families. Therefore, conducting a study about ASD in Saudi Arabia will fill this gap and will help in the decisions-making processes undertaken by the government concerning school provisions for children with autism.

Research into educational provision for children with autism in Saudi Arabia is uncommon (Abed, et al., 2014), which has resulted in a large gap in the literature. In order to have a better understanding of the education system in Saudi Arabia in terms of provisions for children with autism, it is necessary

to examine what is happening in practice in KSA by seeking the views of teachers and parents about their children's education. Therefore, the aim of this thesis is to investigate the views of educational professionals and families regarding awareness of and school provision for children with autism in Saudi Arabia.

For this research, educational professionals such as teachers, head teachers, deputy head teachers and social workers were asked about their views, knowledge and attitudes regarding the presence of children with autism in their schools. Parents of pupils with autism were also asked to share their views, thoughts, awareness and experiences regarding their children's schools.

These research aims led to the development of multiple research questions, which are:

1. What do parents and educational professionals feel are the barriers to and enablers of effective educational provision for children with autism in Saudi Arabia?
2. How do parents and educational professionals feel about the general awareness of autism in Saudi Arabia?

3. What do parents and educational professionals feel are the barriers to and enablers of achieving a diagnosis of autism in Saudi Arabia?
4. What other factors do parents and educational professionals feel are the barriers to and enablers of the provision of education for children with autism in Saudi Arabia?

Thomas (2013) argued that research questions can be examined from different perspectives. The following section discusses the perspectives obtained during this research.

## **1.6 Study significance and outcomes**

This section briefly summarises the context of the study and introduces the reader to the thesis. One important assumption in this study is that a lack of awareness exists in Saudi Arabia regarding children with autism. The researcher discovered this assumption during her Masters dissertation (Alarfaj, 2012) and through social media outlets, such as the researcher's Twitter account. This study intends to further explore the assumption that while some organisations are working on improving the awareness of autism in Saudi Arabia, this process is still in its early stages and there is a lot to be done.

Another significant outcome of this study is the opportunity to observe the views of parents and practitioners on school provision for children with autism. Research in this area is widespread in the United States and Europe but is very limited in the Gulf region and Saudi Arabia specifically, where the legislation of inclusion practices is being developed. My informal feedback from parents highlights that this is a major barrier that parents face. Parents and practitioner's views on the availability of support in specialist centres and clinicians to diagnosis these children are also explored in this study.

## **1.7 Structure of the thesis**

In addition to this introduction, the researcher structured this thesis into seven further chapters. This chapter (Chapter one) covered the aims of the thesis; its research questions, literature review, methodology and methods employed and briefly outlined each of its chapters.

Chapter 2 provides an overview of Saudi Arabia in general and the Saudi education system in particular. This is crucial, because the research context for this study is Saudi Arabia, and thus its educational system is one of the

most important aspects. Moreover, the chapter addresses Saudi educational districts and schools and a clear vision of the comprehensive aims of special educational support in Saudi Arabia.

A review of relevant literature is presented in Chapter 3. This review defines the most important aspects of this research, including definitions and classifications of ASD, its awareness and its provision in schools. In addition, it discusses a brief history of autistic spectrum disorders, and addresses the prevalence and diagnosis of autism both in Saudi Arabia and worldwide. As parents can be significantly affected by having children with autism, their views on the education system are also discussed. The idea of including children with autism in mainstream schools is essential to this research, because its aim is to examine awareness and school provision for children with autism in these schools. Finally, teachers' attitudes towards inclusion and the theoretical perspective are addressed in the literature review.

Chapter 4 covers the research methodology and methods employed in this thesis and provides the rationale of the study design. The chapter also includes the epistemological and analogical positions adopted in this study.

In addition, the chapter discusses the choice of a mixed methods research design, how researchers choose their methods, and the research sample targeted in this study. The chapter also explains the data analysis process and its ethical considerations.

Chapter 5 illustrates the data analysis from the perspective of parents of children with autism and draws on the interviews conducted with parents and comments made on the Twitter account used in this study.

Chapter 6 analyses the data collected from surveys and interviews with professional educators working in the Saudi Ministry of Education.

The most important chapter of this thesis is the discussion, Chapter 7. This chapter begins with an introduction, summarises the main findings and then highlights issues that were discovered in this study. The chapter continues with a discussion of select philosophical beliefs and their inclusive and practical application. The chapter ends with a conclusion section.

In the final chapter, Chapter 8, the researcher discusses the contribution of this research to the body of knowledge, principal research findings, research

conclusions, recommendations, research limitations, and suggestions for future research.

# CHAPTER TWO: Background of Saudi Arabia

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## **2.1 Introduction**

This chapter discusses Saudi Arabia in general and its education system in particular. While this study was conducted in Saudi Arabia, this thesis will be examined in the UK, so it is useful to provide some background about the place of interest. Moreover, the researcher believes that because this study explored the views of parents and educational professionals, it was also valuable to provide a sense of Saudi cultural, legal, educational and regulatory systems and of the Kingdom's population. This background could be helpful for the reader in determining if these factors had any influence on the views of the participants.

The Kingdom of Saudi Arabia (KSA) is one of the most culturally conservative Muslim countries in the world. However, because Saudi Arabia is also one of the wealthiest and politically and economically influential nations, it has one of the most distinctive existing cultures (Hein, Tan, Aljughaiman & Grigorenko, 2014). For this reason, this chapter describes

Saudi Arabia in terms of its geography, population, legal, regulatory and education systems. Special educational needs will also be discussed in this chapter to clarify the context in which the research is grounded.

## 2.2 Background of Saudi Arabia

### 2.2.1 Saudi Arabia map



**Figure 2.1 Map of Saudi Arabia**

Saudi Arabia comprises nearly 2,250,000 square kilometers, or 868,730 square miles. To its East lies the Arabian Gulf, and to its West the Red Sea. The United Arab Emirates, Qatar and Bahrain border Saudi Arabia on the

East, and it borders Kuwait, Iraq and Jordan on the North and Yemen and Oman on the south. As the largest country in the Middle East, the KSA occupies four-fifths of the Arabian Peninsula and is similar to Western Europe in area.

Desert and semi-desert regions comprise about 95% of the Kingdom. The most verdant land in Saudi Arabia is its Red Sea coastline, and there are many mountains and forests in its Southwestern corner. A narrow coastal plain extends through the Kingdom's Western coast, and a mountain range runs parallel to this plain along the Red Sea. Along the Arabian Gulf is a low-lying area called Al-Ahasa. Saudi Arabia's Western mountains contain large deposits of limestone, gypsum and sand, and its Eastern area has the richest reservoirs of oil in the world.

In terms of religion, the most important impact of Saudi Arabia is that the last and greatest prophet of Islam, Mohammed (PBUH), was born there in AD 570. Over the next 150 years, Islam grew from Saudi Arabia and spread all over the world. Today, millions of global pilgrims come to visit the holy cities of Makkah and Madinah to perform religious observance. This gives Saudi Arabia great political influence, particularly with Muslims around the

world. In addition, Islam is the main cultural foundation for Saudi citizens and as such influences their attitude and personality.

Saudi Arabia is also considered the main economic influence in the Middle East, as it has played an important part in international trade for centuries due to its strategic location near sea trade routes utilised to transport goods from India and China to Europe. Historically, primary shipping goods included incense, spices and myrrh, which were used in medicines and cosmetics and were common to ancient inhabitants of the Arabian Peninsula.

Oil was discovered in Saudi Arabia in 1936, and by 1950, the Kingdom had become a major oil producer. Today, Saudi Arabia has an estimated 25% of the world's oil reserves and is considered a leader of the international oil industry. Its oil revenues are used to diversify its economy, reclaim land from the desert and construct basic infrastructure such as roads, telecommunications systems, urban areas, hospitals, and power stations. However, all of these systems require further development. In December of 2005, the Kingdom became the 149th member of the World Trade Organization (WTO). Moreover, Saudi Arabia has begun opening its economy to the rest of the world.

This information summarised Saudi Arabia in terms of its geography and politics, and how both influence the culture of the country, public opinion, and daily life. The following section covers its legal and regulatory systems and how these affect the cultural life of the nation.

### **2.2.2 Saudi Arabia's legal and regulatory systems**

Saudi Arabia's judicial structure is based on the four schools of Islamic law: the Hanbali, Shafii, Hanafi and Maliki schools. Saudi lives are structured according to the Shari'a, or Islamic law, along with the broader cultural values of patriarchy and traditional gender-specific customs, including gender segregation outside of the home (Hein, Tan, Aljughaiman and Grigorenko, 2014). Historically, before the Saudi judicial system was unified, its courts and individual judges derived their legal judgments from these four schools. In the Western part of the Kingdom, two schools of thought dominated – the Hanafi and Shafii – while in the central region, the Hanbali school was the only major source of legal guidance. Today, Saudi courts issue their rulings according to the Holy Qur'an and the Sunna, or the practices of the life of the Prophet Mohammed (PBUH) and are guided

without being limited to the specific principles of any of the aforementioned schools of law.

It should be noted that the Islamic religion influences the life of people who follow Islamic rules in many different ways, the most important of which concern marriage and raising children as this study concentrates on the life of children with autism and their parents and the views of educational professionals.

### 2.2.3 Population

Year	1985	1999	2004
Population	13 million	21 million	22.7 million

Table 2.1 Population of Saudi Arabia

Saudi Arabia's population growth rate is 3.24%, which ranks among Arab countries between the lowest growth rate (Kuwait, at 2%), and the highest (the UAE, at 5.84%). The Kingdom's growth rate ranks higher than the global average of Arab countries of 2.37%. Saudi Arabia's high birth and low mortality rates are the result of dedicated and intensive efforts towards health care. In 2004, over 22 million people lived in Saudi Arabia

(Alquraini, 2011) and as of 2013 this number increased to 28 million (Yearbook, 2013).

Saudi nationals comprise 72.9% of the Kingdom's population, of which 50.1% are male and 49.9% are female. Immigrants make up 27.1% of the population, a total of 6 million people, of whom 69.5% are males and the remainder females. This general information about Saudi Arabia provides an overview about the nation in which this study was conducted.

The following discusses the Saudi education system covering the background and code of practice, then special educational needs.

## **2.3 Education system**

Historically, the Saudi educational system is grounded in what Prophet Mohammad established in Makkah in the 7th century, which is a seat of learning (in Arabic, *madrasah*, a place to learn all kind of things, but in the context of or with an emphasis on Islamic studies) (Aljughaiman and Grigorenko, 2013). Moreover, according to historic documents, this tradition later differentiated into *kuttabss*, Islamic schools held in mosques to study the Qur'an that existed in the Western region as early as the 7th century, and

*maktabs*, small local schools described first by Ibn Sina in the 11th century (Asimov and Bosworth, 1998; Rugh, 2002b; Wynbrandt, 2010). Notably, some of these early schools admitted girls as well as boys. Today, the Saudi educational system is based in Islamic behaviour, regardless of subject (Aljughaiman and Grigorenko, 2013). As a result, Saudi students should be strong believers who follow Islamic rules and norms in order to contribute to the Saudi community socially and culturally (Al-Sadan, 2000).

Saudi Arabia's educational system consists of 24 government universities and approximately 24,000 schools, as well as a large number of colleges and educational and training organisations. The system is open to everyone nationally and provides students with free education, books and health services. The government allocates over 25% of its education budget to vocational training and spends around 13.17 billion USD annually on elementary education and research. All education is free for Saudi nationals, and private schools are available for children of foreigners working in the Kingdom. These international schools offer programs for children up to the age of 14, and some foreign schools for children up to the age of 16.

As stated earlier, Saudi Arabia is a segregated society, which means gender-related values and practices affect many aspects of Saudi life, such as interpersonal relationships, education, and employment. The Saudi education system, for example, is segregated into single gender schools, with same gender teachers and slightly different curricula, in which the male curriculum is more rigorous than the female curriculum (Baki, 2004; Hamdan, 2005). It should be noted that preschools are the only educational institutions that are not segregated, but preschool staff are all women.

As with many countries, the Saudi education system is divided into three main levels: primary (6-12 years of age, 6 grades), secondary (12-15 years of age, 3 grades) and high school (15-18 years of age, 3 grades). These three levels are compulsory and free. Students can begin preschool at age 3, but there are very limited governmental nurseries compared to schools. To clarify, there are many primary, secondary and high governmental schools but nurseries are very limited. Saudi university students begin at the age of 18, and the number of years studying depends on the major (Aljughaiman and Grigorenko, 2013). Generally, the Saudi education system comprises of 24 state and 16 private universities, over 100 colleges and similar institutions, and more than 30,000 schools (Alarfaj, 2011). Yet, as of 1996,

enrollment ratios in Saudi schools were relatively low, and stood at 76% for primary schools, 61% for secondary schools, and 16% for high schools (Prokop, 2003). Education in the Kingdom is compulsory for children aged 6 to 15 and includes free tuition, textbooks and health care (Faraj, 2005). Characteristic teaching and lecturing styles focus primarily on memorisation (Basamh, 2002; Merebah, 1987), and Saudi schools use a unified curriculum, with textbooks issued and managed by its Ministry of Education. As a result, attempts at educational innovation are centralised, such as those to diversify teaching methods in Saudi classrooms (Ministry of Education, 2008).

It should be highlighted that a large part of the Saudi state budget annually, totaling 24% in 2012, is invested in education (Pan-Arab, 2012). To compare, in 2007, Saudi Arabia's public education expenditures comprised of 6.4% of its GDP, whereas the corresponding number was 5.5% for the United States and the United Kingdom and 0.7% for the United Arab Emirates (World Bank, 2012b). This investment is justified in part by the growing Saudi working-age population, which is estimated to increase from nearly 4 million in 2004 to 8.26 million in 2020 (Prokop, 2003).

It must be clarified that the Saudi educational system is based on religious beliefs dominated by the Islamic code of conduct, which appears in all its affairs. Thus, it is not possible to explain Saudi educational policy without referring to such beliefs. It is essential to realise that Islam accords education a very high position, and that education and religion are seen as indivisible aims of education policy. Furthermore, the respect for those included the education system has its basis in religion. According to the Islamic law issued in the Kingdom, girls' and boys' education is compulsory, and is segregated with respect to school facilities and teaching staff.

## **2.4 Special educational needs**

In order to increase the efficiency of Saudi government schools at a high educational level, consideration of special needs students should be gradually implemented for boys and girls at all three educational levels, as well as in the management and operation of illiteracy and adult education programs and special needs classes. Saudi teachers who work in special education programs or institutes primarily use the term 'special education teacher', as most of these educators have degrees in special education. Moreover, Alnahdi (2014, p.85) found that the "terms 'general teachers' or 'general education teachers' are used with respect to teachers who majored

in subjects other than special education and work in schools that have special education programs but who are not involved with these programs.”

#### **2.4.1 Historical view**

In the 1960s, special education programmes officially began in Saudi Arabia when its Ministry of Education opened the nation’s first school for students with visual impairment in Riyadh (Althabet, 2002). Since then, special education has received increased attention from the government. As a result, “the Ministry of Education established a General Directorate for Special Education (DGSE) in 1974, which was responsible for planning and improving special education programs in the country” (Al-Ajmi, 2006, p.66). Therefore, the number of schools with special education classes quickly increased when the Ministry began integrating students with disabilities into mainstream schools by designating certain classes to be utilised for students with disabilities. This change, which occurred in the late 1990’s, is considered to be one of the turning points in the history of special education in Saudi Arabia. For instance, special education provision for male students increased from 38 programs and institutes serving 5,208 students in 1994-1995 to 2,047 programs and institutes serving 46,514 students in 2004-2005 (Al-Mousa, 2007). This rate of growth indicates an

increase of almost 53 times, with the number of male students with disabilities receiving special educational services increasing almost nine times over 11 years. In addition, special education programs for female students increased from 18 programs and institutes serving 2,517 students in 1994-1995 to 530 programs and institutes serving 10,651 students in 2004-2005 (Al-Mousa, 2007), an increase of almost 29 times, with a fourfold increase over 11 years (Alnahdi, 2014). Furthermore, in 2011, Saudi Ministry of Education figures showed that more than 18,000 students with intellectual disabilities received special education services from approximately 4,500 special education teachers across the country in that year (ibid).

Clearly, much progress has been made along many fronts in Saudi Arabia, including increased rates of economic activity, more infrastructure projects, and manufacturing and public health achievements. The consideration is the educational field that resulted in great improvement of individuals' standard of living and their quality of life. These achievements were primarily realised through joint efforts of both state institutions and the private sector in mobilising human and financial resources to implement development plans, particularly those of the last decade. Furthermore, these developments

allowed Saudi Arabia to join the G-20 as a partner and influential member in taking part in international decisions concerning the international economy.

According to Dubis and Bernadowski (2014), “with regard to special education, the Kingdom of Saudi Arabia (KSA) spends a significant amount of time and effort to support individuals with disabilities. In fact, the government allocates a large part of its budget to improving special education and related services in its schools and institutions” (p.168).

## **2.5 Conclusion**

There are many important positive visions for the future of Saudi Arabia along multiple fronts, as the country has opportunities and resources on which to base further achievement and progress. In light of the findings derived from the literature, clear policy and strategies can be presented, related mainly to progress that can be made by policy makers to ensure success in all fields. The educational field is one of the most important areas that can benefit from this progress. As the MoE has increased awareness of the educational field in general, all Saudi educational organisations should work toward fulfilling its aims and objectives and face any difficulties by resolving them together. Furthermore, the Saudi Ministry of Education has

the perfect opportunity to use its efforts and resources to achieve maximum accomplishments by implementing the right programs and evaluation systems, rather than misusing these resources. The important role of the Ministry lies in its range of procedures that should motivate teachers and learners to create advanced learning opportunities for all students.

Finally, as it was clarified earlier, the importance of this chapter is to give the reader a brief background about the country this study was conducted and how it differs from the UK, the country in which the researcher's PhD was examined.

The following chapter will discuss existing literature with regards to children with ASD in Saudi Arabia and worldwide.

# CHAPTER THREE:

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## LITERATURE REVIEW

### 3.1 Introduction

Reviewing relevant literature is an essential activity of any academic project and an effective review creates a solid foundation for the promotion of knowledge (Webster and Watson, 2002). In this chapter, the researcher discusses the literature on children with autism in Arab countries, Saudi Arabia in particular. Moreover, the aims of this research are to examine the views of parents and practitioners on awareness of children with autism in Saudi Arabia as well as school provision for students with autism. Therefore, for this research, the views of the families and educational professionals are very important, as these are the people who care for and directly communicate with children with disabilities. This chapter discusses the relevant literature focused on autism, autism awareness and school provision for children with autism. While there has been an extensive range of published research from Western countries, autism arises in all cultures and countries (Hussein, Taha, and Almanasef, 2011), and therefore additional research is needed on autism, especially in Arab countries.

It should be noted that “autism is an umbrella term for a wide spectrum of disorders sometimes referred as “Autism Spectrum Disorders” (ASD) or “Pervasive Developmental Disorders” (Ozand, Al-Odaib, Merza, and Harbi, 2003, p. 55). Currently, a global movement exists to bring autism and other neurodevelopmental disorders to the forefront by highlighting and finding ways to reduce the burden on those directly affected by these disorders and on society as a whole (Kheir et al., 2012). To date, the number of children diagnosed with autism has increased. According to Bishop, Whitehouse, Watt, and Line (2008), this rate has increased significantly, especially in the past three years. As a consequence of this increase, some researchers have argued that these children and their parents are in need of immediate and extensive support services (Dardas and Ahmad, 2014b).

Furthermore, Park and Chitiyo (2011) found that public attention has increased among children with autism as a result of promotional activities from government and non-government organisations. This has drawn the researcher’s attention, as it is clearly beneficial to understand the level of awareness of autism in Saudi Arabia to help improve educational services and increase societal understanding of children with autism. Elsabbagh et al.

(2012) pointed out that parents, professional groups and government agencies from all over the world are working to create awareness and establish support services for children with autism.

According to Murshid (2005), there are only six non-profit centres in Riyadh that offer therapy services for children with autism and private schools that are run by either parents of children with autism or non-government organisations. Thus, the need remains to continue training and implementing educational outreach programmes with specific goals according to the needs and available resources of each community. In addition, training programmes are needed in all Saudi cities, not just Riyadh.

Two main issues have driven the researcher's decision to conduct this study. Firstly, it has been noted that research into autism and school provision in Arab countries is very limited, and thus more in-depth studies should be conducted. Secondly, as Al-Sharbati et al. (2013, p. 2) pointed out that "some studies have indicated that teacher's knowledge toward autism is not equivalent to that of mental health professionals". This suggests that the improvement of teacher and societal knowledge can lead to changing attitudes. Thus, the primary focus of this research is that a lack of knowledge

about autism may lead to situations in which children with autism in mainstream schools are not diagnosed, and therefore, their particular learning needs are not met. As such “autism is widely acknowledged as pressing public health challenges due to its negative repercussions on the family and society precipitated by the inherent tendency for children with ASD to have a higher level of dependence than other children” (Al-Farsi et al., 2012, p. 1214). Clearly, these points suggest that gaps in the literature exist which will be addressed in this study.

The aim of this research is to investigate the views of educational professionals and families on the awareness of children with autism and school provision in Saudi Arabia. Therefore, this chapter discusses the main facets of the work of educational professionals, such as teachers’ and parents’ views on the awareness of children with autism and school provision. Hence, this chapter begins by defining key terms, such as Autistic Spectrum Disorder (ASD) and aspects of awareness and school provision (Section 3.2).

Section 3.3 discusses the history of ASD in Saudi Arabia and the world in general with respect to its discovery and development. Subsequently,

Section 3.4 and its subsections outline the prevalence and diagnosis of ASD among children. Furthermore, as it is crucial to discuss the prevalence and diagnosis of ASD in order to know the level of ASD awareness in Saudi Arabia, teachers' attitudes toward inclusion and aspects of school provision are examined in Section 3.5.

In addition, this study considers parents' views on the Saudi education system, including their feelings, perspectives and the challenges they face. How the family system and structure operates in Saudi Arabia is outlined to provide a clear view of the influence of the family in Arab society. In Section 3.7, the 'inclusion' of special educational needs practices is discussed. However, as mentioned above, due to the lack of research on autism in Arab countries, the researcher also reviews additional studies that were conducted in the UK and the USA.

## **3.2 Definitions for this research**

Defining the key terms of any research project is essential. Those key terms used in this research include 'autism', 'awareness' and 'school provision'.

### 3.2.1 Autistic spectrum disorder

The definition of autism has changed over time, as is evident by the many diagnostic criteria that have been used in both epidemiological and clinical situations (Elsabbagh et al., 2012). The most recent definition for autism appears in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5), which changed the definition to ‘autistic spectrum disorder’, or ASD for short. ASD is defined as:

Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following currently or by history (deficits in social emotional reciprocity, deficits in nonverbal communicative behavior used for social interaction and deficits in developing, maintaining and understanding relationship, severity is based on social communication impairments and restricted, repetitive patterns of behavior).

Restricted repetitive patterns of behavior, interest, or activities as manifested by at least two of the following, currently or by history (stereotyped or repetitive motor movement, use of objects or speech, insistence on sameness, inflexible adherence to routines or ritualised patterns of verbal or nonverbal behavior, highly restricted fixed interest that are abnormal in

intensity or focus and hyper- or hyperactivity to sensory input or unusual interest in sensory aspects of the environment)

Symptoms must be present in the early development period (but may not become fully manifested until social demands exceed limited capacities or may be masked by learned strategies in later life).

Symptoms cause clinically significant impairment in social and occupational current functioning as well as other important areas of current functioning.

These disturbances are not better explained by intellectual developmental delay (*DSM-5*, 2013, p. 50).

This updated definition was recently applied in Saudi Arabia, which should affect the level of autism awareness in that country.

The DSM-V and DSM-IV were the sources of previous definitions for ASD.

According to Wing, Gould, and Gillberg (2011, p. 768), the DSM-IV:

Refers to the basic triad problems underlying autism as impaired social interaction, impaired social communication and restricted behaviour pattern. The draft of the DSM-V reduces this to two—impaired social interaction and communication (now regarded as one conjoined problem) and restricted behaviour (p. 768).

Another definition by the American Psychiatric Association (2000) states that the term ASD covers a group of neurodevelopmental disorders that are defined by impairments within the following three categories: social interaction, communication skills, and patterns of activities. The ways in which the lives of parents of children with ASD are affected is discussed further in Section 3.5.

For the purposes of this research, the definition of ASD is especially important, because it may be one of the factors that explains the current level of autism awareness in Saudi Arabia. At the time this study was conducted, the publication of the DSM-5 was fairly recent, and its criteria had not yet been used for diagnosing ASD in children. One important feature of autism spectrum conditions in children is lack of empathy and sympathy, although this may be linked to another perception. When you do understand, they respond, so they have empathy but no sympathy (Wing et al., 2011).

To clarify, for individuals with ASD, problems of social interaction are generally present from birth (Bader & Barry, 2014), unless encephalitis or a brain injury occurs afterward, which can sometimes lead to autistic behaviour. Recognising the earliest signs of autism in infants requires an

experienced professional (or a very observant parent) (Wing et al., 2011). “DSM-5 will likely decrease the number of individuals diagnosed with ASD, particularly the PDD-NOS subgroup” (Kulage, Smaldone, and Cohn, 2014, p. 1918). In particular, a diagnosis of PDD-NOS, which stands for ‘pervasive developmental disorder-not otherwise specified’, indicates the presence of stereotyped behaviours, interests, and activities. Criteria for other PDDs or related disorders, such as schizophrenia, however, are not met (Szatmari, 2011). These are some of the definitions of autism from different sources.

The following section will discuss autism awareness in the context of this research.

### **3.2.2 Autism awareness**

The term ‘awareness’ is defined as “the knowledge or perception of a situation or fact” (Merikle, 1984, p. 449). In this study, the researcher explores the level of knowledge or perception of autism among teachers. The aim of this exploration is to examine teacher awareness of children with autism in mainstream schools. Wolff (2004) pointed out that the rising level of awareness of ASD has led to many innovative interventions and increased

access to quality care and education opportunities. Thus, it is important to investigate this issue as it relates to Saudi Arabia.

According to Merikle (1984, p. 449), “awareness [is] defined as the ability to make better than chance level, forced-choice decisions concerning either the identity or the presence of the primes, and, conversely, it was assumed that observers were unaware of the primes when these decisions were at a chance level of performance”. As indicated by verbal reports in forced-choice tasks, ‘awareness’ is defined in terms of an observer’s ability to discriminate among several possible stimulus states (Marton and Booth, 1997). However, Merikle's (1984) belief is that it is unacceptable to define awareness. He argued that awareness is best defined as the ability to make forced-choice decisions, and that unawareness is the absence of such ability. This is a general definition of awareness, and for the purposes of this research, the meaning of the term ‘awareness’ is the ability to identify and recognise children with autism in mainstream schools.

A general lack of knowledge and awareness of ASD can result in the misunderstanding of student behaviour. This can lead to situations in which students who have not been officially diagnosed with ASD are accepted into

tertiary schools (Almasoud, 2011). As such, the teacher and society's overall ability to recognise the characteristics of children with autism is an important aspect that has been considered in this research. Thus, this study accepts Merikle's (1984) definition, as it is important for teachers to be able to recognise children with autism. Since school provision is as important as awareness in this thesis, it is defined and discussed in the next section.

### **3.2.3 School provision (i.e. educational provision)**

School provision is an important topic that has drawn the researcher's interest in conducting this research. This study defines 'school provision' as a place where children can learn and be taught in an environmental setting or perhaps 'an environment in which children can learn and be taught'. The main aim of this research is to examine the context of school provision for children with ASD in Saudi Arabia in either special schools, mainstream educational environments or at home, as well as why, and who is responsible for making such decisions. These decisions can be quite complex, and some researchers argue that educational provision for children with autism in mainstream schools involves a number of issues (Cigman, 2007; Griffith, Fletcher, and Hastings, 2012; Pha'draig, 2007). According to Pha'draig (2007, p. 290), "special education refers to any educational provision which

is designed to cater for pupils with special educational needs, and is additional to or different from the provision which is generally made in ordinary classes for pupils of the same age”.

The following section discusses the history of ASD, which is essential in determining the level of awareness and understanding of the disorder in developing countries, such as Saudi Arabia.

### **3.3 ASD and disability**

In section 3.2, the researcher identified three important aspects of this research and an outline of the general definitions for autism is one of the aspects. However, in this section the researcher will clarify what she means by ASD, disability and the theories that are currently being debated. Also, this section will provide clarification on how useful these definitions are within the context of KSA. According to Al-Ayadhi (2005), in Saudi Arabia the ASD is “a neurodevelopmental disorder with unknown etiology. The etiology of autism is complex, and the underlying pathologic mechanisms are unknown” (p.265).

This definition explains that the cause of ASD is still unknown, which might be one of the reasons behind lack of awareness of autism in Saudi Arabia. This assumption was confirmed by many Saudi doctoral thesis and articles (see for example Al-Othman, 2002, Al-Sammari, 2006, Al-Faiz, 2006, Abusukkar, 2014). However, many theories have discussed autism and how it can be known or explained such as The Theory of Mind, The Theory of Executive Dysfunction, The Theory of Weak Central Coherence and The Theory of Empathizing-Systemizing. Since these theories are not really related to this study, they will not be explained in detail.

To clarify, autism is a lifelong developmental disability that affects how a person communicates with other people and how they experience the world around them. From the researcher's point of view, children with autism are not considered disabled because they are able to move, talk, hear and see and can do all the things that normal children can do but in different ways. It is a new concept but we can see for example parents who have looked after their children and supported them which has enabled their children to live and learn almost like other children.

The researcher also met the families of children with ASD during her Masters study. There were a number of children who were diagnosed with ASD and made good progress in mainstream schools even though some of the schools were not inclusive. These few cases support Glazzard (2013) who stated that “my reflections on the ways which we could secure change are born of an on going belief that children with special educational needs can effectively work with their mainstream peers and the needs for the school to meet national expectations” (p.94). This led the researcher to argue that there is a difference between disabilities and ASD and to support that children with ASD are different and might have special educational needs but they are not disabled. Moreover, “autism should no longer be conceptualized as an extremely rare disorder” (Gillbeg & Wing, 1999, p.404).

### 3.4 History of autistic spectrum disorder (ASD)

While the disorder known as ‘autism’ was first identified by Leo Kanner in 1943, the certainty and appropriateness of the terminology used for this condition has since been extensively debated (Kanner, 1943). Likewise, the study of autism has changed rapidly over the years, especially in the literature on the concept and definition of the disorder (Wolff, 2004).

Historically, many terms have been used to describe autistic spectrum disorder, and a review of the literature revealed terms such as ‘autism’, ‘autistic syndrome’ (AS), ‘infantile autism’ (IA), ‘childhood autism’ (CA), ‘autistic disorder’ (AD), and the most advanced in the literature: ‘autistic spectrum disorder’ (ASD). For the purpose of this thesis, Autism Spectrum Disorder (ASD) is the term used.

Autistic spectrum disorders are neurological pervasive developmental disorders that impact children’s communication and social functioning (Shattuck, 2006). ASD is the third most common disability, after cerebral palsy and mental disorders, that affect children from all cultural and socioeconomic groups (Dardas and Ahmad, 2014a). However, based on the literature review, the influence of culture on clinical features of autism research in the Middle East has been infrequent (Hussein et al., 2011). Children with autistic disorders often exhibit forms of complex action that can considerably affect the functioning of their parents and families (Foot, Howe, Cheyne, Terras, and Rattray, 2002). Recent research conducted in Saudi Arabia and Egypt hypothesised that “autism is a biological disorder with a clearly defined phenomenology” (Hussein et al., 2011, p. 2). However, based on the history of autism, this is clearly not the case. Social

differences might shape its presentation, as well as the way in which children with autism are generally cared for and with respect to clinical interventions. According to Bishop et al. (2008), in the 1980s and 1990s many children diagnosed with severe language disorders would now be considered to have ASD. This change is due to the progress in making diagnoses and in general clinical awareness. Despite the fact that Western countries established and developed the study of Autism for over 60 years, this is not the case in Saudi Arabia and other Arab nations. As stated in this thesis, there is a lack of research on this topic, and most published research on autism has only been recently conducted.

This section discussed some of the history on the autism spectrum disorder and listed a few of the major journals that have addressed autism. The prevalence and diagnosis of autism was also considered in this study in order to explore the situation regarding awareness of children with autism.

The next section discusses ASD prevalence and diagnosis in detail.

## **3.5 Prevalence and diagnosis of autism in Saudi Arabia**

### **3.5.1 Prevalence**

“Autism is a developmental disorder affecting a growing number of children” (Park and Chitiyo, 2011, p. 70). According to Almasoud (2011), in the United States, the number of children with ASD, autism and associated subgroups has increased to more than half a million, and over the last decade this figure has grown considerably. Furthermore, in the UK, autism affects approximately 115,000 families, many of whom encounter difficulties in obtaining a diagnosis (Midence and O'Neill, 1999). In Oman, Al-Farsi et al. (2010) found that the prevalence of children diagnosed with ASD is relatively low, i.e. 1.4 per 10,000 children, as compared with other countries worldwide, such as the UK. However, the authors also indicated that the overall prevalence in Oman for all forms of ASD was actually estimated to be 60–70 cases per 10,000 children. Another study conducted by Elsabbagh et al. (2012) suggested that the low prevalence in the Omani and Jordanian studies could be due to lack of diagnosis and underreporting of cases, as well as limited access to service centres. Although these cases do not necessarily apply to the prevalence of children with autism in Saudi Arabia, they do provide a general sense of ASD prevalence in Arab countries.

Further studies on the prevalence of ASD highlighted that in this population of Arab countries, it is important not only to treat but also to clarify the hypothesis of whether cultural differences affect the presentation of the symptoms of the disorder (Amra et al., 2012). As such, knowing the population of children with ASD in Saudi Arabia is significant in order to discuss the prevalence of this disorder and to compare the findings with those of other countries.

According to Yazbak (2004), in 2004 there were an estimated 42,500 cases of children with autism in Saudi Arabia. However, Yazbak (2004) did not indicate how this estimate was obtained. This finding supports the fact that the prevalence of autism in Saudi Arabia is difficult to determine due to its problematic nature that sometimes makes diagnosis difficult. In fact, a review of the literature revealed no specific figures on cases that have been diagnosed as ASD (Murshid, 2011). Furthermore, Yeargin-Allsopp et al. (2003) found that determining the prevalence of autism cases is challenging, as diagnoses are often based on the presence of uncommon behavioural patterns. As a result, the next subsection reviews the literature that examines the diagnosis of children with autism in Saudi Arabia and worldwide.

### 3.5.2 Diagnosis

A diagnosis of ASD is often invaluable for parents, and one study indicated that identifying the actual condition has helped many parents to better accept their children (Midence and O'Neill, 1999). However, some parents find it difficult to accept a diagnosis of ASD, and prefer their children not be diagnosed at all. This research investigates the attitudes and feelings of Saudi parents towards autism in order to help them gain access to services, diagnoses and other types of support. As a result, this section discusses the literature regarding parents' attitudes toward diagnoses of children with autism in Arab countries and worldwide.

Talking about the diagnosis and the features that appear on children with autism is one of the most important aspects that should be considered since misdiagnoses for children with autism are often made, which may lead to inappropriate or ineffective treatment. There are some 'signature' characteristics of children with autism, including, impaired social interaction, avoiding eye contact and lack of sympathy. It should be noted that while the way in which autism is expressed in children varies greatly, it usually follows a general pattern.

In addition, Murshid (2011) noted that late diagnosis is an issue that appears in many studies due to the unreliability of specific ASD tests. This is a major concern that can influence the lives of children with autism, their families and school provision. With respect to the diagnosis of the phenotype of autism, the diagnostic criteria reflect more qualitative characteristics usually associated with extreme delays in developing language and cognitive skills (Elsabbagh et al., 2012). Moreover, the study highlighted that delayed intervention in Saudi Arabia may also be due to the limited access of services.

Autism's main presentation is still not very clear in terms of environmental inputs, which means it is considered by many as an 'invisible' disorder, which can make it even more worrying to parents and doctors (Ozand et al., 2003). Al-Ayadhi (2005) argued that despite the absence of a known cause of autism, increasing evidence suggests that a variety of factors can cause the disorder. Murshid (2011) pointed out that although many scientists believe that both genes and the environment play a role in the pathogenesis of various neurological disorders, the cause of autism is still unclear. This fact might be one of the reasons for the lack of general societal awareness of autism and why it remains so difficult to diagnose. As stated previously,

most investigators agree that numerous genes acting in concert are involved that predispose or confer fragility toward the appearance of autism, and moreover, that the incidence of autism in the world is increasing (Ozand et al., 2003).

One of the factors that affects the diagnosis of ASD in children is that it is generally assessed the applicable health, as is the case with countries such as the UK (Powell et al., 2000). However, this might be different in other countries, as they rely mainly on doctors to diagnose children with ASD. However, teachers and families still play an important role in raising initial concerns about their children with ASD, as it can be an ‘invisible’ disorder. “Unfortunately, in Saudi Arabia, diagnosis and assessment processes to determine the eligibility of students for special education and related services are still not free of shortcomings” (Alquraini, 2011, p. 154). As a result, it is often difficult to find competent specialist authorities on autism in Saudi Arabia, and parents are generally unsure where to go to find specialists or therapists or about asking teachers for help. Furthermore, Alquraini (2011) noted that the assessment of children with autism typically does not begin early enough, often only when the child goes to school. This is considered a late diagnosis and lack of awareness for the professional will

delay the diagnosis further. Moreover, most special education and public schools lack IQ tests, adaptive behaviour scales and multidisciplinary teams deemed suitable by Saudi cultural standards.

To conclude this section, the current evidence suggests that early diagnosis of ASD and early educational intervention are essential in optimising long-term ASD prognoses (Robins, Fein, Barton, and Green, 2001). According to Almasoud (2011), many difficulties and challenges remain in diagnosing ASD in Saudi Arabia.

The next section discusses parents' views regarding the Saudi education system.

## **3.6 Parents' views on the Saudi education system**

### **3.6.1 Parental voice**

The perspectives of parents who have children with ASD and how their quality of life is affected by this disorder are extremely valuable. The need for early diagnosis and better awareness among health professionals of developmental problems in young children is an important concern for parents. Studies conducted in Arab countries indicate that having a child

with ASD can disrupt family life and result in a number of economic, social, psychological and physical difficulties (Dardas and Ahmad, 2014b). However, it is worth mentioning that ASD is a spectrum disorder, which means individual cases can vary considerably. On the other hand, Alquraini (2011, p. 152) found that “Saudi cultural values deal with disabilities according to the policies included in the Quran and Sunnah. This means that 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”. However, few studies found that parents relate their child’s disability to their religion. Although Arabs are mostly united in a shared culture that is considered substantially different from that of their Western counterparts, to date, studies that have investigated the quality of life among parents of children with autistic disorder in the Arab world are scarce (Dardas and Ahmad, 2014b).

Some studies have pointed out that having a child with ASD does not necessarily have a negative effect on parents’ lives (Schieve, Blumberg, Rice, and Visser, 2007). One important finding that appears in most of the

literature is parental views that delays in diagnoses causes them distress. In addition, parents state that these delays also waste precious time for intervention and point out that autism workers require additional tools to assist in the detection of autism in very young children (Robins et al., 2001). Clearly, the diagnosis of ASD is still a problematic issue in Western as well as Arab countries.

In addition, one of the main autism-related parental complaints found in the literature concern the services provided for their children. Al-Farsi et al. (2012, p. 1219) argued that “caregivers often complain that their children do not get expected benefit from such services”. However, some studies have mentioned that parental perceptions of the nature of the disability may vary to some extent based on cultural values (Hussein et al., 2011). In contrast, according to Solomon, Necheles, Ferch, and Bruckman (2007), children’s disabilities often result in feelings of shame and guilt in Arab societies. Nevertheless, it should be recognised that Arabs are largely united in a common culture where loyalty to one’s extended family takes precedence over individual needs and goals. Additionally, Arab culture has traditionally held the expectation that older siblings, especially women, should help care for younger children. The structure and systems of Arab families have been

discussed in some studies. This could help parents become comfortable placing children with ASD in the same school as their siblings, knowing that these siblings can help look after them.

For example, according to Woodgate, Ateah, and Secco (2008, p. 1078), “the ‘system’ was defined by parents as a conglomerate of all child-related agencies and institutions (e.g., health care facilities, educational settings) existing to protect and advance the development of the child with autism”. However, Dardas and Ahmad (2014a) found that in many cases, parents can feel a sense of segregation and described a system that was inaccessible in many ways. For example, parents spoke of a system in which professionals lacked appropriate training and knowledge of autism and that the provision and resources to raise and support children with autism were limited and inadequate. In addition, some studies have shown that parents in Saudi Arabia are likely to keep children with ASD at home because they think that the ‘eyes of others’ matter more and that the behaviour of their children will attract negative attention (Al-Farsi et al., 2012; Woodgate et al., 2008).

It should be noted that parents who have children with autism often experience greater levels of stress, depression, and despair than parents of

children without ASD. Moreover, Vernon, et al. (2012) pointed out that the attitudes of parents about their children's social weaknesses and experiences of limited personal contact are likely to have a significant negative impact on the well-being of the parents themselves. In this article, the authors pointed out that children's deficits in social skills were predictive of stress levels in parenting for mothers of young children with ASD. In addition, studies have shown that mothers of children with ASD reported higher stress levels when dealing with their children, including irritability, drowsiness, hyperactivity, self-care, telecommunications, and shortcomings in social interaction (Ekas and Whitman, 2011).

Woodgate et al. (2008) noted that parents' lives are often affected in many different ways when they have a child with autism. Midence and O'Neill's (1999) study of parents of children with autism showed that dealing with the disorder was very difficult and demanding. They reported that non-verbal communication and bouts of anger and violence were the most difficult behaviours to manage. This sort of study could help explain why many parents keep their children with ASD at home. One study, which was conducted in Oman by Al-Sharbati, et al. (2015), suggested that similarities could also exist for Saudi Arabian families.

The question is, does stigma prompt such protection? A number of studies have shed light on the challenges that parents of children with autism face, especially the fact that autism often remains undiagnosed up until children enter preschool (Lam, Wong, Leung, Ho, and Au-Yeung, 2010; Mendoza, 2010; Ozonoff, Williams, and Landa, 2005). On the other hand, Ekas and Whitman (2011) reported that some parents of children with ASD report a positive experience and few incidents of stress.

The following section discusses views of parents of children with ASD regarding school provision.

### **3.6.2 Family perspectives regarding school provision**

Amra et al. (2012) indicated that 60% of children with ASD in Mansoura (Egypt), Al-Ahsa (Saudi Arabia) and Amman (Jordan) reside at home and do not attend regular school. However, in the UK and the USA, school-aged children with autism are generally enrolled in mainstream or special education schools. Al-Farsi et al. (2012) also found that families in Oman are likely to go abroad to seek ASD treatment. One of the objectives of this research is to discover whether this is the case in Saudi Arabia as a whole,

and if so, why. Another point worth considering is the quality of life for parents and how it affects and vicariously impacts the lives of children with autism (Lam et al., 2010).

Moreover, the invisible characteristics of autism make it more difficult for parents to explain the nature of the problems and behaviours of their children (Schieve, Blumberg, Rice, and Visser, 2007). Although research suggests a growing understanding of what it is like to be a parent of a child with autism, more research needs to be conducted in order to understand and improve the care of children with autism from the point of view of their parents (Müller, Schuler, and Yates, 2008). The perspective of parents regarding child autism awareness and service is one of the contributions that this research will make to the field. Some studies have indicated that in urban areas, an increase in household income has led to an improved access to services, medical care and rehabilitation (Al-Sharbati et al., 2013; Elsabbagh et al., 2012; Renty and Roeyers, 2006). In contrast, many parents in rural areas lack sufficient knowledge about ASD intervention and are unaware of the high cost of related care, and as a result, they often have a negative outlook on family members who have autism (Amra et al., 2012). Consequently, the need for increasing awareness of children with autism,

especially in mainstream schools, is vital in helping parents, changing outlooks and perceptions and improving society as a whole.

Yazbak (2004) observed that in developed countries children with autism generally attend regular or special education schools. Unfortunately, this support is, as yet, largely unavailable in developing countries. Research has shown that early intervention may help children with ASD to reach important milestones (Jonathan M., 2010). It has also been noted that children with ASD who receive early interventions are more likely to develop better communication skills and fewer uncontrolled behaviours (Robins et al., 2001).

Moreover, parents can become more likely to recognise the importance of their role in educating their children, preparing them for school, placing value on their educational endeavours, demonstrating a belief in their abilities, encouraging their language development, and rewarding their efforts (Estes et al., 2009). Even if parents' perspectives on school placement are not always in the best interest of the child or the school itself, they still have significant influence on these decisions (Glazzard, 2013). As

in some cases, the parents want their child in mainstream schools even if the school is not ready or able to meet their child's educational needs.

### **3.7 Special educational needs and inclusion**

“Inclusion is an educational practice based on a notion of social justice that advocates access to equal educational opportunities for all students regardless of the presence of a disability” (Sharma, Forlin, Loreman, and Earle, 2006, p. 80).

Generally, in Saudi Arabia, the Ministry of Education is responsible for providing a suitable education for all students with disabilities or special educational needs (Alquraini, 2011). However, before 1985, children with disabilities in Saudi Arabia did not receive any type of special education services (AL-Ajmi, 2005), and the responsibility and duty was placed on parents to provide all assistants and staff. In 1972, the first institute for deaf students and those with mental disabilities was established in the Kingdom. From this point onwards, there was an expansion of the services that were provided for children with disabilities and regulations were established that guaranteed rights for people with disabilities. Furthermore, the first Legislation of Disability was implemented in 1987, which stated that Saudi

individuals with disabilities had equal rights to other persons in the community (Alqefari, 2010). Therefore, special educational need regulations and departments were the beginnings of giving children with disabilities the right to live and to learn as ‘normal’ children. Then the idea of inclusion was established as, in general, people with disabilities should not be isolated.

Alquraini (2011) stated that special educational needs in Saudi Arabia have gone through a rapid and dramatic period of improvement. “According to the Ministry of Education in Saudi Arabia (2008), 96% of students with multiple and severe disabilities received their education in separate institutes in 2007–08” (Alquraini, 2011, p. 151). This study suggests that special educational need for students with disabilities in mainstream schools is still in its early stages, and this research will highlight the gap in school provision for children with autism, particularly the extent of the changes required to meet the legislative requirements of “education for all” (Al-Sharbati et al., 2013). In addition, Cigman (2007) emphasised the need to discuss the inclusion or exclusion of children with ASD, and highlighted that specialised teaching techniques are required, irrespective of the level of ability. Glazzard (2013) also pointed out that even though they may attempt to eliminate exclusionary practices, inclusive schools might need to exclude

some children in order to secure their own existence. In other words, there are limits to the extent to which mainstream schools can transform their pedagogical approaches under the umbrella of performativity, even though the literature has emphasised the relationship between inclusion and pedagogical transformation (ibid).

In addition, Hussein et al. (2011) found a higher percentage of children with autism in government schools in Saudi Arabia compared to Egypt, where the majority of children with autism were educated in private schools. This suggests that Saudi Arabia's educational system is relatively more advanced in terms of accommodating children with autism and integrating resources and teaching techniques children with special educational needs would need in a government school. This study, however, will examine this finding by asking parents and educational professionals about the quality of school provision for children with autism.

Glazzard (2013) highlighted that "inclusion operates under a regime of accountability" (p.95). Some researchers have argued that in order to integrate children with disabilities into mainstream schools, a number of factors must be considered. First, 'educational reform is needed to change

the existing system and rethink entire school curricula in order to meet the needs of all children. On the other hand, other researchers consider this unnecessary, and assert that ASD children should follow a modified or adapted curriculum that fits into existing structures (Robins, 2008). In addition, some contend that parents have the right to choose the educational provision for their child (Robson, 1989). Furthermore, other researchers have pointed out that children with ASD have characteristic requirements that, in many cases, are difficult or impossible to meet in mainstream settings (Cigman, 2007; Johnson and Myers, 2007). It has been recognised that some children with ASD require dedicated small classroom spaces, a high degree of organisation with experienced and skilful teachers, and sufficient one-to-one teaching time for each child (Müller et al., 2008). Still other researchers have argued the different point of view that educators should be willing to take some risks regarding social justice. However, this should not involve placing children in inappropriate educational contexts. It has also been argued that “inclusion can be a risk for schools if performance indicators are to be the overriding concern” (Muller et al., 2008, p.73).

According to Glazzard (2013), integrating children with ASD with their mainstream peers, who can act as role models for language, communication,

and social interaction for these pupils with communication and interaction difficulties, is one way in which the social skills of children with ASD might be improved.

To conclude this section, special schools are required for some ASD children and the idea of inclusion needs to be considered for others. According to Blacher and Howell (2007, p. 97), “children should not only be taught social skills, but they also should be equipped with social thinking strategies so that they can ‘think about others’ thoughts’ and understand the consequences of their own behaviour”.

It has been pointed out that students with ASD can benefit from inclusion in mainstream educational settings, and that local authorities should therefore ensure that they are offered placement in these settings (Muijs and Reynolds, 2001). Throughout the literature reviewed to this point, it seems that parents still struggle to find the best school provision for their children with autism. Clearly, many studies indicate that inclusive education systems have faced a number of difficulties, including teachers’ attitudes, characteristic scheme constraints in the education system, educational issues and conceptualisation of roles within the system (Pha’draig, 2007). Another study conducted by

Boer, Timmerman, Pijl, Minnaert (2012) argued that to start inclusion, changing educational policy is necessary by creating a more unified education and standardising provision for all students. This approach will benefit through the acceptance of children with disabilities in public schools. Inclusion does not only benefit children with disabilities but also the children without, through the advancement of their social skills. For that reason, inclusion became an important matter of debate over the last decade. However, “implementing inclusion on daily practice is challenging” (ibid, P.574). The researcher believes that inclusion is part of special educational needs and will benefit children with disabilities, especially ASD children who are affected mostly by social skills and anything that requires social contact. Including them in a healthy social environment, which has a educated sense of awareness and is able to provide them with all the care, expert teaching and suitable resources they require, will help parents as well as the child as they will feel confident and reassured that their children are well taken care of and uplifted through inclusion. Contrastingly, the researcher also believes that inclusion in Saudi Arabia is clearly not effectively applied and is still behind in comparison to the UK and USA.

To summarise, “inclusion is a term which has been used to refer to a number of educational practice taken toward those who are marginalised by social and educational practice” (Wilde & Avramidis, 2010). In this study, inclusion is used to refer to the state of including children who have special educational needs (SEN) into mainstream schools. Inclusion became a fundamental and important requirement for all special groups, including children with autism, considering that inclusion is the only way to achieve the ultimate goal of mental health, namely happiness and the appropriate degree of quality of life. Moreover, inclusion is a very practical tool for all strategies and plans for improving quality of life in integrated and balanced aspects, not only for the disabled but also for society as a whole. Therefore, from the researcher’s point of view, the inclusion of children with ASD in mainstream schools will help them and their parents to be included in society. In this study, the idea of inclusion and how it works in Saudi Arabia will be clarified from both parents and professional’s views regarding the awareness and school provision for children with autism.

### **3.8 Teacher’s attitudes toward inclusion**

This section discusses the attitude of teachers toward children with disabilities. Many studies, especially those of Western countries, have

examined the attitude of teachers toward children with disabilities (Jonathan M., 2010; Pha'draig, 2007; Sharmaa, Forlinb, and Loremanc, 2008). In general, however, few researchers have specifically investigated the attitudes that teachers have toward children with autism. As a result, the researcher in this study inquired in her survey about the attitude of teachers toward children with autism in particular.

First, Park and Chitiyo (2011, p. 70) defined 'attitude' as "a person's enduring favourable or unfavourable cognitive evaluations, emotional feelings, and action tendencies toward some object or data". The attitude of a teacher can play an enormous role in the inclusion of children with autism or other disabilities. For example, when a teacher accepts a child's disability, other children may react in the same way and copy the teacher's behaviour and attitude (Robins, 2008). In addition, when teachers accept a child with a disability, the child may also feel welcomed and unashamed of their disability. Furthermore, studies conducted in Saudi Arabia indicate that the role of teachers in promoting the successful integration of students with disabilities is vital, as teachers have a major influence in facilitating the inclusion of students in their classrooms (Alquraini, 2011).

Unfortunately, teachers' views on inclusion and their overall attitude of children with disabilities was not very positive (Hussein et al. (2011). The literature suggests many reasons for this negative attitude, including a lack of awareness and knowledge regarding children with disabilities and how to care for them in an educational context (Al-Makhalid, 2012). Moreover, another reason for this perspective could be the highly demanding work that teachers think they may undergo, as Saudi Arabian schools do not employ assistant teachers or shadow teachers for students with educational needs.

However, it should be noted that Alquraini (2011), in his study on special educational needs, found that male teachers generally had a more positive attitude toward integrating students with disabilities and that this attitude correlated with the level of teacher education. Another study by Al-Faiz (2006), in Saudi Arabia, showed that teacher experience and having a family member with disabilities were the two variables that most affected teachers' attitudes toward inclusion. Furthermore, results of studies pertaining to teachers' attitudes toward inclusion vary considerably, with some studies indicating a positive attitude while others revealed different perspectives. Similarly, the variables that influence teachers' attitudes also varied to some extent in terms of gender, having relatives with disabilities, attending

training programmes and whether they were qualified general education or special education teachers. For this study, the author examined all these variables in order to enhance their awareness and the reasons behind their attitudes. Supporting this point, Park and Chitiyo (2011) observed that one result of this unfavourable attitude toward children with disabilities is the need to conduct more research and examine how this perspective can be changed. Some researchers have argued that general inclusion of students with disabilities in classrooms can result in a higher degree of concern and anxiety among teachers because of additional demands imposed on them (Sharma et al., 2006).

In contrast, teachers' knowledge towards children with autism is one of the main features of this study. To clarify, the second term defined in this section concerns the meaning of knowledge in general. 'Knowledge' can be defined as "the body of 'truths' information or awareness that humans have acquired or constructed" (Savin-Baden and Major, 2013, p. 214). This definition is employed in this research because the survey instrument includes a section that explores the extent of teachers' general information and awareness regarding autism. Hussein et al. (2011) found that in Saudi society, there exists some positive knowledge on autism, largely due to the

efforts of many non-governmental organisations. It should be noted that the findings of this study compared Saudi and Egyptian societies, which might explain their validity. Furthermore, according to Al-Makhalid (2012), additional research is needed on the knowledge of teachers regarding children with autism in Saudi Arabia. Kim et al. (2000) hypothesised that to some extent a lack of knowledge may result in limited social attention observed towards children with autism, which may be due to difficulties in perceiving the reward value of social interaction.

Furthermore, Al-Sharbati et al. (2013, p. 1) discovered misconceptions about autism spectrum disorders among teachers in mainstream schools in Oman, and found that “we posit that such lack of awareness was likely to be rooted with socio cultural patterning as well as conflicting views often ‘spun’ by the scientific community and mass media”. In addition, a recent study reported a poor level of knowledge of autism among teachers in Oman (Al-Sharbati et al., 2013). Therefore, it seems that if this is the case in Oman, the situation is likely to be similar in Saudi Arabia, as Arab culture is relatively similar across countries. In addition, both of these nations are considered developing countries, so this research sets out to determine if a need exists for pre-service teacher training to consider the attitudes, beliefs and concerns

of teachers. This is crucial in ensuring the most appropriate preparation is made for teachers to be equipped to provide inclusive education (Sharma et al., 2006).

It should be clarified that Al-Sharbati et al.'s (2013) study is one of very few conducted in an Arab nation that sought to explore teacher awareness of the specific signs and symptoms common in children with autism spectrum disorder that are characterised by behaviour that varies across children. For example, the study findings illustrated that a large number of participants had incorrectly indicated that children with autistic spectrum disorders tend to be overly talkative. In addition, Al-Sharbati et al. (2013) pointed out the need to quantify teacher awareness and attitudes toward children with autism, as it is possible for these children to attend mainstream schools. This study will identify the gap in previous research in terms of the awareness and attitude of teachers, along with the situation of school provision for children with autism.

The following section will summarise this literature review.

### **3.9 Theoretical perspective**

According to Creswell (2009, p. 51), "...a theory might appear in a research study as an argument, a discussion, or a rationale, and it helps to explain (or predict) phenomena that occur in the world". Furthermore, a research theory should evaluate the strengths and weaknesses of qualitative, quantitative, and mixed research methods in line with the circumstances of the research (Basit, 2010). According to Barrow and Woods (1988, p. 571), "it is clear that there are different kinds of theory, or different senses of the word 'theory'". The starting point for examining the theoretical perspective for this research is theory in education in general. Many educators appear to hold in the back of their minds the idea that theory represents the clearest possible awareness of phenomena, but on the other hand, it has been argued that there is nothing as practical as a good theory (Thomas, 2007). In an educational context, theory and practice are often perceived as dramatically opposed, and issues that may be successful in theory may not always be useful in practice (Barrow & Woods, 1988). However, some educators argue that no difference exists between theory and practice, and that we have no time for theory, as we live in a practical way (Collins & Kneale, 2000). In contrast, it is necessary to discriminate in identifying theoretical perspectives to support research, as many commentators contend that theory is essential

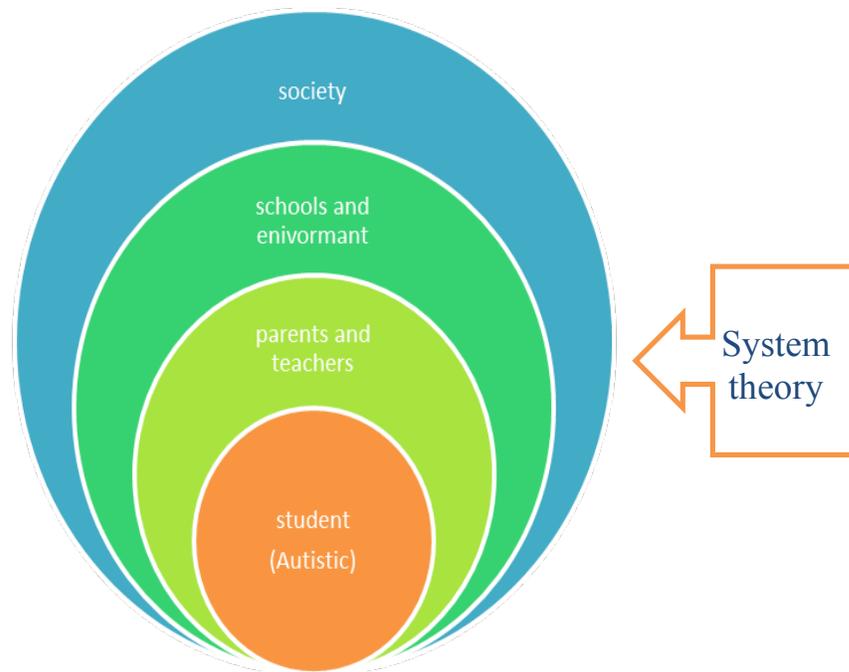
(May, 2011). Therefore, for any research project, it is essential to select a guiding theory that represents the closest fit between its theoretical and practical applications. As a result, General System Theory has been identified as the most suitable approach for this research.

The rationale behind this decision is discussed in the following section.

### **3.9.1 General System Theory**

As stated previously, this research examines the views of educational professionals and families on the awareness of, and school provision for, children with autism in Saudi Arabia. Thus, this research investigates the educational system in Saudi Arabia as well as the legislation regarding children with autism in terms of their inclusion. General system theory (Bertalanffy, 1968) has been identified as suitable for this research, as it relates to the systems of specific organisations, such as educational systems, which cover societies, schools, environments, teachers, social workers, student and parents (Greenfield, 2011). Furthermore, when applied to education, general system theory does not concentrate on individual children, but rather views the world around the child, starting with their parents and family and ending with the environment and society.

At the time, Bertalanffy (1968) was concerned with the research and theory of biology (Watson & Watson, 2011). According to Tissot (2003, p. 51) “his concern stemmed from the failure of the accepted approach (at that time) to accept the culture of an organism when investigating it”. General System Theory suits the epistemological position of this research, which states the world is constructed. However, the definition of ‘system theory’ seems to be very general, as in “systems theory is an interdisciplinary theory about the nature of complex systems in nature, society, and science, and is a framework by which one can investigate or describe any group of objects that work together to produce some result” (Bertalanffy, 1968, p. 48). Figure 3.9.1 below illustrates how system theory can be used to examine the world surrounding children and how this world is interrelated.



**Figure 3.9.1 System theory**

To clarify, as stated previously, system theory complements the epistemological position of this research that the world is constructed. However, the definition of system theory, which seems somewhat general, states that “systems theory is an interdisciplinary theory about the nature of complex systems in nature, society, and science, and is a framework by which one can investigate or describe any group of objects that work together to produce some result” (Bertalanffy, 1968, p. 48).

Bertalanffy (1968) suggested that a belief in an adaptation of general system theory could prove to be a major step towards the unification of science. The

reason for this is that general system theory stems from logic-mathematical terms, which are in themselves purely formal, but are applicable to all applications concerned with systems (Bertalanffy, 1950). To conclude, general system theory can be used to explain phenomena that society might express toward a system, such as the school provision for children with autism. Thus, applying this theory can help define each category in question and its effect on such a system (Glazatov, 2012).

For further clarification, system theory is appropriate for this thesis for several reasons. First, the child is the center of the system theory and this goes along with the general focus of this thesis. Second, though this study is about autism, the researcher is not particularly interested in the individuals themselves, but rather more interested in the layers of support of that individual child, such as the family and in particular the extended family and then the second layer of support being professionals. The tension and the supportive mechanism for the child by working together that parents and teachers experience is what drew the researcher to this study. This explains how society and culture in Saudi Arabia are related to one another and can influence each others' life which children, teachers and families are all a part of.

The next section discusses the epistemological and analogical aspects of this research.

### **3.10 Summary**

In conclusion, according to Elsabbagh et al. (2012, p. 160), “autism is a lifelong neurodevelopmental condition interfering with the person’s ability to communicate and relate to others”. Many children with ASD struggle with language deficits, social impairments and restricted and repetitive behaviours, and also face difficulties functioning independently in an environment (Park, Yelland, Taffe, and Gray, 2012).

This chapter has shown that the majority of studies on ASD or autism inclusion have been conducted in Western industrialised countries, such as the United States and the United Kingdom. While several published reports have discussed the occurrence of ASD in Arab countries (Amra et al., 2012), more research is required on autism, school provision and level of awareness. Furthermore, Alquraini (2011) pointed out that because very few studies in Saudi Arabia have explored a teachers’ perspective, it has been difficult to determine teachers’ attitudes toward children with ASD.

Research has also examined characteristics of autism spectrum disorder in Saudi Arabia and Egypt, and has highlighted the influence of culture in investigating and treating this disorder (Hussein et al., 2011). Similarly, it is unknown whether Saudi teacher attitudes will track those in other developed countries, given the significant religious and cultural differences present in Saudi society. In addition, Alquraini (2011) highlighted the importance of considering societal values and how they can affect public perceptions of people with disabilities. Autism is clearly often considered a disorder of childhood, and those with the disorder bear the consequences of lifetime costs that increase significantly during adulthood.

However, Wolff (2004) mentions how increasing awareness among teachers, doctors and the general public towards autism has contributed to the growing numbers of children being recognised with the disorder. This awareness has stemmed largely from the promotional activities of parent organisations. In addition, in the past few years, awareness and understanding of autism has seen increased recognition around the world, driven in part by the growth of research evidence (Dardas and Ahmad, 2014b; Elsabbagh et al., 2012). “Parents of all children, not only those with SEN, need to play an active and valued role in their children education and be given a real say in the way

their child is educated” (Jones, 2004, p. 121). The autism spectrum is an extremely prevalent disorder that is presently the “fastest growing neurological condition in the world”, over the last six decades; there have been more families living with ASD than ever before.

This summarises the main findings presented in the literature review. This chapter has discussed the main facets of this research, including outlining the definition of autism, awareness and school provision, and the history, prevalence and diagnosis of autism. It was found that teacher attitudes toward inclusion and the perspectives of parents had an enormous impact on this research. System theory, which is the theoretical aspect of this study, was also illuminated in this chapter. Finally, special educational needs and the idea of inclusion between pro and exhibitions was discussed. In sum, Sharma et al. (2006) argued that it is likely that teacher attitudes in Arab countries are similar to those in Western countries in 1980, although the others gave no empirical evidence to support this hypothesis. Partially due to the aforementioned factors, the challenges of raising a child with autism may carry risks of impeding the ability of parents to provide basic care and compassion to children with a disabilities (Vernon, Koegel, Dauterman, and Stolen, 2012).

# CHAPTER FOUR: METHODOLOGY

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## **4.1 Introduction**

Johnson and Onwuegbuzie (2006, p.48) pointed out that “research needs to be defensible to the research and practice communities for whom the research is produced and used”. To achieve the goal for this study, this chapter presents details of the methodology used to conduct this research. First, the chapter discusses the aim and purpose of this study and identifies its research questions. Second, the ontology and epistemology underpinning this research is discussed, as well as how these reflect on the research position within an analogical approach. Next, the chapter discusses the practical issues undertaken during the data collection process, namely for capturing interview, questionnaire and social media data, and provides details about the sample of respondents who provided these data. Finally, the chapter describes the ethical procedures undertaken in this research.

## **4.2 Aim of the study**

To date, research into the educational provision for children with autism in Saudi Arabia has been uncommon, which has resulted in a large gap in the literature. In order to improve the education system in Saudi Arabia for children with autism, it is necessary to examine the situation within Saudi schools and how parents perceive their children's educational provision. Therefore, the aim of this study is to investigate the views of educational professionals and families on the awareness of, and school provision for, children with autism in Saudi Arabia. Professionals such as teachers, head teachers, deputy head teachers and social workers were asked about their views, knowledge and attitudes toward the presence of children with autism in their schools, and parents of pupils with autism were also asked for their perspectives, thoughts and experiences of school provision for their children. The following section addresses the research questions that arose from these research aims.

## **4.3 Research questions**

According to Johnson, Onwuegbuzie, and Turner (2007, p. 113) "mixed research... started with researchers and methodologists who believed both qualitative and quantitative viewpoints and methods were useful as they

addressed their research questions”. However, the most fundamental aspect of any research project is that research methods should be identified that enable thorough examination of its research questions (Johnson & Onwuegbuzie, 2004).

This study addresses the following research questions:

1. What do parents and educational professionals feel are the barriers to and enablers of effective educational provision for children with autism in Saudi Arabia?
2. How do parents and educational professionals feel about the general awareness of autism in Saudi Arabia?
3. What do parents and educational professionals feel are the barriers to and enablers of achieving a diagnosis of autism in Saudi Arabia?
4. What other factors do parents and educational professionals feel are the barriers to and enablers of the provision of education for children with autism in Saudi Arabia?

It has been argued that research questions can always be examined from different perspectives (Thomas, 2013). Thus, this section identifies the theoretical perspective supporting these particular research questions. In

addition, it discusses the roles of the research methods used in terms of epistemology and constructivism.

#### **4.4 Epistemological / analogical position**

Academics in various disciplines attribute a varied range of meanings to the terminology of research (Schwartz-Shea & Yanow, 2012). This section addresses how these worldviews are either constructive or interpretative and discusses the particular position this research takes. In order to understand the interrelationship between the key components of research studies, including methodology and methods, a clear and transparent knowledge of the analogical and epistemological assumptions that underpin the research in question is necessary (Grix, 2002). These assumptions can also be referred to as research paradigms, which are models, viewpoints or conceptual outlines that help us to shape our thoughts, confidence, views and performance into a logical whole (Basit, 2010; Bryman, 2012). In this study, the researcher thought that there is a lack of awareness regarding children with autism, which affects the school provision of children with autism.

These sorts of paradigms relate to the ideas of this research, which concern how Saudi educational professionals view their education system in terms of

including children with autism (or any undiagnosed pupils who may present with the same criteria for children with autism) and the views of parents who have children with disabilities on this system. Moreover, this research views these individuals' worlds as constructive, which some authors define thus: "social constructivists hold assumptions that individuals seek understanding of the world in which they live and work" (Creswell, 2014, p. 18). The importance of this statement is that individuals who express an opinion have constructed that opinion based on their experiences of the way the social world operates. For example, in terms of this research, the perspective of many parents might be based on their experience with the school local to them. Generally, the answers that research respondents gave to questions depended on some of these understandings. To clarify, it is necessary to explain ontology and epistemology and where this research positions itself.

#### **4.4.1 Ontology**

According to Grix (2002, p. 177), "ontology is the starting point of all research, after which one's epistemological and methodological positions logically follow". Generally speaking, analogical assumptions are concerned with what we believe establishes social reality. 'Objectivist' and 'constructivist' perspectives are examples of analogical positions. An

‘analogical position’ is a declaration that social phenomena and their meanings exist independently of social actors (Cohen, Manion, & Morrison, 2007). Furthermore, it can be argued that if ‘ontology’ is about what we may know, then ‘epistemology’ is about how we come to know what we know (Punch, 2009). This study investigated a social phenomenon related to children with autism with respect to what Saudi educational professionals and parents know, and how they know it.

In relation to this research, what we know is that children with autism exist. What we do not know is how their life is affected from the environment that they live in. Obviously, the social phenomena that gave the researcher the idea of this study is that in Saudi Arabia people are socially connected; they meet every week with their extended family. This connection allows the social phenomena to spread very easily. For example, one of the social phenomena that the researcher discovered is that people have no idea what autism is even if some of them have heard about it before. Therefore, people might misconceive some children as autistic just because they are not socially involved. In order to know if this is really what is happening in Saudi Arabia, the researcher attempted to conduct a mixed method study and

tried to have a deep understanding from both parents and professionals who participated in this study.

#### **4.4.2 Epistemology**

One of the essential branches of philosophy is concerned with the theory of knowledge, especially with respect to its methods, validation and “the possible ways of gaining knowledge of social reality” (Grix, 2002, p. 177). It has been argued that in research, analogical and epistemological positions can lead to different views of the same social phenomena (Bryman, 2012). An ‘analogical position’ is the interrelationship between what a researcher thinks can be researched, and an ‘epistemological position’ links this to what we can know about it, as well as how to go about acquiring it (i.e. a researcher’s methodological approach). Therefore, it is important to comprehend the impact a researcher’s analogical position can have on what and how she studies (Kembera & Leungb, 2008). Speaking broadly, epistemology focuses on the knowledge-gathering process and is concerned with developing new models or theories (May, 2001), which permits a researcher to identify the methodology that is most effective to achieve the aims of a study.

The suitability of similar standards of research quality relies on the types of knowledge that different methodological approaches generate and the varying philosophical perspectives on reality that these call into question. In general, qualitative research seeks to investigate depth over breadth, and can be used to examine nuances in lived experiences, as opposed to aggregate evidence. However, it can be argued that qualitative research is more contextual and subjective when compared with quantitative research, which tends to be more generalisable and objective (Sharp, 2009). This argument has broadened the gap between quantitative and qualitative perspectives, and significantly influenced the evolution of validity criteria in qualitative research (Whittemore, Chase, & Mandle, 2001). In this study, the qualitative were applied more than quantitative. This will give deeper information about the social phenomena that were examined in this study.

With respect to this study, what is known is that many children with autism live in Saudi Arabia, in particular Riyadh. However, what the researcher seeks to know is the position of these children in terms of school provision. This research investigates the views of individuals, which suggests that the most effective way to collect data for this study was through qualitative methods. However, in order to collect a sufficient amount of data,

quantitative methods were also used to investigate the views of educational professionals about the awareness of, and school provision for, children with autism in Saudi Arabia. This entire process was based on the knowledge of parents of children with autism and educational professionals. In sum, it can be concluded that epistemology and ontology are important factors in determining research methods.

The following section discusses the mixed-method approach for data collection that was applied in this research.

## **4.5 Mixed methods**

Creswell (2014, p. 3) justified the use of mixed-methods approaches in research, as “a study tends to be more qualitative than quantitative or vice versa” depending on the needs of the researcher. For this study, mixed-method approach was employed to address the research aim. Several definitions exist for mixed-methods approaches. In general, ‘mixed-method’ studies can be defined as “empirical research that involves the collection and analysis of both qualitative and quantitative data” (Punch, 2009, p. 288). Furthermore, Johnson et al. (2007, p.123) stated that “mixed-methods research is the type of research in which a researcher or team of researchers

combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration”.

However, in the context of this study, the following definition of ‘mixed-method’ was deemed most appropriate: “qualitative dominant mixed-methods research is the type of mixed research in which one relies on a qualitative, constructivist-poststructuralist-critical view of the research process, while concurrently recognizing that the addition of quantitative data and approaches are likely to benefit most research projects” (ibid, p. 124). This definition is suitable because it states that while a research method might skew toward qualitative methods, in order to gather more data, a researcher might also use quantitative approaches, which then results in a mixed-method approach. As stated above, mixed-method research is that which contains ideas from qualitative and quantitative research domains (Johnson et al., 2007).

In addition, mixed-method research is becoming an increasingly popular approach in several areas of study, most likely in part because it can provide

a better understanding of research problems (Molina-Azorin, 2012). To support this point, the goal of mixed-method research is to draw from the strengths and minimise the weaknesses of both qualitative and quantitative research methods rather than to replace either of these approaches. A further advantage of mixed-method research is that it can also help bridge the perceived schism between quantitative and qualitative research (Cohen et al., 2007). In sum, mixed-method approaches are appropriate when neither quantitative nor qualitative methods are sufficient in themselves to capture the trends and details of a situation (Creswell, Fetters, & Ivankova, 2004).

To underscore a strength of these two main data types, quantitative data can facilitate the assessment of generalisability of qualitative data and shed new light on qualitative findings during the data analysis stage (Schwartz-Shea & Yanow, 2012). Furthermore, during this stage, qualitative data can perform an important role by allowing interpretation, clarification, description, and validation of quantitative results, as well as by grounding and modifying these results (Phillips & Pugh, 2006). As these methods are often perceived as requiring more work and financial resources and generally taking more time, mixed-method studies may be viewed as a challenge (Molina-Azorin, 2012). However, Johnson and Onwuegbuzie (2004, p. 14) stated that

“research is value-bound, that it is impossible to differentiate fully causes and effects that logic flows from specific to general”. This clarifies that using a mixed-method approach in this research benefitted its data analysis, as the quantitative and qualitative data were combined to provide a greater understanding.

In addition, research methods themselves must be demonstrated to be free from analogical and epistemological assumptions, and the choice of which methods to use should be directed by research questions (Lieberman, 2005). The potential benefits of mixed-method research include that it allows for more comprehensive findings, increased confidence in results and validity of conclusions, and more insightful understanding of the underlying phenomena under investigation (Molina-Azorin, 2012). This approach also has the potential to reduce some of the problems associated with using a single method of data collection, as it integrates the strengths of both main types of data. In sum, the reason for choosing a mixed-method approach for this study was that it afforded a greater understanding of the research problem through obtaining qualitative and quantitative data from educational professionals. Additionally, more comprehensive findings and increased

confidence in results were obtained through applying a qualitative approach to analysing the data collected from the parents of autistic children.

At the data collection stage, quantitative data can also play a role in providing baseline information, can help to avoid “elite bias”, and can facilitate the data collection process (Kalayci & Çimen, 2012). Furthermore, justification of choices concerning research approaches and connecting thoughts across techniques, philosophies, and research questions should be evident in any project (Whittemore et al., 2001). Broadly speaking, according to Grix (2002, p. 178), “we need to be aware of, and understand, that different views of the world and different ways of gathering knowledge exist”. However, it is worth noting that all research methods carry both benefits and limitations (Frandsen, Walters, & Ferguson, 2013).

## **4.6 Methods**

The previous section explored and justified the use of a mixed-method approach in this research, and this section describes the specific methods that were used. Kaplan and Duchon (1988) argued that “combining qualitative and quantitative methods proved especially valuable in terms of the research” (p. 582). One of the benefits of mixing research methods is that

this process can suggest new avenues and modes of investigation that are unlikely to occur if one method is used alone. Many researchers would benefit from combining research methods, and all researchers should have a solid understanding of the methods used by other researchers in order to facilitate communication, encourage collaboration and provide greater research. As a result of current research trends, the world is becoming increasingly interdisciplinary, complex and dynamic (Johnson & Onwuegbuzie, 2004).

For this research, a variety of methods were used to gather data in order to investigate the views of educational professionals and parents on the awareness of and school provision for children with autism. Data collection from surveys, interviews and social media accounts were the three methods that the researcher used in this study, all of which were applied at the same time. The researcher began by collecting social media data and conducting interviews with parents, then she distributed the study survey to Saudi education professionals, and finally, she conducted interviews with senior education officials in the Saudi Ministry of Education Special Needs Department. In terms of the design of the data collection, questions were adapted from previous research mentioned in the literature and the tools used

in the researchers' Master's research. Section 3 of the survey was taken from another study, namely and the reference of the article was added on the same page of the questionnaire. All the scale and open questions were adapted from the tools utilised in the Master's study. These tools were not piloted for the purpose of this research, but they were piloted for other previous studies.

The first data collection method discussed in this chapter is the interviews that were conducted with parents and senior education officials. The second data collection method is the surveys, which were administered to Saudi education professionals. Finally, the chapter discusses the third data collection method that was performed via social media accounts (i.e. Twitter) and was used to obtain data from parents.

#### **4.6.1 Interviews**

A great deal has been written about the advantages of conducting interviews in educational research (Collins & Kneale, 2000; Murray, Bagby, & Sulak, 2011; Savin-Baden & Major, 2013; Sharp, 2009). The main advantage of conducting interviews is that this method allows face-to-face encounters to take place and provides opportunities for interviewers to pose probing questions about a participant's experience. Consequently, for this research,

the interview method provided a means of acquiring potentially rich and detailed information (Al-Makhalid, 2012). There are several types of interviews, including focused, structured, and semi-structured (i.e. open-ended or open). Semi-structured interviews permit the researcher to capture the opinions of interviewees concerning facts or events, and responses can support confirmation of provisional results or interpretations (Alqefari, 2010). The technique of administering semi-structured interviews is to pose questions whose subject and sequence have not been determined before an interview (Collins & Kneale, 2000). Another benefit of employing this technique is that it permits flexibility in addressing the subject matter and the sequence of questions according to each individual respondent (Al-Makhalid, 2012). This flexibility in format and structure means that an interview can be modified to suit different research purposes. In addition, the flexibility of this approach allows the researcher to ask further questions when necessary to obtain a deeper understanding of an interviewee's perspectives. However, one of the disadvantages of conducting semi-structured interviews is that they require a certain sensitivity that must take into account the manner in which the researcher and the respondent interact. In addition, the flexibility in format and structure of this interview type

means that the interview can be modified to be suitable for the needs and purposes of different research.

However, the main disadvantage of collecting interview data is that it can be time-consuming and expensive, particularly if a study involves data collection from an extensive sample. In addition, analysis of in-depth data also requires a lot of time (Cohen et al., 2007). Furthermore, the presence of a researcher in an interview can influence a respondent's answers in a negative or positive way. Burton, Brundrett, and Jones (2008, p. 73) claimed that "the most serious disadvantages of interview are the cost and the lack of confidentiality and anonymity". For example, respondents might feel uncomfortable or threatened when asked questions that relate to personal issues, such as drug use, domestic violence or sexual behaviour. As a result, some respondents may choose not to participate in an interview, and those who do participate may conceal or alter their answers or give only socially desirable responses (Clough & Nutbrown, 2012; Punch, 2009). Finally, it is possible that during interviews a researcher may influence respondents, consciously or unconsciously, through facial expressions, intonation, pausing at certain points, asking leading questions or other indirect signs (Creswell, 2014).

It is important to note that from preschool onwards, Saudi Arabian schools are separated by gender, including university level (see Chapter 2, Section 2.3). Consequently, women cannot enter male schools and men cannot enter female schools. As a result, this female researcher was required to interview senior male educators via phone. This proved to be time consuming, as many government employees could not be interviewed during business hours, which sometimes made it difficult to arrange mutually convenient interview times. Second, it was often difficult for the researcher to explain her research clearly and persuade male senior educators to share their perspectives in an interview. For this reason, the researcher interviewed female professional educators. Interviews with these women were scheduled according to their availability and preference for phone or face-to-face communication.

For this study, the researcher went to Riyadh, Saudi Arabia to conduct interviews with senior educational professionals and parents. Ten semi-structured interviews were conducted with parents, and five with senior educators. Both the parents and the educators were given the opportunity to set their respective interview times, so that the researcher could schedule

them according to their availability. As all of the interviewees preferred to be interviewed by phone and contacted the researcher when they were available. In addition, after obtaining ethical consent, all of the interviewees agreed to allow the researcher to record their interviews. Finally, the researcher assured all interviewees that their recordings would be strictly secured and that their information would only be used for the purposes of this study.

#### **4.6.2 Questionnaires**

In addition to using interviews, administering questionnaires is a useful method for gathering relatively large quantities of data from large samples within time and resource limitations. Questionnaires are often used to gather information about attitudes, behaviours, activities and responses to events, and usually consist of a list of written questions (Thomas, 2007). Respondents complete questionnaires either under timed conditions, by post, or by responding to researchers directly who, armed with the questionnaire, pose questions directly (Creswell & Clark, 2011).

Many scholars have asserted that using questionnaires is the most efficient means of collecting data (Cohen et al., 2007; Creswell & Clark, 2011; Savin-

Baden & Major, 2013). However, it can be argued that the use of questionnaires for research purposes is not without its difficulties. Typically, questionnaires are administered to gather data about conditions and practices and are used to ascertain attitudes and opinions of respondents about an issue, object or situation (Al-Makhalid, 2012; Clough & Nutbrown, 2012; Sharp, 2009). However, in order to be used effectively, questionnaires must be well designed in a manner that is easily understood by respondents and is likely to produce accurate responses. In addition, researchers should bear in mind that respondents may not always be pleased to respond to a questionnaire, and that enthusiasm to respond carefully and honestly, if at all, might be low (Kalayci & Çimen, 2012).

“A variety of software tools are now available for conducting Internet surveys and they are becoming an increasingly sophisticated and easy to use” (Solomon, 2011, p. 1). For the purposes of this study, the researcher attempted to avoid this problem by setting up a questionnaire using the web survey application “Survey Monkey” and by attempting to distribute her questionnaire to a large sample of educational professionals. It is important to produce research outcomes that are measurable and presented in a way that can be generalised to a certain extent and allow for useful results.

Consequently, the potential to reproduce results in similar environments, though with limited precision, is important (Sandelowski, 2000). In addition, the questionnaires used in this study contained open-ended questions, and thus invited respondents to share viewpoints without the limitations of selecting predetermined answers provided by the researcher. This allowed for a qualitative constituent to the data collection process in addition to the already quantitatively rich questionnaires (Alqefari, 2010).

Many procedural considerations should be taken into account when developing a questionnaire that is faithful to the original aims of a study. The data collection process should be initially addressed through a reflection on the purpose, aims and objectives of the study and on the research question to be addressed. It is vital for questionnaire questions to be written in accordance with the basic content and aims of the inquiry, such as “what are the subjects we are absorbed in and why?” and “which questions will produce meaningful answers?” (Creswell, 2014, p. 56). Furthermore, questions should form an actual pre-coded logical order and allow for the acquisition of clear data. For this study, the aforementioned technique was vital in shaping the questionnaire and allowed the research to be more focused and specific.

However, few studies appear to present satisfactory evidence of validity of the numerous courses for developing questionnaires that evaluate teaching. For this project, the researcher designed the questionnaire to directly address the research questions. The questionnaire was divided into four sections: 1) general information about the educational professionals; 2) questions about the practitioner's knowledge of autism; 3) a belief scale that contained a selection of statements to which the respondents agreed or disagreed; and 4) an open-ended section in which respondents could express any comments or concerns. The educational professionals' knowledge about autism was by far the most important facet of the questionnaire.

#### **4.6.3 Social media**

The final source of raw data for this thesis is through the use of social media. It has been argued that social media in general exhibits a rich variety of information sources, however the fact that the quality of social media data has varies greatly from very high-quality to low-quality items, and sometimes content is abusive, is the main challenge posed by content on social media sites (Agichtein, Castillo, Donato, Gionis, & Mishne, 2008). Social media content has become indispensable to millions of users,

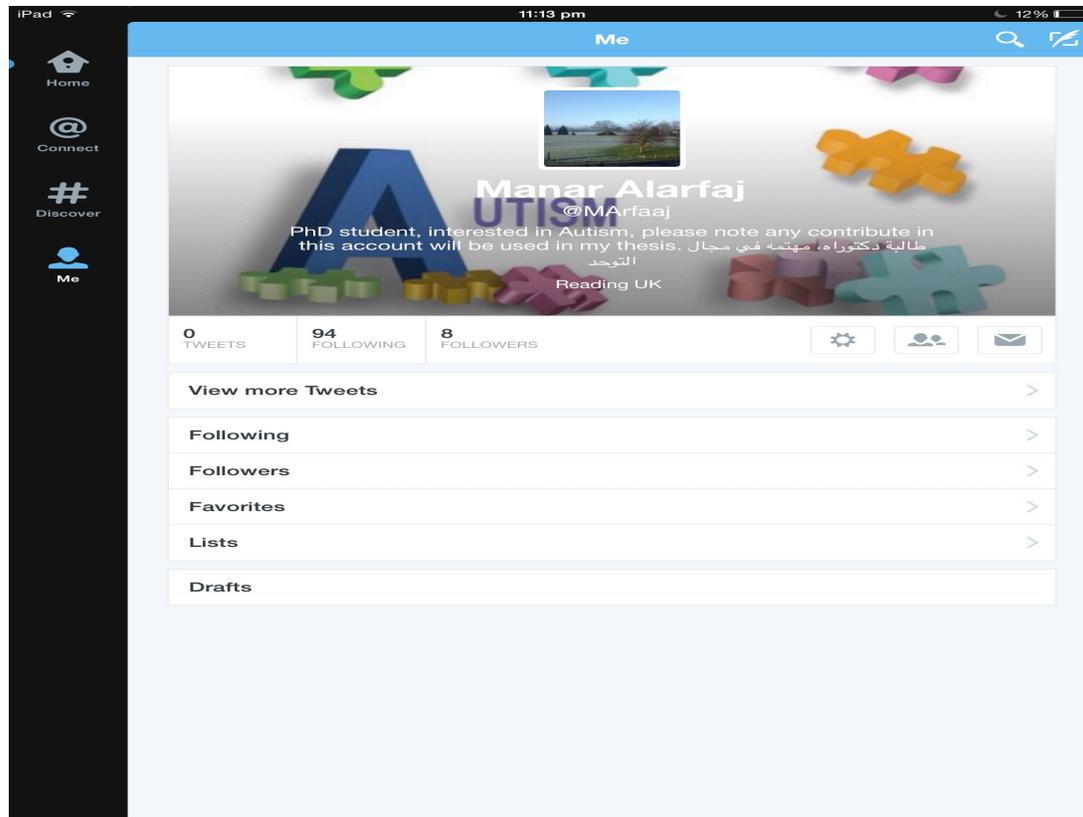
specifically, community question/answer portals which are a popular terminus of users looking for assistance with a specific situation, for entertainment, and for community interaction (Agichtein et al., 2008; Bryman, 2012). Generally speaking, the idea of using social media in research studies to collect data is fairly new (Cohen et al., 2007) and requires detailed knowledge of content (Bryman, 2012). However, some researchers think that recent coverage of previous research prejudices the fact that significant numbers of people do not have access to or choose not to use the Internet is of greatest concern to researchers (Solomon, 2011). It is clear that using social media in collecting data for research is not an easy option, and it has a number of limitations, as access to the Internet cannot be assured for all people. Recently, researchers have discovered the use of the Internet for sample enrolment, not only for online surveys but also to make experimental judgments (Ahn, Gubbels, Yip, Bonsignore, & Clegg, 2013).

As Frandsen et al. (2013, p. 247) found, “social media (e.g., Twitter, Facebook, Google+) represent a relatively new online avenue for recruiting not only general population samples but also specific population cohorts”. Cohen et al. (2007) suggested that social media methods can be applied to the accounts of a number of people who share aspects of their lives. Twitter

is one of the social media applications through which participants can share their ideas and thoughts. To clarify, those with Twitter accounts can follow the accounts of those who share their interests, and one can share any idea or thought through tweets. However, tweets cannot be any longer than 170 characters. For this study, through following the accounts of some parents of children with autism, the researcher became more interested in exploring this further. The researcher found that Twitter accounts she followed frequently showed a mix between parents willing for their children and others expressing their concerns and complaints. However, it is important to keep in mind that the Internet is, in a sense, a public place, and in a research context, unless measures are taken to limit access to Twitter accounts, they may be responded to by people who are not among those sampled by the researcher (Gilbert & Karahalios, 2009). The researcher used twitter data as new tool and identified the difficulties as well as the risks of using such a new data collection method.

As previously mentioned, the idea of collecting Twitter data for this study came from seeing the number of Twitter accounts run by parents of children with autism in Saudi Arabia. The researcher thought this could be a fruitful resource for data collection, and that she could post some questions to the

parents who have children with autism regarding the awareness of and school provision for these children. However, as Cohen et al. (2007) indicated that the procedure for following such methods should be to specify to whom the researcher is posing questions, and what acts and situations involve. Also, researchers must make choices and take responsibility for their actions. Furthermore, problem preparations must respect the meaning of the act to the researchers. On the other hand, the researcher knew that clarifications about what respondents wrote on Twitter to answer her questions should respect the meaning of the acts to the actors themselves. In other words, the researcher had to indicate in the Twitter personal account information that the account was to be used for data gathering purposes, that she was a PhD student, and that any participation could be used in her study. The 'personal account information' is something that all Twitter accounts have where the account holder can write anything . Generally speaking, this information is an explanation of the purpose for the account or the account holder's interests or profession. The following figure (3.1) shows an image of how the Twitter account the researcher used appears, and her personal information, as well as the number of followers, those she follows, and tweets.



**Figure 4.2 Twitter screenshot**

To conclude, “social network data analysis would seem to have a useful role to play in educational research by providing a technique for dealing with the bulk and the complexity of the accounts that are typically generated in qualitative studies” (Cohen et al., 2007; p. 389). Therefore, the researcher set up a Twitter account to gather data from parents of children with autism. She then posted tweets explaining her study, the intentions behind the account, and her bio. Examples of responses to the researcher’s Twitter queries are provided in Chapter 5, Section 5.2.

## 4.7 Sample

In quantitative research, it is significant to ensure that the number of participants in a given sample is sufficient for statistical analysis purposes and to understand any possible limitations or biases in the sample (Murray et al., 2011). Furthermore, the kind of sampling used in a study is one of the most important features distinguishing what is known as ‘qualitative inquiry’ from ‘quantitative inquiry’ (Sandelowski, 2000). At the research design stage, quantitative data can support the qualitative component of a study by classifying representative sample members as well as distant ones (Kalayci & Çimen, 2012). Ideally, quantitative research involves probability sampling to permit statistical inferences to be made, and qualitative research typically involves purposeful sampling to enhance understanding of information-rich cases (Sandelowski, 2000). In addition, purposeful sampling is generally focused on or toward the development of idiographic information from generalisations and about individual cases.

Probability sampling is primarily concerned with the development of ‘nomothetic’ knowledge, or that which generalises from samples to populations (Punch, 2009). However, employing a mixed-method approach

has implications for the sampling strategies employed in this research. At the most basic level, there are two broad approaches to sampling: random (i.e. probabilistic) and non-random (i.e. non-probabilistic). To clarify, a ‘random sample’ is a sample taken from a population or set of cases that is premised on the idea that every individual or case within has an equal probability of inclusion (Bryman, 2012). On the other hand, ‘non-random sampling’ involves the selection of individuals or cases when such a requirement is deemed unnecessary (Cohen et al., 2007). In some cases, mainly those that concern qualitative studies, samples are selected with explicit purposes in mind, which is usually a choice that leans towards the generation of relevant or rich data, as is the case for this research project. However, Johnson and Onwuegbuzie (2004, p. 18) stated that “gaining an understanding of the strengths and weaknesses of quantitative and qualitative research puts a researcher in a position to mix or combine strategies and to use what Johnson and Turner (2003) call “the fundamental principle of mixed research”. Until a point of informational redundancy is reached, researchers will sample participants in scoring categories until they have collected data from enough cases in each scoring category to allow them to draw conclusions about the validity of the result or to elaborate on and clarify the result (Sandelowski, 2000). In the vast majority of empirical research

studies, quantitative samples are non-random, which makes them weak in terms of both inference quality and generalisability (Kalayci & Çimen, 2012). This is one of the limitations for this research project in terms of sampling, which will be discussed later in the conclusion chapter. In order for the findings of a well-designed research project to be generalised to a broader population, the sample in question needs to be truly representative of this population (Muijs, 2004).

Despite these concerns, purposeful and probability sampling techniques can be successfully combined. For this study, the qualitative and quantitative data samples constitute opportunity sampling, as the researcher was interested in capturing the perspectives of professional educators. A selection of primary schools (for both boys and girls), private schools and schools solely for children with autism were considered for participation in the study so there wasn't a special criteria for choosing the sample of schools. In addition, the researcher's aim was to collect at least 250 surveys, conduct 10 interviews with school officials, and have discussions with at least 15 parents of children with autism through social media, specifically Twitter. Mixed-method research approaches typically contain an unlimited

selection of combinations of sampling, data collection and analysis techniques (Cohen et al., 2007).

The following subheadings will provide information on how the researcher located her sample and contacted them and will present the challenges faced during the data collection process.

#### **4.7.1 Twitter data**

With the expanding use of social media, the researcher used a Twitter account due to its popularity, and because of the researcher's interest in SEN, she was following most of the well-known Saudi public accounts in which topics about SEN or ASD were usually discussed. On these accounts, parents were posting their complaints and sharing their struggles with the activists in these areas. Other parents, on the other hand, were guiding the new parents who were asking about autism centers, diagnoses and early intervention. When the researcher decided to conduct her study and collect data, she started to post questions regarding her study that emerged into her mind at that time of completing her literature review and were adopted from her master's degree interview. Initially, it was very challenging for the researcher to get answers on her posts until she realised that by mentioning

well-known accounts and getting retweeted by them, her tweets will be seen and will become recognised by more users. Therefore, the researcher was able to gather a following, and interaction and participation increased. This allowed the researcher to collect data from parents from their bios and previous tweets.

#### **4.7.2 Interview sample**

The interviews were mainly conducted with 10 parents (9 female, 1 male) and 5 professionals (4 female, 1 male). The total number of the participants in the interviews were elicited using two methods. In terms of interview, the sample was mixed. Twitter users responded in private when the researcher posted if anyone was willing to participate in an interview. Also, when she returned to Saudi Arabia, she visited centers that specialise in offering support to children with ASD and asked the head of these centers to distribute her information sheet to the parents. Not all parents who initially contacted her continued and completed the interview as some of them withdrew during the interview and others postponed due to their busy schedule but did not complete the interview in the end. To get the data from the professionals, the researcher herself visited the Ministry of Education. Professionals in this study include teachers, supervisors and leaders. After

the researcher got the approval from the parents and the professionals to participate, the interviews were scheduled.

#### **4.7.3 Survey sample**

Before distributing the questionnaires, the researcher visited 20 public schools, 13 girls' and 7 boys' schools in Riyadh. The samples of the questionnaire were collected by distributing them by hand when the researcher went back to Saudi Arabia (Riyadh). She visited approximately 20 schools and met the head teacher in each and give her the information sheet including the consent form, which a detailed information regarding the study and asked them if they are willing to let her school and teachers participate in the study. After obtaining approval from the headteachers, copies of the questionnaires were distributed and a total of 20schools were visited. Among these 20, 2 head teachers refused to participate and the other 18 completed the consent form and distributed the survey to the teachers. However, not all were returned.

#### **4.8 Data analysis**

To expand the scope and improve the analytic power of their studies, researchers have increasingly turned to mixed-method techniques. In the

face of this, these techniques are neither paradigm nor method-linked; rather, researchers' orientations toward inquiry and their methodological commitments influence how they use them (Sandelowski, 2000). Data in this study was analysed based on the type of data. Twitter data and interviews were analysed using thematic as well as line-by-line techniques and using different colour highlights to identify the themes that emerged. After collecting the data, all recorded conversations were transcribed and data collected from questionnaires' was analysed using SPSS.

To further explain the data analysis for the three methods used in this research, the next subheading will explore in detail how the researcher analysed the data.

#### **4.8.1 Interview analysis:**

Firstly, the researcher listened to the recorded interview several times then transcribed all the interviews into Arabic, the language the interviews were conducted in. The data was analysed using thematic and line-by-line techniques so themes that relate to the aims of the study and that had been discussed in the literature review chapter started to emerge. The researcher read all the interview line by line, highlighted and coded all the ideas that

she needed to use in the analysis data as direct quotes. To ensure the accuracy of translation, all direct quotes were given back-translation to ensure the meaning was retained. Furthermore, the translations were checked by another PhD student whose mother tongue is Arabic. Examples of the transcribed interview are attached in appendix ( J ).

#### **4.8.2 Twitter analysis:**

Data from Twitter accounts were sorted according to each theme that emerged from the questions asked, which were based on the literature review. There was a total of 60 tweets from 15 different accounts, and almost each person shared their opinion with almost 4 tweets not necessary for the same questions. Example of these Tweets are attached in appendix ( I ). All tweets were analysed using thematic and line-by-line techniques, and the direct quotes were translated back and forth to ensure the English translation was accurate.

#### **4.8.3 Survey analysis:**

There was a total of 242 surveys returned, which were analysed using SPSS. The researcher asked for help in using the SPSS software, and she chose to present the data in chapter six. Only the open-ended questions, which were

in Section 4, were analysed using thematic and line-by-line techniques. In total, there were approximately 92 surveys, which answered the open ended questions. Examples of these answers are attached (in appendix J). All themes and coding that the researcher came up with are based on the research questions and the literature review.

## **4.9 Research Authenticity**

In this section, research reliability and validity is the main focus, as these are the two criteria most widely used to determine whether or not a research instrument is viable (Kembera & Leungb, 2008). Since this research project utilises a mixed-method approach, triangulation will also be considered in more detail.

### **4.9.1 Validity and reliability**

Validity and reliability are important aspects of successful and defensible research studies. As Cohen et al. (2007, p. 133) stated, “if a piece of research is invalid then it is worthless”. Many authors have studied validity and reliability in great depth, and various definitions of these terms exist (Burton et al., 2008; Cohen et al., 2007; Creswell & Plano Clark, 2011; Punch, 2009; Thomas, 2007). However, to summarise, “validity simply means the degree

to which a study's results should be trusted" (Murray et al., 2011, p. 35). Generally speaking, 'reliability' refers to the consistency of the results of an assessment (Oktay, Jacobson, & Fisher, 2013).

In addition, the term 'reliability' refers to the extent to which a research instrument, such as a test, will yield the same results on different occasions (Ribbens McCarthy & Edwards, 1997). Collins and Kneale (2000) stated that claims based on prior knowledge that are validated under a dominant model become suspect if the epistemology used to validate this knowledge comes into question. In mixed-method approaches, considerations of 'validity' are still in their infancy. Many feel that the validity criteria used in quantitative perspectives are inappropriate for qualitative research, as qualitative research is based on entirely different epistemological and analogical assumptions (Whittemore et al., 2001). In fact, Onwuegbuzie and Johnson (2006, p. 55) argued that "because validity is the test of this correspondence, validity does not exist because there simply is no single reality, with truth being partially arbitrary as individuals interact with their worlds". Therefore, the authors concluded that using the term 'validity' in mixed-methods research could be counterproductive. Furthermore, it has been argued that developing validity standards for qualitative research is

challenging due to the necessity to incorporate rigour and subjectivity as well as creativity into the scientific process (Whittemore et al., 2001). In each mixed-methods research study, investigators must manage challenges of representation, legitimation, and integration, but negotiations about validity issues that describe these problems are still in their relative infancy (Onwuegbuzie & Johnson, 2006).

Generally speaking, based on positivistic philosophy, initial conceptualisations of validity were directly applied to the reliability and validity standards of quantitative or experimental research (Kaplan & Duchon, 1988). Although judgment is necessary to determine the optimal weight of each criterion for a given study, there is a need for common validity criteria in qualitative research (Collins & Kneale, 2000). Furthermore, research quality depends on honest and forthright investigations are, and searching for alternative explanations and a self-critical attitude is imperative (Frandsen et al., 2013). Even so, every study contains biases and particular threats to its validity, as all methods have limitations, and research involves multiple interpretations as well as the moral and ethical components inherent in judgment.

As a result, what becomes most important is to determine the validity standards of a particular study (i.e. its criteria), to employ the optimal methodological techniques, and to critically present the research process in detail (Kembera & Leungb, 2008). Validity cannot be assumed, and the presentation of research findings must invite the opportunity for critical reflection by consumers. This is the importance of explicating “how we claim to know what we know” (Whittemore et al., 2001, p. 522). One major possible concern is that it would be difficult to argue that a study is valid if its results are not reliable (Murray et al., 2011). Hence, validity and reliability are interconnected. Kembera and Leungb (2008, p. 352) state that “reliability has proved much easier to establish as there are readily available statistical tests”. This means that ‘validity’ represents the truthfulness of findings, whereas ‘reliability’ refers to the stability of those findings (Whittemore et al., 2001). Cohen et al. (2007) pointed out that research is valid in the sense that it is appropriate in kind and, within that kind, sufficiently complete and faithful, and reliable in the sense that there exists an acceptable level of agreement as to how to use the network system to describe data. On the other hand, any system of description needs to be both valid and reliable. In terms of addressing validity in both approaches, validity in qualitative and quantitative data is addressed differently. For

qualitative data, questions of validity can be addressed through the honesty, depth, richness and scope of the data collected, the participants approached, the extent of triangulation and the objectivity of the study. For quantitative data, validity can be enhanced through careful sampling, suitable arrangement and suitable statistical treatment of data (Schwartz-Shea & Yanow, 2012).

To conclude this section, one way this research was conducted to ensure the validity and reliability of its data was to employ a mixed-method approach so that its quantitative data could be confirmed through the analysis of its quantitative data. In addition, triangulating the data analysis ensured the reliability and validity of this data.

The following section discusses triangulation in more detail.

#### **4.8.2 Triangulation**

Campbell and Fiske (1959) referred to the idea of triangulation as “multiple operationalize,” in which more than one method is used as part of a validation process to ensure that any explained variance appears as the result of the underlying phenomenon or trait and not the research method

(e.g., quantitative or qualitative) (Johnson et al., 2007). The technique of using a variety of sources to support research results is called triangulation (Murray et al., 2011). Therefore, it could be said that ‘triangulation’ constitutes different approaches to studying the same phenomenon, and seeks to affirm convergence and validation of research results (Molina-Azorin, 2012). Therefore, Kaplan & Duchon (1988, p.582) claim that “triangulation of data from different sources can alert researchers to potential analytical errors and omissions.” Furthermore, through triangulation, researchers can check the robustness of results as findings can be strengthened, especially if multiple methods are used (Kaplan & Duchon, 1988). Researchers will inevitably obtain information for convergent validity and, thereby, also achieve the purpose of triangulation in the process of sampling for complementarity (Sandelowski, 2000).

It should be mentioned that triangulation approaches are perhaps not suitable for all research purposes, but due to their comprehensiveness they do hold certain advantages, such as allowing researchers to be confident of their outcomes, encouraging the development of creative ways of collecting data, leading to denser, richer data, and discovering contradictions (Johnson et al., 2007). In addition, to best understand a research problem, a researcher’s

intent on using this model should triangulate her methods by gathering both quantitative and qualitative data simultaneously and integrating these two forms of data (Creswell, Fetters, & Ivankova, 2004). Consequently, triangulation is an important aspect of research, and should be considered when applying mixed-methods approaches in research projects.

For this study, the researcher used triangulation to strengthen her mixed-method design and triangulated the qualitative and quantitative data by viewing it from different approaches. As Azulai and Rankin (2012, p. 125) stated, “the overarching principle of triangulation in quantitative and qualitative research is that multiple viewpoints allow for greater accuracy of the interpretation of the research findings”.

#### **4.10 Ethical considerations**

Creswell (2009, p. 175) asserted that, “ethical issues in research command increased attention today”. As a result, through reflection on this research process, the ethical considerations that needed to be anticipated were extensive. However, as Cohen, Manion and Morrison (2007) pointed out, ethical concerns can stem from the kinds of problems examined by social scientists and the methods they use to gain valid and reliable data. Moreover,

researchers are inevitably responsible for all aspects of the research process, and for the reliability of results (Punch, 2009). This researcher attempted to address all ethical concerns in undertaking this project and made use of available literature in the field. As many authors indicate, privacy, anonymity, confidentiality and betrayal are the most important elements in conducting education-related research that a researcher is required to consider (Creswell & Plano Clark, 2011; Punch, 2009; Savin-Baden & Major, 2013).

In this study, the information sheets distributed to participants contained all the pertinent ethical information that needed to be divulged to participants, such as procedures to protect confidentiality and anonymity. Additionally, all respondents were assigned a discrete identification number (ID) to distinguish their responses from those of other participants, which ensured that the records of this study would be kept confidential and that no identifiers would link participants to the study or be included in any published report. The research records for this study will be stored securely in a locked filing cabinet and on a password-protected computer, where only the researcher and the researcher's supervisor will have access to the records. In addition, the researcher offered to send a summary of the

research results to all respondents electronically via email if requested. However, in any case, it is important to mention that all research data for this project will be destroyed after five years.

The researcher considered the ethics process very carefully and completed all ethics documentation required by the University of Reading. In addition, the researcher was aware of the ethical issues that can occur at all stages of the research process, beginning with the researcher's choice of topic, why it is important, and who will benefit from this research (Punch, 2009). The University's Ethics Committee was also sent the consent forms for all involved in this research for approval. As a result, this project has been reviewed following the procedures of the University of Reading's Research Ethics Committee and has been given a favourable ethical determination for conduct.

Research consent forms can be defined as "the procedures in which individuals choose whether to participate in an investigation after being informed of facts that would be likely to influence their decision" (Diener and Crandall 1978, cited in Cohen et al., 2007, p. 52). In order to begin collecting data and visiting schools, the researcher gained written approval

for this project from the Saudi Ministry of Education, which was provided in writing to the head teachers involved in the study. In addition to this letter, the researcher gave all head teachers the information forms for the surveys and interviews. These forms were used to give the head teachers and any other participant from the schools involved a full understanding of what they would be expected to contribute, and how they could contact the researcher if they had questions or wished to change their mind about participating.

Moreover, the researcher gave the senior educational professionals involved in the study the consent form so that they could indicate if their school's staff were willing to participate, whether they were prepared to be interviewed and if they would object to being recorded. However, it should be clarified that the data collection procedure was dependent on the type of school involved. In the case of girls' schools, the researcher entered each school and met with its head teacher, gave her the approval letter and the consent form and then waited for her to respond. Nevertheless, because the boys' schools are separate in Saudi Arabia, and women cannot access these schools, in the same way as men cannot access girls' schools, the procedure was different. In these cases, the researcher went to the boys' schools and gave the head teacher the approval letter and consent forms and waited

outside the school gate for his response. When the head teachers agreed that their school would participate, they indicated this in the appropriate box on the survey. The researcher also asked in advance if she should administer the survey in schools in person or if it was more appropriate to collect the surveys later. However, this process constituted one of the major difficulties in the data collection process, as face-to-face interaction was not possible in boys' schools, and therefore the research could not be explained to the head teachers in these schools. This example illustrates how ethical problems for researchers can increase markedly when they move from the general to the particular and from the abstract to the actual (Cohen et al., 2007).

## **4.11 Summary**

In conclusion, the methodology chapter could be considered the heart of a thesis, as it discusses many important aspects of any research project. In terms of this study, this chapter explained the research aim, research questions, and the purpose of this research. The chapter also discussed the theoretical perspectives that link to general system theory, how these perspectives link to this research, and the ontology and epistemology in which the research is situated. Furthermore, the chapter outlined the mixed-methods approach methodology used in this research, explored the three

chosen data sources (i.e. survey, interview, and social media) and related these to the research questions. The study's sampling and data analysis methods were also discussed in terms of their validity and reliability, triangulation and the strengths and limitations of each. Survey data was analysed through SPSS software, and interview social media data was analysed manually. Finally, this chapter outlined the ethical considerations that were addressed in this research.

# CHAPTER FIVE: THE PARENTS' VIEW

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## 5.1 Introduction

The purpose of this study is to investigate the views of the participants on the awareness of and school provisions made in Saudi Arabian schools for children with autistic spectrum disorder (ASD). The study poses four research questions, and the views of both parents and professional educators are the main data resources for addressing these questions. This chapter focuses on the first set of participant data, which concerns the perspectives of parents of children with autism and discusses two data sources: Twitter data and interviews. The data collected from parents, all of which qualitative, includes approximately 60 responses collected via a Twitter account and 10 semi-structured interviews conducted directly with parents.

The collected data was explored, described, explained, and evaluated to ensure the systematic and empirical standards of proper research (Ruane, 2005). For the purposes of this chapter, the researcher explored the qualitative research data sets by coding them to discern common themes; i.e.

examining the data for differences and similarities in the responses. Hence, the process of exploring, describing and expanding the collected data sets is discussed in this chapter. The main themes for this research include awareness, diagnosis and school provision, and are based on the first research question, which is: “What do parents of children with ASD perceive as the barriers to quality education for their children in Saudi Arabia?” Furthermore, many other themes appeared in this data, such as having statement, training programmes and searching for better environments abroad for children with autism.

The first data set discussed in this chapter concerns the Twitter data (Section 5.2). The researcher will clarify and discuss the complete data set collected from her Twitter account. The researcher began analysing Twitter account data when she had the idea for collecting Twitter data, as discussed in Chapter 4. The first section of this chapter is divided into five subheadings: 1) comments on awareness, 2) comments on diagnosis, 3) perspectives on school provision, 4) parent training programme, and 5) general feedback. These subheadings arose after the researcher recorded and analysed all comments and responses on her Twitter account. The second section of this chapter (5.3) discusses the results of the semi-structured interview data

analysis. Following the same structure of the previous section, the researcher divided this section into five subheadings: 1) ASD awareness, 2) issues related to ASD diagnosis, 3) school provision, 4) parent training programmes, and 5) other themes that arose from the interview data analysis. The chapter concludes with a summary section, which lists the main findings of the analysis of both data sources. Please note that all raw data passages are presented in italics.

## **5.2 Twitter data**

As discussed in Chapter 4 (see Section 4.7.3), the researcher set up a Twitter account for the purposes of this study. She indicated the intent of the research in the account's biography section, which is a brief profile that all Twitter account users list to clarify the purpose of their accounts. In her biography section, the researcher listed that she is a PhD student interested in autism and advised that any contributions made to her account could be used in her thesis. The reason for mentioning this is to show how the number of followers increased during the data collection process. The first screenshot (see appendix A) shows the appearance of the researcher's Twitter account when it was set up. This was done so that anyone following, retweeting from or contributing to this account would see this biography

information and become aware of the purpose of the account. This screenshot was taken when the account was set up, and thus does not show any tweets and only eight followers.

The researcher knew that there was no easy way to identify the people who fit the criteria of her research and encourage them to respond to her Twitter account. Thus, she began to follow more and more parents of children with ASD and accounts set up by Saudi organisations for the purpose of either raising awareness of autism or special educational needs. This led her number of account followers to increase, as those followers all appeared to be interested in autism. The second screenshot (see Appendix A) shows an increase in the number of account followers and the number of Tweets at that time. As the image clearly shows, at the time the screenshot was taken, the number of account followers had increased from 8 to 180, and the number of Tweets to nearly 200. It should be noted that the researcher used this account for data collection from 15/09/2014 until 05/05/2015.

To clarify the data collection procedure, at one point the researcher came across a Twitter account, (@SpeciaEdl), that was set up by an organisation interested in special educational needs in Saudi Arabia. At the time, this

account had 36,109 followers, most of whom stated they were from Saudi Arabia and that they were either parents of special needs children or special needs educators. This account was of great assistance to the researcher in attracting more followers and respondents to her account. Including the @SpeciaEdl account, tweets from the researcher's account helped her reach a wide range of people who were interested in these topics. Therefore, in most of her tweets that posed questions, the researcher included a mention of the @SpeciaEdl account in order to help her reach more parents to pose her questions.

As a result, her number of Twitter followers increased, more people began sharing their views on and experiences regarding ASD awareness, diagnosis, school provision, and the barriers they faced in raising children with ASD. The questions that the researcher asked repeatedly in her Twitter account, as well as in her interviews with parents, included:

“What you think about the awareness level in Saudi Arabia regarding children with autism?”

“Furthermore, what school provisions do Saudi children with ASD have?”

“Is this the parents’ choice or the government’s, and what are parents’ concerns, if any?”

The researcher also posed questions about ASD diagnosis and asked respondents for further comments that could improve the lives of ASD children and their families.

Next, if the researcher received more than four responses to any one question, she posed this same question two or three additional times via Twitter on different dates and times. As a result, the researcher received more than 60 combined tweets answering these questions. The researcher also posted a few screenshots for comment, and while these were written in Arabic, she always provided a translation to clarify these tweets. To ensure that the meaning of Arabic data is not lost in reverse translation, other Arabic speaking PhD students were asked to check the translations (for more information see chapter 4.9).

The researcher used the term ‘user’ to refer to the people who answered her questions via Twitter. It should be noted that there was no way of knowing the identities of respondents and no screening process took place. This was

an open forum, although it was intended for parents and unless respondents specifically referred to their children, there were no guarantees that all contributors were parents of children with ASD. However, when the researcher performed this analysis, the overwhelming majority of respondents appeared to be parents. Thus, the researcher assumed that this data came from parents of ASD children.

The next section discusses the response data that the researcher obtained from the Twitter account concerning the following themes: ASD awareness, diagnosis, school provision comment, parent training programmes, and general feedback.

### **5.2.1 ASD awareness**

The first question posed via Twitter concerned ASD awareness in Saudi Arabia. A number of respondents shared their views on this question, and most of them asserted that there is almost no awareness of ASD children in Saudi Arabia. Only two respondents conveyed a more positive outlook and said that there is currently some awareness of children with ASD in Saudi Arabia, but that the situation needs to improve. Figure 5.2.1 shows an example of one of these positive comments, in which User 1 stated: “*Better*

*awareness than before, but we still lack support; however, knowing about the situation is not the same as dealing with it”.*



*The awareness level is very weak; the community does not know about this disability. Of course the responsibility to raise awareness lies with several ministries, including health, media and education*

**Figure 5.2.1 Example 1**



**Figure 5.2.2 Example 2**

By contrast, Figure 5.2.2 shows a comment by another parent, User 2, who wrote: *“The awareness level is very weak; the community does not know about this disability. Of course the responsibility to raise awareness lies with several ministries, including health, media and education”*.

Although the users’ Twitter comments varied on this issue, they all agreed that a lack of awareness of ASD persists in Saudi Arabia, and that there is much room for improvement. The list below contains some of the common

responses to the account, all of which indicate the same notion of a lack of ASD awareness:

User 3: *“The awareness of autism is poor in community.... And it is what families of children with autism face as a daily challenge.”*

User 4 concurred, and mentioned awareness in remote areas: *“Unfortunately, there is no awareness or attention to children with autism, especially in remote areas, such as Asser....”*

User 5 commented: *“Society needs to raise awareness in cases of special needs in general and especially for Down syndrome, autism and learning difficulties.”*

User 7 emphasised the need for increasing ASD awareness among families, as well as in society: *“Now, the level of awareness is greater than before, but even still families need more awareness.”*

User 8 agreed with User 7: *“Parents are in need of awareness of how to deal with children who have autism as well as increased awareness of autism in society. We still aspire possible and improving services.”*

User 9 introduced himself as a father of a six-year-old child with autism. He posted three tweets, one that concerned awareness: *“It is not only weak awareness for parents of children with autism, everything related to autism is weak: rehabilitation centers, health services, social welfare specializations....”*

However, User 6 held a more positive view: *“Specialists have begun to attempt to spread awareness, and it seems that half of society has started to be aware, but we need more support, support, support....”*

Thus, this last comment suggests that lack of support is an issue in raising ASD awareness. Here, the researcher attempted to get further information by posing additional questions and clarifying in previous responses, and asked: *“What do you mean by support, and what kind of support?”* The answers included one from User 6: *“Moral and material support.”* User 10 offered another opinion about awareness in Saudi Arabia: *“We need to raise*

*awareness in society for the next 50 years, and I hope the community will gain more understanding and help this category of children with autism.”*

This suggests that it may take some time to raise ASD awareness in Saudi Arabia and make the community better able to care for children with autism.

Regarding the question of suggestions to improve the awareness of children with autism in Saudi Arabia, User 5 responded: *“A short video clip can present the definition of autism in a way that excites curiosity and does not provoke pity”*. In another tweet, User 5 continued: *“This could be a series of clips for each special needs case, which could increase awareness and show the benefits of greater awareness”*.

When the researcher asked for the reasons driving this lack of awareness, ten people responded. They all highlighted *“the lack of obvious reasons for autism and especially reasons going back to before the child is born”*.

Furthermore, the absence of voluntary organisational campaigns to raise ASD awareness was noted, and many agreed that this was due to the expense of organising such campaigns. Some users also pointed a finger at parents of children with autism.

After analysing all the responses concerning the lack of ASD awareness, the researcher asked respondents why they thought that this is the situation and what their perspectives were of it. While responses varied, four users commented on a perceived lack of interest on the part of some parents of children with autism who do not demand rights for their children. They thought that parents should be more active in addressing the lack of ASD awareness. Furthermore, one user mentioned that while courses on autism for graduates and researchers in this field have increased, few attend them. Another reason that emerged is that there is little cooperation between ASD-related institutions, centers, schools and families. The following list contains some of the user comments regarding the reasons for the lack of ASD awareness:

User 12: *“The lack of obvious causes of autism, especially prenatal ones.”*

User 16: *“The absence of voluntary campaigns to raise awareness, and [the fact that] most seminars, workshops and courses are expensive,”* He continued: *“There is no cooperation and interdependence between institutions and centers, schools, parents and the community.”*

User 17 held a slightly different view: *“Awareness is not weak nowadays; courses have increased regarding the definition of autism for both graduates and researchers interested in this area or the staff of the Ministry of Education, but few attend.”*

User 18 commented: *“Weak awareness results from the lack of interest by parents of autistic children, as well as the reluctance of parents toward awareness courses,”* User 19 concurred: *“the reason of lack of awareness that families of those who have child with autism they do not move and laziness they do not demanding the rights of their children”*

@SpeciaEdI @MARfaaj من وجهة  
نظري ان احد الاسباب هي : عدم الايمان  
بقدرات اطفال التوحد  
عدم اهتمام الدولة بفتح مركز حكومي  
شامل ليبتهم مثل دبي

### Figure 5.2.3 Example 3

One of the most important comments, which is shown in Figure 5.2.3, came from User 15: *“From my point of view, one of the reasons is the lack of belief in the capabilities of children with autism and the lack of interest by the state to open a comprehensive government center, as is the case in*

*Dubai*". This is an important point that is explored in detail in the following section. All of these comments on ASD awareness suggest the need for parents to ask more questions about the diagnosis process and the following section discusses this theme.

### 5.2.2 ASD diagnosis

The researcher elicited four very different types of answers to the question posed regarding ASD diagnosis, which read: "What do you think about the diagnosis of children with autism in Saudi Arabia - is it easy or difficult?". The first response, from User 20, stated that: "*It is easy, there is one center dedicated to autism,*" and User 21 mentioned its name: "*the Autism Research Centre within the King Faisal Specialist Hospital*". However, it is worth pointing out that this one center is set up in Riyadh. User 13 commented on the diagnosis procedure itself: "*Diagnosis should take a long time; unfortunately, most of the centers here carry out a quick diagnosis and make swift judgments, but the best center is the Prince Nasser bin Abdul-Aziz Autism Centre*". In addition, more than three of the respondents mentioned that they went to another country to get a better diagnosis for their children and to begin early intervention techniques. Jordan, Dubai and the UK were the most mentioned places that parents turned to. The final

comment on this point came from User 14: *“Autism has become commonly known and diagnosed. It is not like before, when it was vague, but it is important in any diagnosis to be accurate and clear”*.

Seven users responded to the diagnosis question when asked again, two of which sent four tweets each.

User 22 stated that: *“Diagnosis is difficult, and frankly there are always mistakes and it can be very weak.”*

User 23 concurred: *“We found a few [professionals] who specialize in autism. Most of the diagnoses are wrong or inaccurate in terms of autism in general and its accompanying disabilities.”*

User 25 had a very negative attitude: *“Almost non-existent, and basically the lack of proper diagnosis centers is the main problem facing children with autism.”*

User 30 answered this diagnosis question in four tweets, stating that: *“Diagnosis in Saudi Arabia is inaccurate. I visited three doctors: two*

*specialists in psychology and a third in nerve cells, all of whom said he [my child] was not autistic. I visited another psychologist, who said he has autism. All of them made their diagnoses in less than a quarter of an hour”.*

He continued by mentioning that he went to the UK for help: *“I visited a hospital in Britain and identified four discrete sessions, each of which extended to 40 minutes”.* In his final tweet, User 30 explained how they diagnosed his child in the UK and how this process differed from the one in Saudi Arabia: *“Diagnosis in Saudi Arabia is not accurate, and the doctors do not have enough time to observe the child with you. This may lead to incorrect diagnoses, and the lack of appropriate diagnostic tools can lead to delays in the early intervention.”*

Another User responded to User 30 thus: *“You are right, 100%.”*

The notion of going abroad to get a better ASD diagnosis recurred frequently. User 24 wrote: *“Most disabilities in Saudi Arabia lack rated diagnosis, and many parents move to get their diagnoses earlier, to Jordan and Dubai”.*

The final comment on diagnosis worth mentioning came from User 33: *“Problematic in Saudi Arabia is that the doctors make diagnoses do not undergo any specific medical examination for the diagnosis of autism. Which should include a multidisciplinary team”*, User 33 continued that diagnoses made in only 15 minutes, was, in his opinion, very strange. His last tweet read: *“Diagnosis of course involves making a fateful decision for the child, How can autism be diagnosed in a quarter of an hour with all the ambiguities and difficulties ... any knowledge of this?”*

Finally, User 9 pointed out some reasons for delays and mistakes in diagnosis: *“... the reason for the lack of official government umbrella for people with autism is that the[Saudi] Ministry of Health and is weak and ineffective. The Ministry of Social Affairs’ only role is to exchange financial benefit....”*.

This discussion presented the user’s perspective on ASD diagnosis that was shared on Twitter. After diagnosis, education and early intervention were the main concerns of parents for their children.

The following subsection discusses the views of users regarding school provision for children with autism.

### **5.2.3 School provision**

In terms of general school provision for children with ASD, most parents rely on centers or private schools that specialise in children with autism. They do so to help their children learn or to have their children enrolled in an early intervention programme. The users answered the following questions:

“What school provisions do children with ASD have?”

“Is it the parents’ choice or the government’s and what are the parents’ concerns, if any?”

In answering the above questions, parents’ responses varied. Based on the Twitter data, it is clear that no obvious school provision exists for children with autism. Some parents mentioned that there are public centers that accept their children but if it they are full one must wait, and others said that private schools exist that accept their children. As for the question of including ASD children in mainstream schools, there are apparently children who are still not included. One user indicated that there is only one primary

school in Riyadh that accepts children with autism. In addition, User 4 stated that *“There are more than 150 cases and there is only one government center. There are 15 cases and only four classes [meaning there are 135 ASD students who have been diagnosis and no provision on the waiting list], One of the classes there is a volunteer coach [meaning there is no paid qualified staff....]”* Another father of a four-year-old child with autism, User 34, commented: *“A tragic situation for rehabilitation. Public schools = congested. Private schools = too expensive.”*

The researcher then asked why inclusive schools for children with autism do not yet exist. User 25 responded: *“The lack of trained teachers, also not every child can integrate. There are some cases that need to be trained in a dedicated center”* Another respondent, User 6, stated: *“[ASD] children who are included are not benefiting from integration, especially boys, because unfortunately there is no awareness in schools,”* and continued that *“some parents of [ASD] children go abroad to Jordan or the UAE or other countries”*. This suggests that the notion of a lack of awareness and the desire to travel abroad for better treatment options for their children appear even when respondents were asked about school provision.

When the researcher asked respondents if they were willing to enroll their children in inclusive schools, different perspectives came to the forefront. One respondent, User 4, said: *“It depends on the child’s diagnosis; some children get huge benefits from being included in mainstream schools, and if he or she were to go to a special center, they might acquire negative or undesirable behaviors”*. Another respondent, User 21, mentioned the idea of a shadow teacher: *“I would include children with autism in mainstream schools if they had a shadow teacher”*. User 30 concurred: *“If there was a shadow teacher and trained educational staff I would recommended inclusion”*. This suggests that although the idea of inclusion may be a positive one, it would only be effective under certain terms and conditions. User 36, a parent of a seven-year-old with autism who currently lives in the USA stated: *“Are there options? Are the inclusion follows the merger plan carried out by specialists? Most specialists prefer integration because it is a better environment for all children”*. In terms of who is responsible for this situation, User 9 pointed out that: *“The Ministry of Education, although they are lost. They have a unit but it has a very weak role”*.

In addition to the discussion regarding school provision for ASD children, parents need to be trained to care for these children. Thus, for this study, training programmes for parents of children with ASD is a topic that needs to be clarified from the parental perspective.

#### **5.2.4 ASD training programme for parents**

With respect to the training programme that is provided for parents in Saudi Arabia, the question is, do training programmes for parents exist to help them understand and care for their children? One response to this question is shown in Figure 5.2.5. Here, User 10 pointed out that: “*Workshop Lama Ohaly taught me how to communicate in Riyadh*”. However, this program is the only one that was mentioned in all the Twitter responses.



**Figure 5.2.5 Example 4**

User 30 also stated: “Yes, and I am interested in these courses: organization Autism Research Centre at Specialist Hospital”. However, User 18 offered a very different view: “There are no courses, and if there are, they are non-systematic and sometimes off the target”.

The researcher only received these responses on this topic in terms of awareness and school provision. From this point, the researcher began to ask about general concerns related to children with ASD. The following section discusses the responses.

### 5.2.5 General feedback

At this stage, the question was, “What are the concerns of parents, if any?” Their responses appear to be crucial, and there were seven common answers. In addition to this, the researcher asked, “What are the difficulties or obstacles families of children with autism face, if any?” Three respondents answered this question. The first tweet, from User 9, was: “*Schools, diagnoses the high cost of food and the lack of aid disbursed to them [the children]*”. Another parent, User 21, commented: “*In short, the parents of children with autism have wounds that bleed that are not dosed*”. This is an Arabic expression, which means that parents have a lot of concerns and face many difficulties that no one is capable of assisting with or improving. There were more responses to this with similar meanings, namely, User 3 supported a comment by User 21, saying: “*Anxiety about the diagnosis, schools and cuts and injustice, exploitation and fear*”. Another tweet, from User 10, read: “*Schools and institutes of their own, capable centers for accurate diagnosis and the cost prohibitions for education*”. Concerns about school provision for children with autism appeared in nearly all the answers. Figure 5.2.5, a screenshot of the Twitter feed, shows that the school itself is of the utmost concern. User 30 said: “*Certainly, the lack of schools and*

*institutes as well as their [the children's] fear of the future in terms of care, rehabilitation and physical job security". They also note that their children's future and rehabilitation always follow school provision and child's diagnosis as a matter of parental concern.*



*Certainly, the lack of schools and institutes as well as their [the children's] fear of the future in terms of care, rehabilitation and physical job security*

**Figure 5.2.5 Example 5**

The above screenshot (Figure 5.2.5) posed some concerns in the form of questions:

*“Where should children be diagnosed? Where are best centers for them?”*

*And, in fact, are there enough places for them in these centers?*

*Schools and inclusion are tragedies. There is an effort, but it’s weak.”*

(User 25)

As a result, nearly all comments targeted the same points of school provision and diagnosis centres.



*Where should children be diagnosed? Where are best centres for them?  
And, in fact, are there enough places for them in these centres?  
Schools and inclusion are tragedies. There is an effort, but it’s weak*

**Figure 5.2.6 Example 6**

User 2's concern was: *“More things that frighten me are that there are no safe government centers for autism like the centers in Jordan; all the mainstream schools still do not practice inclusion”*. It is evident from this account that some parents worry that autism services in Saudi Arabia are not as advanced or safe as other Gulf nations, such as Jordan. Another opinion regarding education was User 27's observation that *“Education is judgmental and without formal curricula to fit this category of children”*. In terms of suggestions to address lack of awareness and better school provision and diagnosis, User 3 suggested *“the need for conferences and meeting places to define what autism is and what the role of the individual is in society to help....”*

These were all the Twitter responses and comments that the researcher collected over approximately nine months. The following section presents the data analysis of the interviews with parents and compares these with the Twitter data.

### **5.3 Interviews with parents**

Silverman (2011, p. 131) pointed out that “in-depth interview accounts provide a meaningful opportunity to study and theorize about the social

world”. For this reason, the researcher decided to conduct interviews to discover perceptions about the social world from the angle of children with special needs and their parents. There is no doubt that interviews and social media analyses are both valid sources for obtaining reliable data that can be used to guide practice (Ivey, 2012). However, Ruane (2005) asserted that the interview is the single best device for promoting and setting out the truth. For this reason, the researcher elected to conduct ten interviews with parents to support the social media data as well as to understand the perspectives of parents of children with autism in more detail. The most accessible source of interview data for the researcher was these 10 parents.

Dilley (2000) stated that interviews give researchers the opportunity to explore and pose probing questions. In addition, Ivey (2012) maintained that the process of analysing qualitative data also obviously differs from that used in quantitative studies (p. 319). One way of analysing interview data is to examine it line by line and make tentative notes regarding potential themes (see Chapter 4, Section 4.9). For this research, similar themes emerged from the interview and social media data.

The voluntary interviews with parents were designed to last about 25 minutes to allow for the researcher to capture sufficient data (see Chapter 4, Section 4.7.1). With some parents, the interviews lasted nearly an hour. The researcher posed questions about general information at the beginning of the interviews. Respondents began with a confirmation of the ages of their children that have ASD, which ranged from 3 to 10 years old, with nine boys and one girl. Six of the parents reported that they lived in Riyadh, while the rest lived in other Saudi cities. Thus, the interview respondents lived in a range of Saudi cities. To recap, all ten children of parents interviewed in this study have been diagnosed with autism and have experience with the educational system. The length at which societal awareness of ASD affects these children and their parents is discussed in the following section.

### **5.3.1 Background of the parent's sample**

It is necessary for the readers of this study to understand the background of the parents interviewed, to gain a better understanding of their views. To begin with, it is important to know how the researcher contacted the parents' and what their experiences are regarding children with autism and school provision. It has been mentioned in chapter 4 how these samples were collected but for more information, in this section, more detail will be added.

As the researcher explained previously, she went back to Saudi Arabia to collect her sample and do the research. The total number of parents that the researcher interviewed was 10. In the table below, details of the background of each parent will be given.

**Table 5.1 background of parents interviewed**

N.	Name	Gender	City	Child age
1	Parent 1	Female	Riyadh city	8 years old diagnosis in USA at age 3
2	Parent 2	Female	Dammam city	Mother of 5 children with ASD and the first child was diagnosed at age 5
3	Parent 3	Female	Qassim city	6 years old diagnosis in Riyadh at age 4
4	Parent 4	Male	Jeddah city	4 years old diagnosed at age 2
5	Parent 5	Female	Riyadh city	6 years old diagnosed at age 3
6	Parent 6	Female	Jeddah city	5 years old diagnosed at age 3 and a half
7	Parent 7	Female	Riyadh city	8 years old diagnosed at age 4
8	Parent 8	Female	Dubai city	8 years old diagnosed at age 3
9	Parent 9	Female	Riyadh city	10 years old diagnosis at age 4
10	Parent 10	Female	Riyadh city	12 years old diagnosis at age 4

All parents are originally from Saudi Arabia but (parent 1) lived in the USA for 5 years as she was studying for her PhD. During her studies there, her son was diagnosed with autism. She sadly explained how it was difficult for her and her family to finish her studies and take care of her child. She also

explained how it was hard for her and her son after they came back to Saudi Arabia. She said, “I wish that I could stayed in the US as long as I can for my son” because of the care that her son was receiving. On the other hand, Parent 8 noted that her brother was the first who noticed her son acting differently. He was later diagnosed with autism in Saudi Arabia and when he reached school age, she started to struggle with where and how she could best educate him. She tried to get him a scholarship to register in Dubai’s special schools, which she believed was one of the best places that could cater for her child’s needs. Further information about the stories of diagnoses will be explained in more detail in the section below.

### **5.3.2 Stories of diagnosis**

Most respondents said that they spent a significant amount of time, sometimes over a year, to have their children diagnosed with ASD. According to Parent 3, she initially consulted an ear, nose and throat specialist because her child did not respond so she thought he couldn’t hear. However, the doctor said his hearing was fine, and that he might just be experiencing a delay in speaking. Then, the mother heard about ASD and began to read about it. She soon realised that her child might have ASD, and she decided to look for someone with experience in ASD to help. She

mentioned that she heard about an ASD centre, so she took her child there and was informed that her child did indeed have autism. The center advised her to consult a neurologist, who diagnosed her child at age 3. Another respondent, Parent 6, realised that whenever she would call her two-and-a-half-year-old child, he wouldn't respond. She said: *"I tried to scare him, to knock on the door and surprise him, but he did not move or do anything and there was no eyes contact at all. I searched the Internet and discovered that this might be autism; we went to center in Riyadh and they told us he has autism attributes"*. She continued: *"The diagnostic procedures we have in Saudi Arabia are very difficult. I went to another center in Jeddah, and they diagnosed him with mental illness. I was really shocked. A lot of people receive an incorrect diagnosis, and this is not fair"*.

Another story concerns five brothers with ASD. This case is interesting because their mother said that her first child was almost 5 years old when he was diagnosed and the second was almost 4. She said: *"I went to a specialist because they [the children] didn't talk, and they were diagnosed with ASD. I was really surprised and had no idea what autism was. I went home and started searching on the Internet to understand more about is autism and what to do with my kids. It was really painful at the beginning, and I was*

*really shocked, but after that I tried my best to understand and help my kids as much as I could*". Furthermore, Parent 9 stated repeatedly during her interview that the greatest difficulty her family faced was the diagnosis. She explained that she had "*experienced a lot in order to diagnose my son in the correct way*". It seems that most parents were really shocked and frustrated with the system of diagnosis, as it took too long for their children to receive a correct ASD diagnosis. This finding is very important and is discussed in detail in the discussion chapter.

### **5.3.3 Awareness**

According to the respondents, ASD awareness is a major issue that affects them daily. In fact, most agreed that this challenge affects nearly everything in their children's lives, such as ASD diagnosis, school provision, health and going out in public. As Parent 7 mentioned: "*We are lacking in awareness in public places and hospitals as well as educational settings*". Parent 1 concurred: "*The lack of awareness in society makes it very difficult for us when we go out in public places*". Other respondents pointed out that although Saudi awareness of ASD is increasing, it remains in its early stages. To support this notion, Parent 6 reported: "*Starting this year, a*

*somewhat raised awareness began regarding ASD children, before, they were forgotten, or no one knew them or heard about them”.*

However, regarding ASD awareness, Parent 3 responded: *“Unfortunately, I had no awareness, I am a teacher and I didn’t know about it until I had my boy”*. Moreover, Parent 5 pointed out that: *“There is no awareness at all, even in hospitals. We experience a lot of difficulties because they have no idea how to deal with ASD children”*. She continued: *“True, there are some attempts to raise awareness, such as the World Autism Awareness Day, but these remain weak and insufficient”*. Parent 8 responded that awareness of children with autism is very poor in many areas including educational settings, health care, and early intervention programs. *“Although autism nowadays is known all over the world, there is still lack of awareness [in Saudi Arabia], particularly in the way that people have to manage ASD children. Very few know how”*. This suggests that even when people had heard of ASD in children, they would still not know how to deal with these children or act around them.

Moreover, all respondents mentioned that before their child with autism was born, they had no idea what autism was. Two parents stated that their

families (i.e. the brother or sister of the parents) helped them to recognise that their children are different, and they needed to look after them and watch them closely to gain a deeper understanding of what made them different. This suggests that to some extent, a lack of ASD awareness affected even these parents and how they cared for their children. As a result, some respondents reported that it took a long time for them to have their child diagnosed, which is discussed in the following section.

#### **5.3.4 Parents' views on school provision**

In terms of school provision, all parents agreed that given the choice, they would enroll their children in an inclusive school. Among all respondents, a key theme that emerged was their belief that their children would learn better with other children than at home. However, most respondents stated that there are no local inclusive schools, and if there are, they feel that they are not of good quality. In addition, one respondent mentioned that she offered to employ a shadow teacher to help her child attend an inclusive school, but no schools accepted her proposal. This section explores the perspectives of the respondents that struggle in terms of finding appropriate school provision.

Parent 5's perspective on school provision for her child was: *"I prefer inclusive school settings because the benefit is greater; even the outlook from a societal perspective will change. But on one condition: that he have a private mentor specializing in this field"*. Indeed, most respondents were willing to place their children in inclusive schools, but only under certain circumstances or conditions. Another point came from Parent 9, who said: *"they [ASD children] need a qualified teacher that can care for them and also improve the awareness of ASD among other children in the school"*. Parent 4 shared this preference for inclusive schools yet stated: *"but I am afraid that other children might lash out or harm my child"*. Parent 2 said that this would depend on the child's ability and pointed out that some children with ASD can cope with other children in a conducive school environment, but that non-ASD children may not have this ability, so private schools are a better place for ASD children.

One important aspect here is that all respondents stated that their children attend private schools or centers, and the government pays in just three of these cases. The rest are self-funded, which is very financially difficult and demanding for most of the families. Moreover, because they are self-funded, the schools or centers in question were always their only choice. Although

this might be due to the way this sample was selected, parents who responded to the Twitter account also pointed out the same issue of school provision that appeared in the interviews. Two parents experienced putting their child in inclusive settings; however, both of their experiences were not successful. One of them, Parent 10, said that the time her ASD child spends with other students was minimal, and that the teaching quality was of low quality. Thus, she chose to take her child back to a private ASD school, because the staff is trained, and she can ask them for advice on what to teach her child and any other important information, so that she can better understand how to deal with her child (Parent 3). Parent 7 stated: *“I would feel guilty if I put my child in an inclusive school, because there is no feeling there of responsibility for children with autism and no awareness or knowledge on how to care for them”*. The view of parents regarding inclusive settings are obvious with a dichotomy of parents wishing to include their children in mainstream schools but the schools, teachers and society as a whole are not ready.

### **5.3.5 Additional themes that arose in the interview data**

Awareness of ASD diagnosis and school provision were the main themes that emerged from the interview data. However, the following section discusses other themes that appeared in this data.

#### **5.3.5.1 Fatigue and advice to other parents**

Fatigue and a ‘lost feeling’ were identified as a barrier for parents managing daily life with their children. Most parents mentioned that they do not know where to go and who to ask for help. For all parents, the answer to the question, “Have you ever felt tired?” was always, “*Of course.*” Parent 4 explained that the reason behind the tiredness was that “*the responsibility is not like that for any child, whether within my family or externally, and I feel we have a scarcity of specialists who could provide us with assistance. In addition, there are no centers available for our children*”. This statement suggests that many reasons exist for parents feeling tired. Parent 1 explained that the reason for the fatigue concerns the lack of suitable training programmes as the ones that do exist are charged and very expensive. Moreover, as Parent 8 suggested, “*We need courses and information programs, and along with that we need more practical applied courses*”.

Although all the interviewed parents indicated that they generally felt very tired when managing their children with ASD, they reported that they are very optimistic as well. As a result of the advice that some parents who have a child with ASD mentioned to others, most of them say to try new things with the hope of success. Moreover, as Parent 8 explained, *“Do not rely on one direction or doctor and look for the answer by yourselves. Learn, educate yourselves, read and do not stop on one option”*. Also, Parent 5 advised to *“Try again and do not to despair. Even if he or she [the child] failed to master the skill or something, it is not the end of the world; Be patient; Give a lot of attention to the centers and places in which your children are enrolled”*. Parent 4 gave this advice: *“Do not succumb to despair and frustration, attempt evolution herself and her child in any way she could, for example, keep your distance from negative people, and it is very important that parents appreciate anything done by the child and count it as their own success”*.

Another piece of advice from Parent 3 was to: *“accept the child and treat him like a normal child, talk with him, even without eye contact; this does not mean that he or she doesn’t understand; children with autism need a lot*

*of patience*". Along with this advice and optimism, all interviewed parents mentioned the fear of the future. The next subsection discusses this fear.

#### **5.3.5.2 Fear of the future**

In terms of future anxiety, all parents reported experiencing lots of concerns, especially in terms of their children's education and careers. Parent 4 reported that she is a mother of 5 children with ASD, and said: "*I am really afraid for their future, because what if something happens to me when they are not yet self-reliant?*" Some parent's spoke of their children's future from a societal point of view: "*Where is the community who will look after him or take care of him? Also, can he cope with environments larger than home? I doubt it*". A major fear for these parents is whether society would accept and know how to deal with their children.

Parents also reported experiencing enormous difficulties in that their children cannot do many things for themselves. For example, some children can neither talk nor read, and sometimes even eating and going to the toilet by themselves is difficult for them. These difficulties constitute the most significant barriers for children with autism to attend mainstream inclusive

schools. Moreover, Parent 3 stated: *“This isolation from the world is one of the strongest challenges, along with thinking about their future”*.

### **5.3.5.3 Siblings**

All of the parents of children with ASD who participated in these interviews have other children without the disorder, some older and others younger. However, these parents rarely mentioned the notion that having a child with ASD would affect their siblings in any way. Parent 3, pointed out that her other children are: *“Receptive to their brother’s special needs and have assimilated that he is different from them”*. However, one parent mentioned that his youngest sister always worried about him, as she wants him to be safe, and she always looks after him intensively.

### **5.3.5.4 Diet and medicine**

There was more evidence of people seeking alternative advice and intervention on the topic of diet and medicine for children with ASD, as they had to do with diagnosis. In terms of diet and medicine, the responses from parents varied. Most of them reported that they did not provide their children with any special medicine or specific diet because they were either against the idea or no specialist or doctor encouraged them to do so. However,

Parent 1 reported a different experience, as his child eliminated gelatin and casein from his diet, and he thought that this practice was effective and felt there was some change in his child. Another parent mentioned that she gives her children some medicine for hyperactivity, so they can calm down. In addition, Parent 6 experienced that the center she contacted to register her child in asked her to administer the child medicine in order for the child start early intervention. Parent 3 responded: *“No, I do not give him any medicine because I do not trust the doctor”*. The concern of parents trusting doctors, specialists, centers, and so on appeared in the responses of more than one parent. This issue is addressed in more detail later on in Chapter 7. These were the most frequent additional issues that interviewed parents reported.

## **5.6 Conclusion**

This chapter discussed the data analysis of two data sources used in this research: social media (i.e. Twitter responses) and semi-structured interviews. Respondent groups for both of these sources were parents of a child with autism. The following section summaries the key findings collected from these sources.

### 5.6.1 Twitter account data

Using Twitter accounts as a method of data collection is quite challenging, and at times during this process, the researcher felt that this method would be unsuccessful and that she would not be able to collect any information. It was difficult to have people contribute to a brand-new Twitter account among all of the other public accounts that have a large following. However, the researcher was helped through connections with other very public accounts, which made this method possible.

To summarise, there was a total 60 tweets from 15 different accounts. In this chapter, the researcher used approximately 70% of the tweets and three examples in screenshot form of the original tweets. More tweets can be found in appendix (H).

The following points summarise the data captured from the Twitter account:

- Although Twitter data is necessarily brief, to some extent it showed how awareness of and school provision for children with autism in Saudi Arabia needs to be improved.
- A number of users reported that although the level of awareness of children with ASD is low, there have been some attempts to increase

this awareness in Saudi Arabia, particularly through World Day for Autism.

- General lack of ASD awareness and support was apparent on the Twitter account, and respondents felt that three Saudi ministries (Health, Media and Education) bore the responsibility for this situation.
- A lack of ASD awareness was also reported from respondents in remote areas of Saudi Arabia.
- Several reasons for this lack of awareness were reported, one of them being the absence of what causes autism.
- ASD diagnosis is also a major concern and is challenging for parents.
- More than one Twitter respondent mentioned the idea of traveling abroad to receive a better ASD diagnosis.

According to the Twitter data, school provision is nearly non-existent in Saudi Arabia. Parents reported they were willing to enroll their children in inclusive schools if they employed shadow teachers and training staff.

Only one training programme for parents was mentioned on Twitter, which suggests a lack of these programme in Saudi Arabia.

Parental concerns relating to diagnosis, school provision, rehabilitation and the future of their children always came to the forefront.

### **5.6.2 Interview data**

The main findings from the interview data support those from the Twitter account data. The following points summarise the data:

- Lack of awareness of children with autism affects everything in their lives (e.g. hospitals, educational settings, and public places).
- More than one parent mentioned that they did not know about ASD until their child was diagnosed, which suggests a lack of awareness even amongst parents.
- ASD diagnosis in Saudi Arabia is very difficult to obtain and many mistakes happen.
- Inclusive schools are the preferable school provision for parents of children with autism, yet Saudi Arabia largely lacks these schools.
- The lack of qualified school teachers is one problem parents face in inclusive school settings.

- Private schools or centers are the school provisions for all children whose parents participated in these interviews, with most of them as self-funded.
- Fatigue, advice to other parents, fear of the future, siblings and diet and medicine are other themes that arose in the interviews.
- Fatigue and lack of training programmes were discussed in the interviews simultaneously, i.e. parents felt tired because they cannot find help.
- Parents' advice to fellow parents was always not to give up and to try the best for their child.
- For all parents, their fear of the future resulted from their children not being self-reliant, not having school provision and not being able to have careers.
- All interviewed parents have other children without ASD, which are not a problem for most parents.
- Trusting doctors is an issue.

In conclusion, this chapter discussed the data collection results from two types of qualitative data sources, the Twitter account and interview data. As discussed above, there is a strong correlation between these two sources.

The following chapter analyses an additional two data sources gathered from educational professional's interviews and survey data.

# CHAPTER SIX: EDUCATION PROFESSIONAL'S PERSPECTIVE

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## **6.1 Introduction:**

Norris, Plonsky, Ross, and Schoonend (2015) indicate that the reporting of Method and Results chapters requires careful attention in order to answer research questions effectively. Moreover, as this is the second results chapter, the methods that would be analysed are varied. There is no doubt that both methods of quantitative and qualitative data have advantages and disadvantages and the results that arise from different methods can supplement each other (Hartley & Chesworth, 2000). Hence, as this study employed an analysis using both of these approaches, the results reported in this chapter stemmed from complimentary quantitative and qualitative research methods.

Ruane (2005) point out that collecting questionnaire data could often be dismissed as either superficial or tedious endeavors. Hence, some researchers maintain that conducting interviews for research projects make

more sense than administering questionnaires. As a result, the researcher for this study chose to collect both interview and questionnaire data in order to gain an in-depth understanding of the phenomena involved and support the conclusions that arose from analysing the questionnaire data.

In this chapter, the researcher will analyse the data collected from the questionnaires distributed to educational professionals, including teachers, head teachers, social worker and all educational professionals that work in schools. Furthermore, it will be analysing the semi structured interview data conducted with a senior educational officials working on the Ministry of Education in the special educational needs department. The analysis in this chapter will start with with the quantitative data, the open-ended questionnaires, then the qualitative data, the semi-structure interviews. This data was collected in order to answer the second research question, which is what are the views of educational professionals with regard to the awareness of, and effective educational provision for, children with autism in Saudi Arabia?

The structure of this chapter starts with section 6.2 which is the questionnaire analysis and is divided into four subheading based on the

questionnaire design, 1) general information that was the first supplied in the survey, 2) knowledge of autism, 3) significant outcome on the belief scale and 4) the professional's opinion which, is the qualitative part from the questionnaire. Section 6.3 is the senior educational professional's semi-structured interviews and divided into three subheadings based on the questions that were asked. The first subheading is brief information about the interviewee, then the second subheading is about inclusive practice and the third is the view of senior educational officials regarding awareness of autism in Saudi Arabia. Finally, section 6.4 is the summary of the whole chapter.

## **6.2 Survey analysis**

In the beginning of this section, the researcher wants to explain how the questionnaires were organised in more detail to help the reader understand the structure of the headings. There are four different sections. The first section asks for general information about the participant, the second knowledge of Autism, the third is belief scale and the last section asks for general opinions, which has 3 open-ended questions. This survey targets the teacher, head teacher, social worker and all educational professionals working in mainstream and private school boys and girls schools at primary

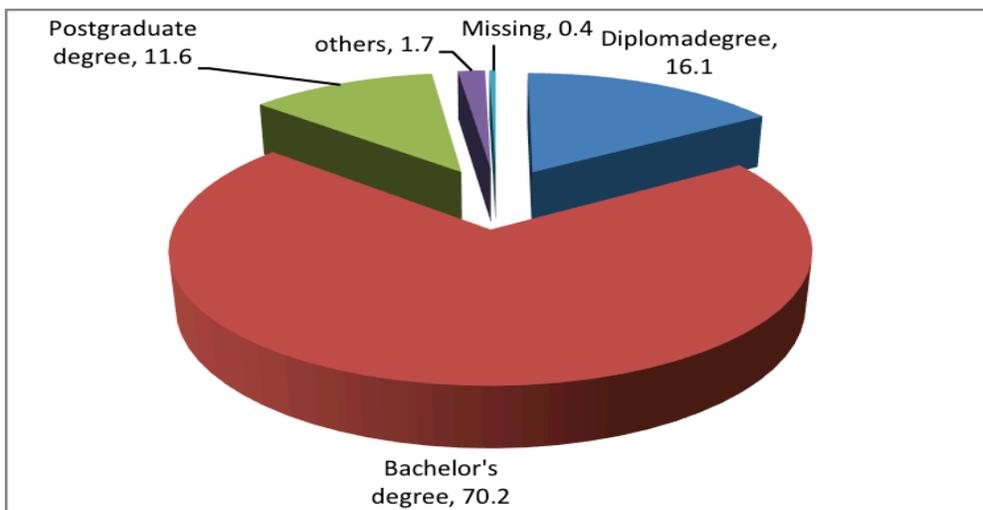
and secondary level in Riyadh, Saudi Arabia. The researcher distributed 400 surveys in Riyadh, the capital city of Saudi Arabia, and the total number of questionnaires completed was 242. For more detail about the questionnaires and how they were distributed and collected, see chapter 4 Section (4.7.2). In order to analyse the survey in this study the use of SPSS statistical package was applied to come up with graphs and tables that portrayed the data. The last section, which is the open-ended questions, was analysed manually and the researcher refers for each individual comment as (EP) educational professionals. It should be pointed that all direct data written in this chapter is in brackets and italics.

The following first subheading is representing the first section in the questionnaires, which is general information in the survey.

### **6.2.1 General information:**

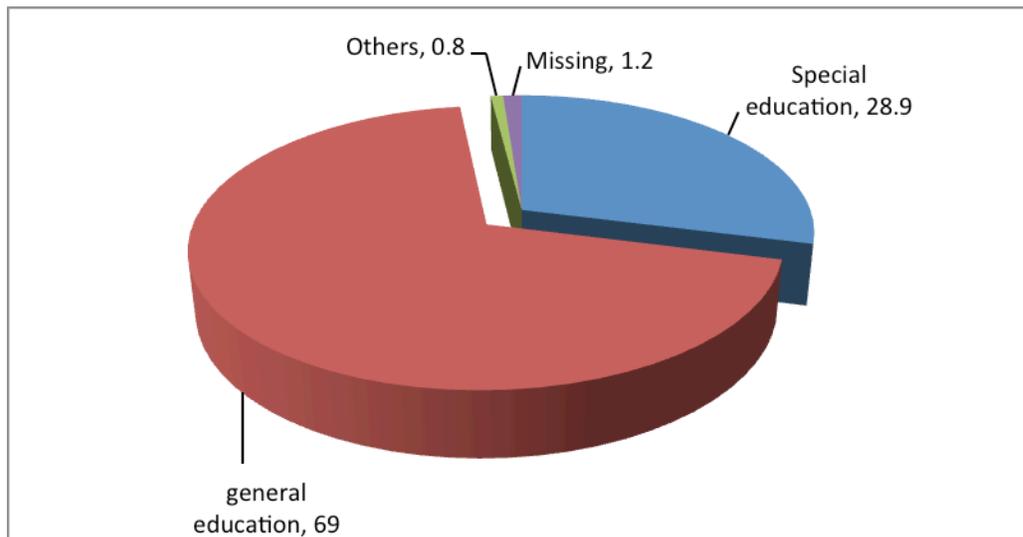
The level of education of teachers and Educational Professionals that work in the school is essential as it will give a better understanding of the extent to which the level of education could affect the awareness of autism and the attitudes toward inclusion. It is evident from Table (6.1) below that 170 of the study sample, representing a rate of 70.2% of the total study sample,

hold Bachelor degree level of education. While the minority, 39 educational professionals representing a rate of 16.1% of the total members the study sample, had a Diploma as their highest level of Education. Historically, Diploma level of education in Saudi Arabia was accepted for employment as teachers in Mainstream Government schools, however, the Ministry of Education later introduced new legislation that all teachers should hold a Bachelor degree from (2005). In addition (28), representing 11.6% of the total study sample, have postgraduate level of education, whilst (4) of them, representing 1.7% of the total study sample, have ‘other’ certificates. However, it has been noted that the majority of the participants in this study hold a bachelor degree level. Figure 6.1 gives a clear idea of the representing sample.



**Figure 6.1 Level of education**

Moving to another point from the general information which the researcher deems important is the percentage of special education teachers and general teachers. The second important aspect that should be highlighted here from the general information section is the area of education, which is either general education or special needs educations. Due to the fact that most of the representing schools in this study are inclusive schools, they would have some special needs teachers. This questions was highly important to ask. As illustrated by figure 6.2, 69% of the sample are general educators.



**Figure 6.2 Field of teaching**

Moreover, it is evident from figure (6.2) above that (167) of the study sample, which represents a rate of 69.0% of the total study sample, that the general educational area holds the majority of the sample. While 70 of them, representing a rate of 28.9% of the total study sample, are special education area, and (2), representing a rate of 0.8% of the total study sample, come from a ‘other’ field of education. It is important to identify the special educational area of teaching from the general one when comparing and contrasting it with other sections of the survey, such as section 2. Especially the one that shows awareness of autism as they should have a higher level of awareness than others. See table 6.2 for more details.

### 6.1 What is the gender of the school?

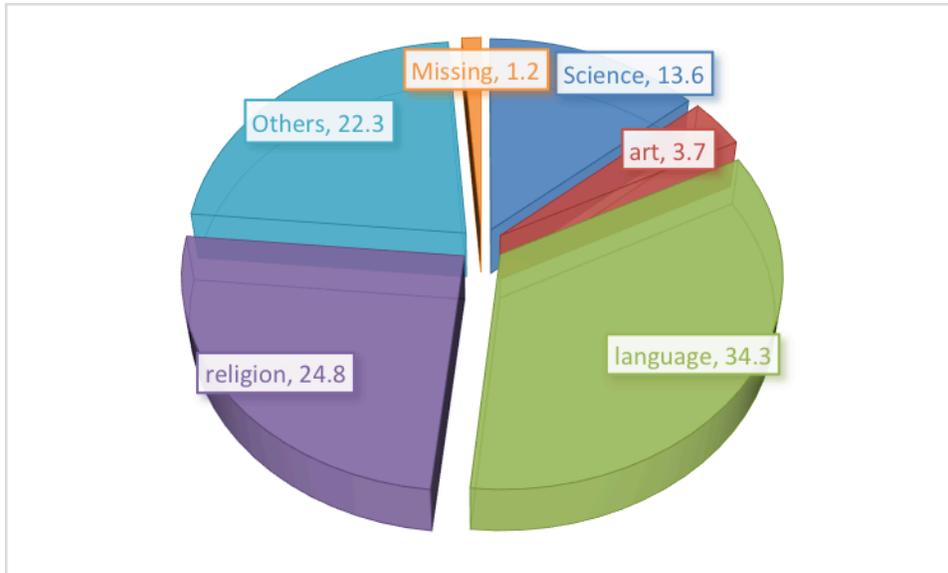
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	103	42.6	42.7	42.7
	Female	138	57.0	57.3	100.0
	Total	241	99.6	100.0	
Missing	System	1	.4		
Total		242	100.0		

The other general information that should be clarified here is the gender of the participant as it was distributed in boys' and girls' schools. Knowing the gender could help the researcher in analysing which groups of males and females have better awareness and what the different between the two is in terms of attitudes towards inclusion. In this study there are 103 male participants and 138 female participants. Therefore, as is shown in table 6.3, the percentage of the female participants is 57%, which is slightly higher than the percentage of male participants, which is 42.6%. However, this is not a significant difference and should not affect the results of this study.

### **6.2 What is your dominant teaching field?**

	Frequency	Percent
<b>Science</b>	<b>33</b>	<b>13.6</b>
<b>Art</b>	<b>9</b>	<b>3.7</b>
<b>Language</b>	<b>83</b>	<b>34.3</b>
<b>Religion</b>	<b>60</b>	<b>24.8</b>
<b>Others</b>	<b>54</b>	<b>22.3</b>
<b>Missing</b>	<b>3</b>	<b>1.2</b>
<b>Total</b>	<b>242</b>	<b>%100</b>

Figure (6.4) shows that (83) of the study sample, which represents 34.3% of the total study sample, are in the field of language teaching and they represent most of the study sample. 24.8% of the total study sample, 60 participants are in the field of teaching religion, and (54) of the sample representing 22.3% are in other teaching areas. 13.6% of the total study sample, 33 in particular are in the field of teaching science, and (9) of them representing a rate of 3.7% of the total study sample teach art. Figure 6.4 below gives a clear visual representation of the dominant teaching fields, which shows that this study's sample represented a varying group of teaching fields. As mentioned earlier in chapter 2, religion plays a big role in Saudi society and this question explores to what extent religion as a field of teaching might affect the awareness of autism and their attitudes towards inclusion of children with autism.



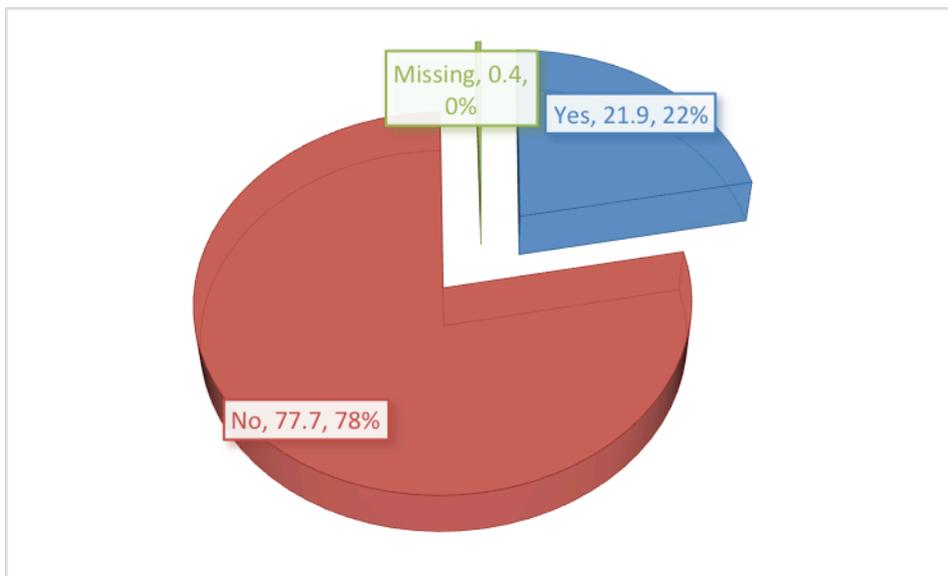
**Figure 6.4 Area of teaching**

### **6.3 Have you received any specific training programme in special educational needs?**

	Frequency	Percent
<b>Yes</b>	<b>53</b>	<b>21.9</b>
<b>No</b>	<b>188</b>	<b>77.7</b>
<b>Missing</b>	<b>1</b>	<b>0.4</b>
<b>Total</b>	<b>242</b>	<b>%100</b>

In terms of training programmes that teachers have in special educational needs, it is very important for this study to include a question of whether they have received it or not. Table 6.3 shows that 188 participants, representing 77.7% of the total study sample, did not receive any training in

special needs teaching, which is the majority. Whilst (53), representing 21.9% of the total study sample, had received training programs in special needs teaching center. Figure 6.5 below demonstrates the large number of teachers who did not receive training programmes. Due to this study including some special educational needs teachers, there is a possibility that of the 53 who claimed to have had training, they were already qualified in that field and so had to take these programmes as part of their preparation for the role.



**Figure 6.5 Training programme**

In this subheading, the researcher selected 4 of the most variable figures that appear in educational level and area. Also, in education dominate teaching field and training programme.

The next section will be analysing and examining the questionnaire results regarding knowledge of autism.

### **6.2.2 Knowledge of autism results in the questionnaire**

This is the second section of the survey that has 10 basic true or false statements that examine the knowledge of autism (Jonathan, Brian, & Barger, 2010). The researcher attempts to analyse this section on SPSS by matching some sentences with section 3 on the survey, which is the belief scale. The results are cross matched between sections 2 of the survey, knowledge of autism, and one of sentences from section 3, the belief scale.

Figure 6.6 and 6.7 represents the true or false answers in section 2 (knowledge of autism) with two other variables, which is what is the gender of the school, and have you had a student with autism in the class. The results from these figures show that both males and females understand basic information about autism but there are very few who point out that they had

students with autism in their class. This indicates that children with autism are still not included in mainstream schools as most of the samples are from general education areas. However, knowing basic information does not mean they are able to recognise children with autism or deal with them and teach them effectively. Perhaps, on the other hand, they are just not aware of children with autism, which is the whole focus of the research questions.



Figure 6.6

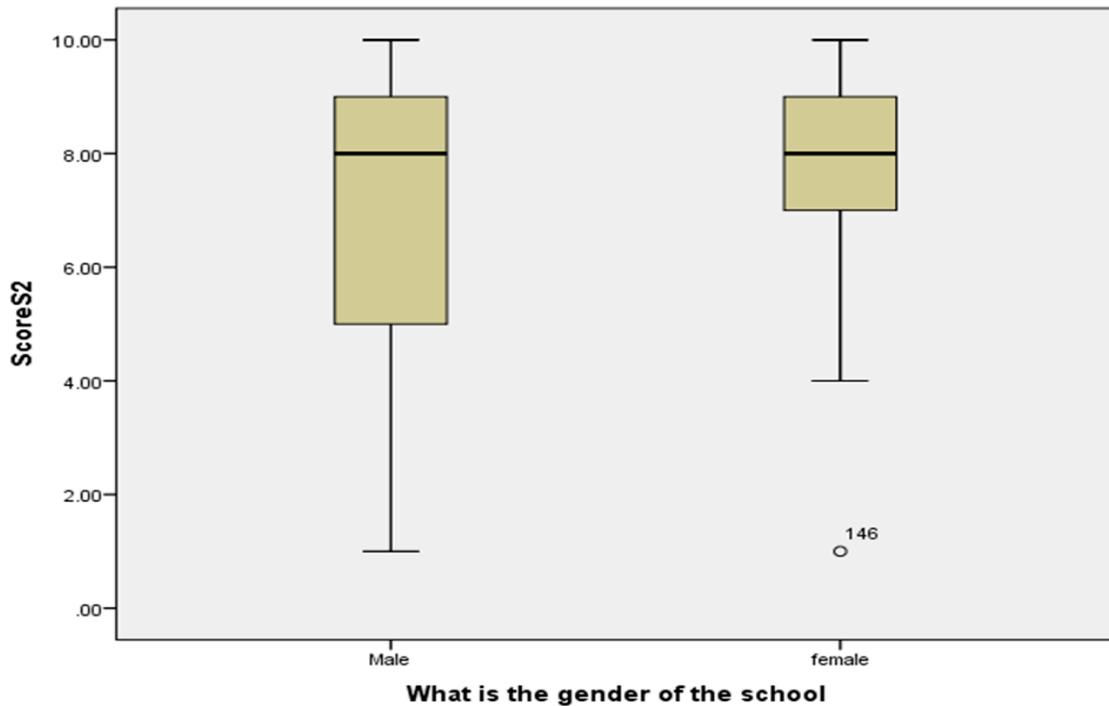


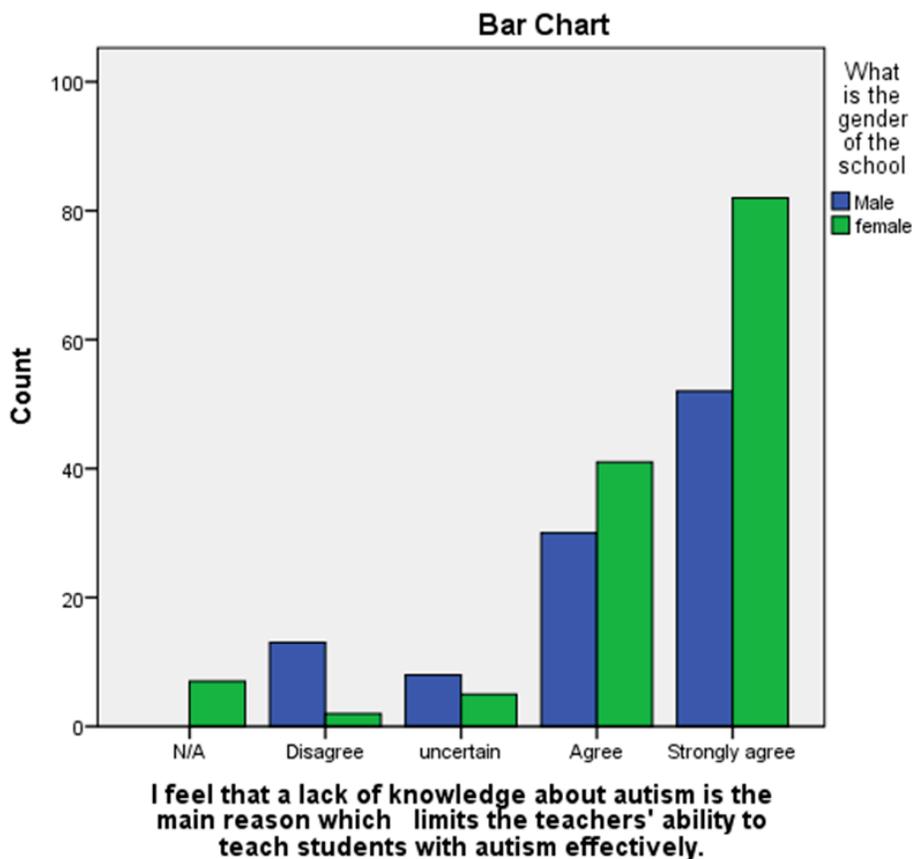
Figure 6.7

### 6.2.3 Belief scale results

These sections on the questionnaire are where the participants share their beliefs by choosing between strongly agree, agree, uncertain, disagree and strongly disagree for each statement. For more detail of how this section was designed see (appendix B). In this subheading, some charts will be presented to show the significant finding of some sentences. The following bar chart shows that over 80% of the females and over 50% of the males strongly agree with statement: “I feel that a lack of knowledge of autism is the main reason which limits the teacher ability to teach students with autism

effectively”. This means that most of the participants in this study confirmed that there is a lack of knowledge and training surrounding autism which results in their fear of teaching students with autism. Table 6.7 shows, in percentage, how the statement across with question what is the gender of school to know the different between female and male in answering this belief scale sentence which is I feel that a lack of knowledge about autism is the main reason that limit the teachers ability to teach student with autism effectively.

**Figure 6.8**



<b>I feel that a lack of knowledge about autism is the main reason, which limits the teachers' ability to teach students with autism effectively. * What is the gender of the school Cross tabulation</b>						
			What is the gender of the school		Total	
			Male	female		
I feel that a lack of knowledge about autism is the main reason, which limits the teachers' ability to teach students with autism effectively.	N/A	Count	0	7	7	
		% within What is the gender of the school	0.0%	5.1%	2.9%	
	Disagree	Count	13	2	15	
		% within What is the gender of the school	12.6%	1.5%	6.3%	
	Uncertain	Count	8	5	13	
		% within What is the gender of the school	7.8%	3.6%	5.4%	
	Agree	Count	30	41	71	
		% within What is the gender of the school	29.1%	29.9%	29.6%	
	Strongly agree	Count	52	82	134	
		% within What is the gender of the school	50.5%	59.9%	55.8%	
	Total		Count	103	137	240
			% within What is the gender of the school	100.0%	100.0%	100.0%

**Table 6.7**

#### **6.2.4 Teachers' opinion:**

Teachers and professional educator's views can be known in more detail in the questionnaires from the last section. The qualitative part of the

questionnaire is situated in the last section of the survey. Three open-ended questions were asked, and results recorded. The questions were:

1. Do you have any other comments about working with students with autism in general?
2. Do you receive any specific support from the school that help you to work with students with autism? If yes, please list.
3. Do you have specific recommendations about improving the awareness of children with autism in schools?

All the answers were collected in order to analyse them manually and the theme of this analysis was each of the three questions. It has been discovered that 70% (n= 169) from the questionnaire were returned without answering any of these questions. The remaining 30% answered some or all the questions very briefly. In this section, the researcher will state some of the educational professionals answers, referring to each as EP followed by the number of survey, between 1 and 242. These answers are based on the most repetitive and significant answers that the researcher deemed useful for answering her research questions.

The results from this section of the survey give a clear idea of the need to improve the awareness of children with autism in Saudi Arabia. Another point that was frequently mentioned in these answers was that most of the EPs did not have any experience working with children with autism, which suggests they are not included or there is a lack of awareness in recognising some students with autism. Also, this supports the early findings in the survey general information section and belief scale. Most importantly, most of them indicate the need of training programmes before including students with autism as well as improvement of the awareness among the society in general. All the answers have been selected under one of the following subheadings and the researcher has written some of them as a direct quote where necessary. Lack of awareness and experience, attitude of inclusion and some suggestions that how the researcher sort out the comments under these three subheading. All direct quotes are in italic format and between brackets.

#### **6.2.4.1 Lack of awareness and experience:**

There are over 30 comments about awareness and experience with most of them indicating the need for improving the awareness to be able to have some experience with student with autism. Here the researcher will list a number of the comments in order to analyse this rich data. For instance, EP

1 opinion was *“I did not deal with children with autism, but from my reading about autism people expect they can integrate them into society, but what the community still needs a means of awareness about autism cases”*. This comment contains two variable points, the first is the lack of experience in working with children with autism and the second is lack of awareness of children with autism in society.

Correspondingly, EP 2’s similar comment regarding the lack of experience was *“I don’t have any experience of working with student with autism”*. In supporting this fact EP 44 points out that *“These opinion that showing in my answered on the questionnaire is not originate from my experience of working with student with autism or friction but the reality of superficial information about autism that I have.....”* and also indicates that *“.....I want to improve the awareness in schools of children with autism before including them”* which confirms that there is a large segment of the study sample which has no awareness or experience of working with children with autism. EP 206 similarly comments *“We apologize for not having gone through the experience of dealing with student with autism”*. This answer gives the impression that the whole survey was not based on their

experience. Here are more of the comments in bullet point format to highlight the lack of awareness and experience regarding autism.

EP 27 *“We do not have the experience in teaching children with autism.....”*.

EP 10 comment *“.....It is not my specialty and I have never deal with students with autism”*.

EP 102 mention the same idea of not having any experience with children with autism hence she cannot give any further comment and suggestions *“No I have no comment because I do not have any sufficient experience in this area”*

EP 73 *“I hope there will be more presence of the largest in the community about autism awareness as well as ways of dealing with them in schools and the role of academic.....”*

EP 55 *“It is important to the work of special courses for children with autism and improve the awareness for all other student and how to deal with their peers who have Autism”*

EP 9 *“This group (students with autism) need a lot of experience and knowledge to deal with..... and also they need to have a large support”*.

EP 214 “.....we are facing difficulties in recognize students with autism as a result of the lack of defined them and their needs”.

The need of defining autism, improving awareness and lack of training programmes and support were highlighted in these open-end questions. Another point worth mentioning is their attitude towards inclusion, which will be discussed in the following section.

#### **6.2.4.2 Attitude toward inclusion**

A number of comments were referring to the idea of including children with special needs in general and how their attitudes toward inclusion may vary. In this subheading, some of the less positive as well as the positive attitudes will be stated.

EP 100 continues her comments and expresses a negative attitude towards inclusion by saying “.....No point of inclusion in crowded schools and also there should be allocate enough time for the students of autism because the class time available is not enough time for them”. EP 33 also comments regarding school provision for children with autism by saying that “I hope development of special schools for children with autism because it is best for

*them more than the inclusion, especially in primary schools”* which indicates that she is not supporting the idea of inclusion and thinks that special schools are a better provision for them. Below are some more comments regarding inclusion and also the lack of support which they refer to after any negativity.

EP 122 comments that the problem of including children with autism is “.....*Lack of equipment and also the lack of sufficient expertise”* which explains their negative attitude. EP 131 also explains “*That the education of students with autism require a lot of hard work and difficult as well as requires a lot of specifications and training and means for the proper performance and results...*” in more and more reasons and barriers that the teachers establish against the idea of inclusion. EP 222 holds a somewhat positive feeling and states that “*Inclusion is important but with the availability of the necessary facilities”*

EP 18 offers suggestions that should be considered before thinking of inclusion such as the fact that autism “*...is supposed to diagnosed medically and behaviorally and then develop proposals and how to modify behavior before the integrate for them (to be there ready for students with autism*

*complete data and incorporated) of the causes and suggestions for teachers as well as a good communicate between parents and the school administration”*. This comment focuses on the idea of diagnosing children properly and putting forward a plan of early intervention that includes children with autism. Also, good relationships between schools and parents should be considered according to this comment.

Here is one of the positive comments and attitudes toward inclusion made by EP 120 *“I think that all of society must understand children with autism and merge this category with the community through inclusion...”*. There is another suggestion from EP 154 saying that *“There must be schools specialist for children with autism, as well as specialized teachers for them”* and this is another negative attitude towards including children with autism in mainstream schools. The idea of specialised teachers being in schools before inclusion came up in these comments frequently. PE 39 mentioned in the open-ended questions that *“I see difficulty in integrating children with autism into regular schools.....”*. These are a range of answers to these questions giving the study a deeper understanding of educational professional’s views regarding the inclusion of children with autism in mainstream schools.

#### **6.2.4.3 Professional's suggestions**

As the last open-ended question was about any suggestions or recommendations to improve the level of awareness of children with autism in mainstream schools, the researcher states some suggestions from the PE 's answer to improve the awareness of children with autism and have better school provision in Saudi Arabia:

EP 9 pointed out that awareness could be improved by “...*Coordination between public schools and private schools with autism and a business trip for students to visit private autism schools and mixing with autism children and play with each other.*” Here the participant's suggestion was to mix children with autism from private schools with other students from time to time to raise the student's awareness of children with autism. Likewise, it will help in learning how to deal with children with autism from both teachers and students. Moreover, another suggestion from EP 66 was to “*give the teachers training programme on autism as well as distribute leaflets showing them the main symptoms of child with autism*”. EP 17 held the same opinion of training programmes being needed and distributing some leaflets that explain and give brief information about autism.

EP 160 also points out that *“I hope to provide specialized centers in the field of autism affordable fit a large segment of people....., Also work to hold seminars and courses in schools to raise awareness of autism and the symptoms of it and to clarify the method of appropriate way to teach them.”*

This comment shows that teachers are willing to have a better understanding and training of autism, but the EP still thinks that special schools have better provision for children with autism.

EP 220 states that *“Dealing with children with autism need a lot of training and learning, as well as specialists in this field must be present in the class to make sure that students with autism they dealt with him or her properly”*.

Similarly, the idea of needing shadow teachers for children with autism came up often in these comment as well as parents’ comments in previous chapters (chapter 5 section 5.3.3). Moreover, EP 26 comments *“that the experience in the field of autism can visits to schools to do workshops for the definition of this category.....”* This EP indicated that visits from specialists to deliver workshops to increase awareness of autism are needed.

EP 180 offers 4 suggestions and recommendations to raise awareness of autism:

*Transplant in all schools the meaning of autism in all its dimensions*

*Give extra dedicated time of quota Scholastic individual with autism student that there is no influence on the rest of the students*

*Encourage ordinary students to accept students with special needs by explaining to them the case of the student and how they should deal with them*

*Generate a community to accept children with special needs through special programs (media) and within the curriculum*

There is no doubt that all these suggestions and recommendation are very crucial to improve the awareness for children with autism in Saudi Arabia, as well as to have a better school provision for these children. In summary, for the result of the survey the important findings were that most teachers had almost no training programmes to help them understand what autism is and how to deal with children with autism. Also, a large segment of the sample had no experience of teaching children with autism, which indicates that inclusion for children with autism has not yet started in Saudi Arabia. Above all, increasing awareness about children with autism is one of the

most highly recommended suggestions made by the educational professionals.

This was the first subheading of the second result chapter for this study, which analysed the survey. The survey target was the educational professionals and as it appears above that there wasn't an awareness of children with autism. Also, the school provision for children with autism is very limited in mainstream schools which has included children with disabilities, especially autism.

The following section will analyse the senior educational professionals' semi-structured interviews and explore in-depth the situation of the school provision for children with autism.

### **6.3 Senior educational semi-structure interviews**

This chapter also presents the results of the analysis of the semi-structured interview data collected from senior educational professionals. The five semi-structure interviews that were conducted provided additional in-depth information about students with autism and their school provision from educational professional's and Ministry of Education workers point of view.

The researcher conducted these interviews after she collected the questionnaire data and before she performed the analysis. Each phone interview took about 30 minutes after respondents contacted the researcher with appropriate times to call. For more information about the interview procedure, see chapter 4 section 4.8. For the purpose of this discussion, the researcher designated all interviewees as senior educators (SE) with a corresponding number and analysed each interview transcript manually. As Savin-Baden and Major (2013) explained, “qualitative data is an on-going process that involve breaking data into meaningful parts for the purpose of examining them”. Following this procedure, the researcher divided the data into significant themes. This section presents the interview analysis into three subsections: 1) general information about the interviewee, 2) interviewee perception on inclusive educational practice in Saudi Arabia, and 3) interviewee views regarding awareness of autism in Saudi Arabia.

### **6.3.1 Interviewee positions and experience**

Table 6.1 lists the positions and years of experience for each of the senior education officials interviewed in this study.

**Table 6.1 Senior educator backgrounds**

<b>Code</b>	<b>State of job</b>	<b>Experience</b>
<b>SE 1</b>	Assistant educational affairs for Special Education	25 years (including teaching)
<b>SE 2</b>	Special educational need director (autism)	19 years (including teaching)
<b>SE 3</b>	Special educational need director (down syndrome)	23 years (including teaching work field)
<b>SE 4</b>	Special educational need director (learning difficulties)	10 years (including teaching)
<b>SE 5</b>	General education director (Development department)	15 years (including teaching)

Those interviewed among the Saudi Ministry of Education officials listed in Table 6.1, only one specialised in autism while the others specialise in additional educational needs, such as learning difficulties and Down syndrome. All officials have extensive experience of at least 10 years of teaching in schools and working at the Ministry of Education. It should be noted that this information does not identify the participants, as the Ministry of Education employs several directors and assistants, and these groups include both men and women.

According to SE 1, “*Saudi Arabia lacks even graduate students that specialize in Autistic spectrum disorder (ASD)*”. In fact, the first class with a precise specialisation in teaching children with autism graduated from Saudi

universities this past year. To clarify, some Saudi universities offer general special educational needs training for specialties in Down syndrome, the deaf, and those with learning difficulties. These specialties are the most open in universities for past few years. This finding helps to explain the slow development of inclusive practices for children with autism as well as that of diagnoses and training for general education teachers in Saudi Arabia, and to some extent the lack of specialists to diagnose ASD.

### **6.3.2 Inclusive practice on in Saudi Arabia**

Most of the interviewees point out that inclusion is still not in good practice and there is a lack of training programmes, expertise and supporting tools. The researcher asked about the mechanism in the selection of mainstream schools in Saudi Arabia and their answers were that “*we visit all schools to see if the building are suitable or can be adjust to meet the needs of children with special needs*”. They add that it is necessary to consider if the head teacher is willing to collaborate to help the child and if there are classes available to be sources room. According to the senior educational professionals, there are a number of schools in Riyadh the capital city of Saudi Arabia that are not ready to include any students with special

educational needs mainly because the school facility and building is not suitable.

On the other hand, at kindergarten level, schools now accept all children no matter their special educational need. This was confirmed by SE 3 in the interview. However, after kindergarten school provision for children with special needs in general and children with autism in particular seems to be very difficult. SE 5 confirms that the main problem is that “*Government centers for special needs usually full and although there are a number of good private centers they are very expensive*”. SE 2 also points out that there is scarcity in early intervention programmes and also space for all children with special needs. Most difficulties arise when places are not capable of accommodating the existing number of children with autism. It should also be acknowledged that all private schools are diligent towards parents who have a child with special needs because they are very expensive and most middle-class families cannot afford it.

Moreover, “*In Saudi Arabia the Salamanca statement was the first step that take the inclusive start to be in a good way and practice.*” SE 5 disagreed that inclusion is still in its very early stages of practice and is very late

compared to other countries. According to SE 4, there are all kinds of special needs that should be included such as Down syndrome, autism, deaf, blindness, learning difficulties and hyperactive children, as this is the ultimate idea of inclusion and that is the legislation. They also emphasise and support that inclusion for children with special needs in general is better for the child as well as the parents. This belief was reflected by the majority of the interviewees from the Ministry of Education. SE1's opinion was that *"we thought that private schools is better for children with special needs but we are wrong including them in mainstream schools is better even if they are in separated class the inclusion the integration of spatial will benefit the child and the parents as well"*. SE 2 claims that in practice, education for all started in 4 schools in Riyadh that accept children with all kinds of disabilities without any limits and the head teacher works hard to help the children and ask if they require more assistance and support.

SE interviewees pointed out that late diagnosis or wrong diagnosis is the aspect that affects many students. For example, SE 3 shared her story of a student she has come across that had been diagnosed with mental illness and it was later discovered that she actually had a learning difficulty. This error in diagnosing children could have an adverse effect on the child and their

future making it unacceptable and an issue that must be tackled as soon as possible. Also, this highlighted that there is a lack in expertise and specialist people that can diagnose children with special needs in Saudi Arabia. SE 1 also continues that “diagnosis is one of the most important problems facing the inclusion”.

Most of the senior educators also mentioned that in terms of training programmes in special education needs, there are very few with base knowledge and understanding, which is due to the lack of training programmes. The second concern was the supporting tools and early intervention programs. SE claims that “*over 20 years the start of inclusion practice but the training programme was not planed and direct for the teachers until 2014.*” Moreover, SE 1 continued by explaining that the plan is to improve the awareness and the philosophical concept of the inclusion within the next 5 years. SE 2 adds that the “*.....lack of support is another problem that we need to work it out*”. According to SE 5, most of the training programmes are personal endeavours that are not under the Ministry of Education rules and guidance. SE 1 mentions that “*there is a great shortage of specialized personnel working in special education and in particular autism specialised*”.

### 6.3.3 Views regarding awareness of autism on Saudi Arabia

All of the interviewees agreed that ASD in Saudi Arabia needs to be expanded. For example, SE 3 point out that it is possible that in mainstream schools there are some children with autism that have not been diagnosed, which could be as a result of the low-level awareness amongst teachers in mainstream school. On the other hand, SE 5 mentions that although *“in general there are some improving on awareness regarding children with autism but the negativity of attitude toward inclusion make improving the awareness even more difficult”*. Furthermore, SE 2 also points out that *“there are some risings in awareness about children with autism but no acceptance”*.

The question of whether there are children with autism in mainstream schools that have not been diagnosed resulted in a “yes” from all interviewees. To explain, in Riyadh there are few diagnosis centers, possibly only 8 centers according to SE 5. Moreover, according to SE 4, another problem regarding the diagnosis of children that teachers and the Ministry of Education are facing is the fact that parents may not want or accept their children’s diagnosis. Furthermore, the idea of not all children being included

appears again even with the senior educators. SE claims that “*Not all children with autism can be included*” which was also pointed out by EP 10 and EP 14 in the survey section 4. For more details see heading (6.2.4). On the other hand, lack of awareness and wrong diagnoses is a big concern that appears in these interviews.

These interviews show that inclusion is not in good practice yet. Very few schools that started the idea of “education for all” with the legislation, which recently started in kindergarten schools, should accept all children no matter of their condition. Diagnosis, training programmes and support tools were all suggestions for improvement. Lack of awareness affects children, families and even teachers and schools in diagnosing and helping them.

## **6.4 Conclusion**

To conclude, this chapter contains both qualitative and quantitative methods that have been analysed. The first survey of 242 is the quantitative part plus the open-end question and 5-semi structure interviews is the qualitative data.

A summary will be presented in bullet point format below:

- Improvement is needed regarding the awareness of autism and inclusive practice in general in Saudi Arabia.
- The importance of having a better diagnosis service to have better inclusion.
- It is possible that mainstream schools have children with autism that have not been diagnosed.
- Training programme is in the very short stage currently.
- Lack of support and good facilities in mainstream schools in Saudi Arabia affecting inclusion practice.
- Education for all have started in 4 schools in Riyadh.
- Kindergarten schools accept children with all and any special needs nowadays.
- Teacher's attitudes towards the inclusion of children with autism vary in this study.
- This study proved that teachers have no experience in working with children with autism.
- There are limited spaces for children with autism in government centers and private schools are very expensive.
- In the knowledge of autism section in the survey, most teachers claimed they understand the basic symptoms of autism.

# CHAPTER SEVEN: DISCUSSION

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## 7.1 Introduction

This seventh chapter discusses the study results and compares them with those of previous studies. The previous two chapters, Chapters 5 and 6, presented the results of the study with respect to the research questions.

To review, this study addresses the following four research questions:

1. What do parents and educational professionals feel are the barriers to and facilitators of effective educational provision for children with autism in Saudi Arabia?
2. How do parents and educational professionals feel about the level of awareness of autism in Saudi Arabia?
3. What do parents and educational professionals feel are the barriers to and facilitators of achieving a diagnosis of autism in Saudi Arabia?
4. What other factors do parents and educational professionals feel are the barriers to and facilitators of the provision of education for children with autism in Saudi Arabia?

To summarise, the original data sets that were used in this study include interviews conducted with parents and educational professionals and data collected from Twitter accounts and surveys. While it is important to examine the themes that emerged from each data set, this chapter comprehensively discusses all of these themes in the context of the research questions.

This discussion focuses on the main research topic: awareness and school provision for Saudi children with autism. Moreover, as a result of the barriers to exploring the awareness that emerged in the study findings, this chapter discusses ways to overcome these barriers and investigates if they are mentioned in the literature. However, as previously mentioned (see Chapter 3), the literature on autism in Saudi Arabia and for Arab countries in general is largely unexplored. While a few recent studies have been published, they mostly concern either special education in general or gifted children. As a result, this research examined a broader research context, including the literature on the situation of ASD acceptance and school provision in the UK and the US. It should be noted that this research is underpinned in Systems theory, which illustrates that the people surrounding

the child with ASD affect his life, from the parents and teachers to the society as whole. Therefore, it is important to get the views of those people on the awareness and the school provision for children with autism in a way that could improve the child's daily life and education.

The focus of this thesis is educational provision for children with autism and in order to understand that and how it could work to the child's best benefit, it is important to think about the different factors in making that decision. Furthermore, the Systems theory is useful because the child is not in isolation but also includes the views of the families and practitioners to determine the best outcome for the child. System theory helps by looking at the various systems of support around the child and as such, it is the best to fit with KSA context.

The structure of this chapter is based on the study findings that emerged from data sets collected from parents of children with ASD and Saudi educational professionals. First, it outlines the main findings from this study and discusses the themes that emerged from the data analysis. The main theme that is addressed concerns the issues highlighted in this study, and the second heading and subheading under this theme focuses on increasing ASD

awareness and expanding diagnosis centers. Second, the chapter examines philosophical beliefs in inclusive education such as school provision for children with autism, parental and educational views regarding inclusion, a lack of teacher experience and training programme and their practical application. A conclusion and summary of this discussion is presented at the end of this chapter.

## **7.2 Summary of the main findings**

This section summarises the main study findings. To review, these findings were based on the analysis of ten interviews with parents and five with senior education professionals, a survey of 242 teachers and education professionals and over 60 Twitter comments. First, the research suggests that both parents and educational professionals agree on the general lack of awareness concerning children with autism in Saudi Arabia, and subsequently, how it can affect the lives of children. Also, the participants agree that this lack of knowledge is the main barrier to inclusion of ASD children in mainstream Saudi schools. Another finding concerns the lack of ASD expertise and diagnosis centers in Riyadh, as well as other Saudi cities. This barrier has had a major impact on early intervention practices for children with ASD, as well as school provision for these children. The

majority of the parents interviewed for this study, as well as those who responded on Twitter, mentioned how long it can take to have their children diagnosed, and also how often incorrect diagnoses occur. Four out of five of the senior education interviewees also shared some incidents concerning mistakes and difficulties in obtaining correct diagnoses for children with ASD.

According to the senior education professionals interviewed for this study, the process of integrating children with ASD into mainstream schools in KSA is still not very effective. In fact, there are just four schools in Riyadh that have recently begun accepting children with autism under the umbrella of “education for all”. The majority of parents of children with ASD stated that they face many difficulties in securing school provision for their children. In fact, not one parent involved in this study stated that their child attends a mainstream school. This could be the opportunity nature of the sample, but more likely it represents a significant barrier that this group of children face when trying to obtain appropriate educational provision in mainstream schools.

The parents who participated in this study generally have a positive view regarding mainstream school inclusion for their children, providing shadow teachers and well-trained staff are present. The views of the educational professional respondents varied on the inclusion of ASD children, as it appears that they have little experience of integrating children with autism into mainstream Saudi schools. Finally, ASD training programmes for teachers and parents are in very short supply in Saudi Arabia.

This summary provides an outline of the structure of this chapter. The following section highlights the issues raised in this study, including increasing awareness of ASD and expanding diagnosis centers.

## **7.2 Key study results for consideration in Saudi Arabia**

The results of this study revealed the participant's view that many important issues concerning children with autism need to be addressed in Saudi Arabia. Firstly, the data analysis relating to parent responses in this study suggest that a general lack of awareness of ASD issues in society and schools is a major barrier. User 38 from the Twitter indicated that "*there are a huge lack of awareness of autism among society which affect the parents and the child on daily life*". In fact, this is one of the most important findings

of this study and is the primary challenge that should be given great consideration. Furthermore, it was surprising that this view was not unique. The results of the majority of the educational professional's data are consistent with those of the parent's data.

For this chapter, there are three main sections, which center on the research questions. These are the lack of ASD awareness, difficulty in obtaining a diagnosis and philosophical beliefs in and practical approaches to inclusive education. The issue of lack of ASD awareness is discussed in terms of the reality concerning autism awareness and the impact it has. Challenges surrounding ASD diagnosis is another major finding that this study has shown can affect children with autism in Saudi Arabia. These are matters that should be addressed by parents and educational professionals together, who agree that avoiding incorrect or late diagnosis is beneficial. In addition, the need for better ASD diagnostic services, and managing possible resistance from parents in obtaining a diagnosis for their children is another barrier that parents of children with autism face. This might be due to the lack of diagnosis centers and lack of awareness amongst parents. Also, another barrier that appears in this study is ensuring that parents do not need

to leave the country to receive either a diagnosis or better services and education.

In the following section, the first theme is discussed which uses data from this study and compares it with the literature for similarities and differences. Lack of awareness is the first thing that needs to be consider and will be discussed under two parts, reality of awareness and the impact of the lack of the ASD awareness.

## **7.2.1 Reality of awareness of autism**

### **7.2.1.1: Lack of awareness**

The main finding from this study concerns the views of the participants on the general lack of ASD awareness in Saudi society, schools, and sometimes even among parents. This is seen in the raw data in the Twitter account, interviews with parents and also some of the senior educator interviews mention *“the lack of awareness affecting the teachers as well as the parents where some of them sometime even resist to diagnosis there children”* (SE 2). A comparison of this finding with the literature review discussed in section (3.2.2) illustrates that the level of ASD awareness in the US and the UK is high, as most studies concerning these two countries reveal a much

greater level of awareness and understanding of children with autism (Kulage, Smaldone, and Cohn (2014). However, to date, Arab countries generally lack an awareness of ASD, which is reflected in their limited literature on this topic (Alqurini, 2011). However, while very few studies on ASD awareness have been conducted in Saudi Arabia or Arab countries in general, some research on this subject has been done in Oman, Qatar, Jordan, and Lebanon, and these results are discussed in this chapter. While not all of these studies discuss awareness of autism specifically, they mention autism, the situation of children with autism in these countries and the lack of awareness which is not different from what was found in this study.

Clearly, the results presented in Chapters 5 and 6 show that participants feel there is a significant lack of awareness regarding children with autism in Saudi Arabia, and that this is a serious issue in Saudi society. The research participants who responded on Twitter, as well as the parents and senior educational professionals who were interviewed all agree on this finding. Surprisingly, a recent US study by Tipton and Blacher (2014) showed that even though the US recognised autism a long time ago, there is still a need for improvement. Furthermore, as Sun and Allison (2010, p. 157) stated,

“although ASD is commonly recognized in Europe and America, it is a relatively new concept in the Eastern world,” which supports the findings of this study. As discussed previously, the results of this study show that much work is required to improve the autism awareness situation in Saudi Arabia. The literature also states that the situation in Nepal regarding ASD awareness seems to be no different than that in Saudi Arabia. As Shrestha and Shrestha (2014) pointed out, even Nepalese children with autism who receive a diagnosis usually miss the opportunity for early intervention due to non-existent awareness and knowledge about ASD. In addition, a few studies mentioned in the literature review in section 3.4.1 discuss research completed in Qatar and Oman on how lack of awareness is a major issue affecting children with autism in these countries. In fact, many recent studies show that increasing awareness about the issues surrounding children with autism is a crucial and controversial aspect in some regions of the world.

Furthermore, these views typically surface mainly in relation to the possible contribution of autistic difficulties to the situations and behaviours causing concern that parents typically described as a lack of awareness of, or sometimes an outright reluctance to, accept (Whitaker, 2007). According to Huang, Jia, and Wheeler (2013, p. 1999), in China, “due to a lack of

understanding of atypical human development and cultural barriers in this country, parents tend to feel shameful of having a child with special needs, such as autism.” While this attitude was not present in the data collected for the present study, and parents did not express feelings of being ashamed at all, the cultural barriers that did come up among respondents were mainly a result of a lack of awareness.

Although a number of participants pointed out that Saudis need to improve their awareness of all sorts of special needs, such as learning difficulties, mental disorders and Down syndrome, autism is in much more need of increased awareness. It is possible to hypothesise that in the literature this situation is less likely to occur in the UK and USA, as they are much more responsive to caring for children with autism and special needs in general. However, some of the participants in this study mentioned that on World Autism Awareness Day, many Saudi schools and centers, as well as hospitals, acted in such a way to increase the ASD awareness in society. The literature from China on this topic also supports this finding by indicating that more intervention and educational opportunities have been created as a result of increased social awareness of autism (Huang et al., 2013).

The parents involved in the present study pointed out that one possible explanation for a lack of ASD awareness in Saudi Arabia is a lack of support and assistance from the government, specifically its Ministries of Health, Media and Education. According to Tipton and Blacher (2014, p. 482), “researchers need to address how best to increase familiarity and even the more basic question of under what conditions being more aware leads to being more accepting.” However, the most important aspect of increasing awareness is the greater acceptance that it could result in, and Matson and Kozlowski (2011) stated this increase can also benefit parents. The benefits of increased ASD awareness may also be useful in helping to improve services, school provision and diagnosis centers.

#### **7.2.1.2 Impact of a lack of ASD awareness**

The majority of parents in this study stated that at this point in time, inclusion cannot be achieved for children with autism because of a general lack of societal awareness about these children. User 38 pointed out that *“lack of awareness of children with autism in mainstream schools prevent cooperation with the teacher and other students in the school and this will affect the child’s learning”*. One possible way forward was presented by the senior education interviewees who emphasised that schools should increase

awareness of autism among head teachers, teachers, students and other school employees. They asserted that if ASD awareness were to increase in schools, a large part of society would become more aware of this issue, as schools include students, families, teachers, head teachers and social workers.

Together, these results provide important insights into increasing ASD awareness and how this could help children with autism that might be affected when staff do not know that a child has ASD. In accordance with these results, two recent studies in particular discuss autism awareness, and suggest that broader diagnostic criteria or increased awareness will result in the increase in the incidence of autism disorders (Kulage, Smaldone and Cohn, 2014). Another view is that restricted access to care or cultural differences in autism symptom awareness has resulted in diagnostic disparities, which may be due to the fact that families of different races and ethnicities lack awareness (Boswell, Zablotzky, and Smith, 2014). In fact, Fombonne (2005) claimed that the rapid increase in the prevalence of autism is undeniable, whether it is due to increased awareness, genetics, environmental influences, or ever-evolving diagnostic criteria. These studies clearly indicate a relationship between increasing ASD awareness and

increasing prevalence. As Boswell et al. (2014, p. 98) pointed out, “From the time that autism was officially recognized in 1943 through the 1970s, it was considered a rare disorder, with a prevalence of roughly 0.5 individuals per 1,000 this estimate doubled by the 1980.” Most professional educators who contributed to this study acknowledged the possibility that there might be children with autism in Saudi schools that have gone undiagnosed because of a lack of awareness.

As previously stated, the study findings indicate that a number of impacts stem from lack of ASD awareness. One of these impacts, feeling isolated, was mentioned by three parents, and they expressed this by explaining the difficulties they face going out with their children. This impact is also due to the perception of the public that leads parents to feel uncomfortable. This phenomenon could be described through the lens of Systems Theory, which was applied in this study, and how the systems of social life may work to affect individual children with autism, as well as their families, societies, and governments. Therefore, if we want to help children with autism by increasing the level of general awareness, this must be done through government, societal, and familial support.

Another affect of a lack of ASD awareness shown in this study concerns problems related to parents' health and wellbeing. Six parents involved in this study reported that they are often very tired, and are starting to have health problem themselves, which they claim i due to the pressure from having a child with autism. In addition, in Saudi society, mothers are seen as the primary caregivers for children, and some of the mothers in this study state that sometimes they cannot go out unless they arrange for childcare. This applies even when the child is old enough to stay with another member of the family. For example, if a child is 10 years old and he has older sister, the mother cannot leave him with his sister alone and go out because he has ASD. This can affect families financially, and any related health problems that arise can increase government costs of caring for parents in terms of prescriptions and medical visits. Furthermore, a lack of ASD awareness can affect the lives of families seeing to their day-to-day needs, such as grocery shopping or visiting a shopping mall.

In addition, several studies have discussed how a lack of ASD awareness, particularly in schools, could have a large affect on recognising children with autism (Stewart, 2012). As discussed earlier, increasing awareness

among school communities is crucial, and many different ways exist to do so.

According to the participants in this study, many strata of society have no idea what autism is, so the need to improve awareness is essential. Many parents who participated especially in the Twitter account have suggested some possible way to increase societal awareness which could begin by having media outlets (e.g. television, radio, Internet) produce content that explains autism and why people should be aware of it. To support, in the literature, a number of articles mention the role of the media in increasing awareness of autism in the UK and the US, which is absent in Saudi Arabia and should be considered (Burn and Parker, 2003; Matson and Kozlowski, 2011; Tipton and Blacher, 2014).

Moreover, as Salomone, Charman, McConachie, and Warreyn (2015, p. 144) argued, “public awareness initiatives as well as training for professionals should be put in place to promote early detection of ASD and access to intervention across Europe.” Hence, it could conceivably be hypothesised that in Saudi Arabia, early identification of children with autism and access to intervention programs could lead to increase public

awareness and initiatives, as well as training for professionals. These initial results suggest a link between increasing awareness and early diagnosis.

The following section discusses the findings regarding ASD diagnosis centers and what parents and educational professionals have supported.

### **7.2.2 Diagnosis centers**

In this study, parents and senior educators described the major difficulties in finding diagnostic centers and a shortage in the availability of the existing centers and expertise. The literature review (see Chapter 3.4.2) classified that late and often incorrect diagnoses for special needs children are a serious global issue. One study by Murshid (2011) indicated that due to the unreliability of specific tests for diagnosing children with autism, late diagnosis may affect children with autism and their families. In addition, Hussein, Taha, and Almanasef (2011), noted that due to the limited access to services in Saudi Arabia, delays exist in early interventions for ASD children. The findings of this research support these studies, and the following sections discuss the four main aspects related to diagnosis that emerged in this research: 1) improved diagnostic services are required, 2)

avoiding incorrect diagnoses, 3) possible resistance to obtaining a diagnosis, and 4) leaving the country to get a diagnosis.

#### **7.2.2.1 Improved diagnosis services needed**

The parent interviewees, Twitter account respondents and educational professionals in this study all agreed on the lack of diagnosis centers for children with autism in Saudi Arabia. The consequence of this shortfall has made the situation challenging for many of the parents. Furthermore, the educational professionals interviewed agreed on the lack of diagnosis services and how it can affect the ability to help and educate children with autism. Failing to identify children with autism early can limit the potential for their appropriate education, and delay putting plans in place for early interventions.

In this study, the majority parents revealed their concerns regarding how much they struggle to get an accurate ASD diagnosis for their children in Saudi Arabia (see Section 5.2.2). While the city of Riyadh has some diagnosis centers, parents reported negative experiences with these centers. Furthermore, parents living outside Riyadh have the additional problem of limited access to diagnosis centers or private schools. Two parents in the

study mentioned that they travelled to other cities or countries to get help and access diagnostic services for their children. Alquraini (2011) published one of the few Saudi studies relevant to this topic (see Section 3.4.2), which supports the finding that Saudi Arabia lacks sufficient diagnosis centers and specialists in children with autism to meet demand.

In a European study, Salomone et al. (2015, p.141) argued that, “Autism Spectrum Disorder (ASD) can in some cases be reliably diagnosed by age two, but in community settings the mean age at diagnosis is often considerably higher.” The current study found that all children involved in this study were diagnosed above the age of two, and that this delay in diagnosis resulted in a delay in early intervention as well.

Moreover, in accordance with the present study’s results, previous studies have demonstrated the difficulty in finding access to services based on geographic locations, which can contribute to delays in diagnosis and treatment for many children, regardless of racial background (Boswell et al., 2014). A study carried out in Nepal concurred that delaying recognition of ASD symptoms in children and not seeking advice early enough is likely

why diagnoses are made at such advanced ages (Shrestha and Shrestha, 2014).

Further, many study participants highlighted the extensive work the Saudi Ministry of Education needs to do to address these issues, which will be discussed in more detail in conclusion chapter. To clarify, the study results corroborate the findings of Alnahdi's (2014) work, which concluded that centers specialising in diagnosis and the assessment of special education services should be set up around the country by the Ministry of Education in order to form multidisciplinary teams and consistency in addressing the needs of ASD children. Furthermore, Alnahdi's (2014) suggested that these centers could work towards raising awareness of the required standards for assessment and diagnostic procedures. In regions where large schools exist, these schools should be prepared and equipped to support diagnosis centers, using a model that should be produced by the Ministry of Education. Along with the short history of diagnosis centers for children with autism in Saudi Arabia, incorrect diagnoses also occurred and are being discussed next.

### **7.2.2.2 Avoiding incorrect diagnoses**

In this study, the topic of incorrect diagnosis emerged several times from the data collected from parents and senior educational professionals. In addition, one senior educator discussed the errors that can sometimes occur in diagnosis, and how such errors can cause educational and psychological harm to children and upset parents. This is one of the major issues that the participants felt that the Saudi Ministry of Education need to improve urgently.

This finding is rather surprising, in that many parents reported that trusting diagnosis results is difficult, as some of their children have been incorrectly diagnosed many times, forcing some parents to visit other centers and sometimes even travel to other countries in an attempt to secure what they feel is a reliable diagnosis. As always, it is important to consider the potential sample bias in these responses. However, after reviewing the literature, it could be argued that incorrect diagnosis may also result from the many changes in the diagnostic criteria for autism (Matson and Kozlowski, 2011).

Furthermore, the study results corroborate the findings of a great deal of work in China. For instance, Sun et al (2015) reported that in China, the diagnostic process for autism is relatively short and is made without multidisciplinary assessment. Also, the parents involved in this study reported that the diagnosis of ASD children at Saudi centers often takes less than half an hour, and they argued that this is not the case in other countries.

Furthermore, Hertz and Delwiche (2009) claimed that the increase in the number of children with autism is due to the changes in diagnosis from the category of mental retardation to ASD. For this study, a senior educational professional reported that he knows of a number of cases of incorrect diagnosis in Saudi Arabia that led to the label of mental retardation. Moreover, according to (Huang et al., 2013), due to poor awareness of ASD among professionals in China, particularly psychiatrists, many individuals with both autism and cognitive impairments have simply been diagnosed as having only cognitive impairments.

The results of the present study corroborate findings that KSA physicians often have a lack of knowledge about autism and its treatment and show resistance, which can lead to problems including late diagnosis (Shrestha

and Shrestha, 2014). A possible explanation for this may be the lack of trained and expert physicians. Another point worth addressing is the fact that sometimes a diagnosis of ASD is not easy to make due to the child's young age or lack of meeting all the criteria that constitute ASD.

### **7.2.2.3 Possible resistance to receiving a formal diagnosis**

Some parents involved in this study have resisted having their children diagnosed, which could also be one of the effects of lack of awareness. One interviewee, the mother of a 14-year-old with autism, pointed out that she helps her child by herself at home, and enrolled him in a mainstream school setting without telling school officials that he has autism. Thus, she avoided labeling him, but she also explained that caring for him at home without an education would have been much harder. In one of the most important ASD awareness studies conducted in an Arab country, Al-Farsi et al. (2010) argued that parents may resist diagnosis because of a lack of awareness and failure to recognise symptoms. The impact of this often appears in schools, where an ASD child might have to repeat an academic year due to not receiving appropriate help. Also, simply labeling a child with autism as naughty or lazy is another impact that could result in him not receiving an accurate diagnosis. The issue could also affect the nation, due to increased

costs for educating a child for each year he or she repeats. As discussed in Chapter 4, according to system theory, these problems can affect children with autism, their parents and teachers, and as such affect their schools, environment, and eventually society. To explain, as a result of parents resisting a diagnosis, the child is left without specialised help and risks losing specialised support of the teachers and other children and consequently may not be able to reach his full potential to pass the examinations or assessment curriculum for each year. This sometimes gives the teachers little choice other than to recommend the child to repeat the year as teachers may think the reasons for this lack of progress are due to the child being lazy or naughty with unhelpful parents. Of course, this is not the best way to support a child who has ASD and increasing awareness should help to avoid such resistance as well as the need to leave the country, which will be discussed next.

#### **7.2.2.4 Leaving the country to receive a diagnosis**

In this study, ten Twitter account users who identified themselves as a parent of a child with autism reported that they went abroad either to have their child diagnosed or for early intervention and identified Jordan and the UAE (Dubai) as their most common destinations. However, this option depends

on a family's level of income, as wealthier families may consider the UK and US as providing better service and expertise. Al-Farsi et al. (2012) discussed how parents in Oman expressed that leaving the country to have their child diagnosed was their only option, due to the shortage of qualified physicians and health centers for ASD children in Saudi Arabia (see Chapter 3, Section 3.5.2).

Providing competent diagnostic services could assist Saudi Arabia, as well as its citizens, to avoid incurring additional costs of educating children with autism in mainstream schools, as some end up repeating an academic year as discussed previously. Studies of autism in the UK and US (Sun and Allison, 2010) suggests other countries should reconsider their attempts in simulating their work with children with autism. This suggestion will be explored further in the conclusion chapter. However, Sun and Allison (2010, p. 165) also pointed out that “methodological differences in case definition, screening instruments and diagnostic criteria were evident between countries which makes it very difficult to compare the studies”. In accordance with the present results, previous studies have demonstrated that due to various barriers, many families have found it necessary to travel to

health care facilities that are far away, move their entire families, or look to educational systems for diagnosis and treatment (Boswell et al., 2014).

According to Salomone et al. (2015), even in the medically well-served areas of Europe described in their study, concerns were expressed about the difficulty of obtaining a timely ASD diagnosis. As mentioned earlier, many parents reported the limited time taken in diagnosing their children, which often resulted in an incorrect diagnosis.

Based on the study data and the literature, Section 7.2 discussed one of the most important aspects of this research, which is a lack of ASD awareness and diagnosis services.

The following section addresses the second important aspect of this study, namely inclusive practices in Saudi Arabia.

### **7.3 Philosophical beliefs in and practical approaches to inclusive education**

It should be noted that with respect to inclusion, the study findings suggest that there are not yet places in Saudi Arabia to include ASD children in

inclusive mainstream schools. Many studies regarding inclusion appear in the literature review, particularly concerning parents' perspectives on special educational needs and teacher attitudes towards inclusion (see Chapter 3, Sections 3.5&3.7). Based on the literature review and the study data, school provision is a major issue that affects children with ASD. The most obvious finding to emerge from the data analysis is that parents have many concerns about placing their children in mainstream schools (see Chapter 5 section 5.2.3). Moreover, the results of this study indicate that teachers and educational professionals face a number of issues and obstacles (see Chapter 6 section 6.2.4). This section discusses these findings in more detail and is divided into three subsections: 1) school provision for children with autism in Saudi Arabia, 2) parents and educational professionals' views on inclusive education, 3) lack of experience among mainstream teachers, and 4) lack of training programmes. Most of these subsections address the fourth research question.

### **7.3.1 School provision for children with autism in Saudi Arabia**

According to the study findings, the majority of parents and educational professionals have stated that children with autism are generally not yet included in mainstream schools in Saudi Arabia. In fact, parents report that

most of the children discussed in this study attend private autism schools or centers. The senior educators also mentioned that the practice of including ASD children in mainstream schools is still in its early stages, and programme for early intervention is very limited.

Moreover, many parents show little concern about including their children in mainstream schools, as they believe that the lack of ASD awareness in society will have a negative impact on their children. This section will discuss the issues surrounding inclusive practices and gender segregation in the Saudi school system.

#### **7.3.1.1 Inclusive practices**

This study has resulted in a greater understanding of the issues facing inclusive practice in Saudi Arabia and affecting ASD school provision. It has also highlighted how inclusive practice is still overdue and there is great work to be done to achieve inclusion effectively and efficiently. It's clearly shown from the results that schools, teachers and the general environment in mainstream schools is still not equipped to integrate children with ASD. This fact appeared in chapter 6 in which the professionals' data analysis showed that there was a lack of knowledge, support and encouragement for

teachers to get to know children with ASD and how they can deal with them. That was mainly what the professionals expressed when they were asked about their views about awareness and school provision for children with autism. Therefore, although inclusive practice is crucial and has been addressed earlier as explained in Frederickson, Jones & Lang, (2010, P.63), they have stated that “over the past 15 years, educational inclusion has emerged as a key issue in educational policy both nationally and internationally.” Unfortunately, the inclusion in Saudi Arabia is still an issue and not applied appropriately.

A senior educator working in the Ministry of Education’s Special Educational Needs Department reported that the process of including children with autism in mainstream schools is still in its very early stages. In fact, the inclusion of children with other disabilities, such as Downs Syndrome, is much further along than autism. According to Reed, Osborne, and Waddington (2012, p. 749), “current legislation often encourages inclusion into mainstream schools of children with special educational needs, including those with autism spectrum disorders.” The current study did not corroborate this result, as the findings show that the special educational needs of children are still largely unattended to in Saudi Arabia.

However, one positive finding of this research as emphasised by one senior educator is that new legislation (<https://departments.moe.gov.sa/EducationAgency/RelatedDepartments/SPECIAL EDUCATION/Pages/Autism.aspx>) in Saudi Arabia mandates that kindergartens accept all children regardless of any special educational needs. Even so, the majority of educational professionals in this study state that cooperation, teaching methods, inclusion legislation, social adaptation and academic improvements for including children with autism all remain lacking in Saudi Arabia.

Other Arab countries are ahead of KSA in this respect. Elzein (2009) argued that Arab countries such as Jordan, Morocco, Tunisia and UAE have already taken appropriate measures to restructure their educational hierarchy to combine the educational systems into one by adopting the UNESCO agreement on Education for All (ibid). In addition, special education services in Saudi Arabia have received much attention over the past 15 years (Alnahdi, 2014). However, in this study, participants reported that it appears much work remains to reform the Saudi education system to fulfill the UNESCO agreement on Education for All. Cordesman and Burke (2002) explain that while the Saudi government has made education a priority, the

means to move forward are not yet in place, and neither are the necessary efficacy indicators to measure the outcomes (Aljughaiman and Grigorenko, 2013).

However, this result is much different to the standard practice in other countries. Reed et al. (2012) found that in the UK, 50 to 60% of children with ASD are now enrolled in mainstream schools. However, a Chinese study indicated that the situation there is similar to Saudi Arabia's, and that, "education for children with severe developmental disabilities, especially autism spectrum disorders (ASDs), is still the greatest challenge in the field" (Huang et al., 2013, p. 1991). According to Al-Mousa (2007), Saudi Arabia has a leading role in the Arab world when it comes to integrating students with disabilities into regular schools. In fact, over 90% of male students and 65% of female students with disabilities have been integrated into its mainstream schools (Al-Mousa, 2007). Even so, the findings of this study dovetail those of others, such as Althabet (2002), who claimed that many children still lack educational services, and that, "special education is still in its early stages, in general, and the practice of the education of students with down syndrome is also in its early stages, in particular" (Al-Ajmi, 2006, p. 4).

The findings of this study have shown that children with autism are generally not being included in mainstream Saudi schools and are thus not receiving mainstream school provision. However, two of the ten interviewed parents have claimed that they are not willing to include their children in a mainstream school setting for many reasons based on their personal experience. Mainstream school provision should be provided to all ASD children and parents have the right to choose what they think is better for their children. Based on the literature, the evidence shows that inclusive practices can expand a child's personal interests and knowledge of the world, which is excellent preparation for adulthood (Elzein, 2009). In contrast, mixed evidence appears from some studies that claim these benefits are very rare (Davis et al., 2004; Humphrey and Parkinson, 2006). Moreover, this study has been unable to demonstrate that Saudi Arabia has adopted a 'rights' agenda encouraged by UNESCO through its Salamanca statement (UNESCO, 1994), which forms an important basis for current policy both in the UK (DfES, 2001, 2004) and US (IDEA, 1997). Furthermore, the idea of inclusion has been operationalized and the drive to place children in mainstream schools has gained great momentum from many sources (Reed et al., 2012). This should be considered in Saudi

Arabia, as it appears in this study that this is not the case. Similarly, according to Huang et al. (2013), many children in China who have autism do not have access to any form of treatment or intervention.

Furthermore, it is important to note that while some studies have found that it is crucial to offer a range of provisions for children with ASD, it has been shown that children with autism who are placed in special schools make greater gains in conduct-related areas relative to children in mainstream schools (Reed et al., 2012). Furthermore, Boswell et al. (2014) argued that education systems play a crucial role in the provision of both these service elements in managing a number of disparities that are present in the diagnosis and treatment of children with autism spectrum disorders. Finally, this study shows that the sample feels very strongly that inclusive practice should be active in all mainstream schools in Saudi Arabia for all ASD children who can be educated in a mainstream setting with other students.

### **7.3.1.2 Segregation of schools by gender**

In Saudi Arabia, all educational facilities are segregated by gender for both children and teachers starting from year one primary school until university (see Section 2.3). Abed, Pearson, Clarke, and Chambers (2014) explained

that this segregation is mainly due to religious and cultural reasons, and students and teachers cannot conduct visits to each others' schools, although telephone contact is permitted. However, very few research studies discuss or mention this limitation on sharing practice in Saudi culture.

According to 90% of parents interviewed in this study, this fact of the Saudi educational system has affected children with autism, primarily because it is usually the mother who looks after the children, especially if they have special needs. Mothers in Saudi Arabia are usually the primary caregivers, with full responsibility for daily child care routines such as feeding, sleeping, cleaning, dressing and even teaching and helping with homework. Moreover, Saudi culture dictates that if a Saudi child has any special needs, the mother's responsibility is even greater.

In addition, autism generally affects more boys than girls, so it is often not easy for mothers of boys to enroll a child with autism in mainstream schools as they are not permitted to work closely with or even contact their child's teachers (Heina, Tana, Aljughaiman, and Grigorenko, 2014). However, as mentioned earlier, the literature review showed little evidence of the impact of this segregation on school provision in Saudi Arabia, and how it effects

children with autism and their families. In the following section, school provision for children with autism in Saudi Arabia will be discussed in more detail, along with the study findings regarding the views of parents and educational professionals on school provision.

### **7.3.2 Parents' and educational professionals' views regarding inclusive education**

Many parents involved in this study reported great concern regarding school provision, as they found private schools too expensive, and the level of teaching and expertise lacking. As discussed previously, school inclusion in Saudi Arabia remains in its early stages, which means it cannot be fully relied upon, because neither teachers nor mainstream school students know enough about how to support children with autism. Another important point is that schools should be prepared in terms of early intervention, as this will help children with autism improve their social and academic levels. These findings corroborate those of Griffith, Fletcher, and Hastings (2012), in that the lack of availability of appropriate intervention is one of the most problematic issues for children with autism and their families. There are similarities between the attitudes expressed by parents in this study and those described by Whitaker (2007), as he showed that parents of children

with ASD attending mainstream schools identify serious concerns in terms of social experiences in school as well as with children's experiences and progress. Furthermore, parents expect school staff to take any concerns that they may have about their child's experience and progress seriously (ibid). In fact, Dubis and Bernadowski (2014) showed that proper communication between families and school officials can assist in improving students' academic achievement and promote their behavioural development. In addition, some research has shown that parents need teachers to respect their knowledge of their children, understand their individual needs and provide parents with information, feedback and support, as opposed to blaming parents for any shortcomings in their children's education. A large gap exists between families and schools in Saudi Arabia, and this must be addressed, as both parents and teachers must work together to find solutions and overcome any barriers (ibid).

The benefits of inclusion for children with ASD in mainstream schools were not revealed in this study, as expressed by the majority of both parents and senior education professionals. Furthermore, some of these professionals have negative feelings and views about including children with autism in mainstream schools. For example, "inclusion cannot be achieved" is a

response to the open-ended questions on the survey. In addition, the teachers suggested that parents should be more active in addressing a child's needs and development. As Dubis and Bernadowski (2014, p. 167) pointed out, "in the Middle East, parental involvement in both general and special education is considered a new phenomenon, meaning it is a fairly new area for educational researchers to investigate." It is interesting to note that another researcher reported that some special education teachers in Saudi Arabia have no interest in explaining and discussing a child's situation and improvement with parents and they refuse to collaborate with parents (Abed, et al, 2014). This could be one of the reasons that make the majority of the parents unwilling to integrate their children in mainstream schools. Byrne (2013) adds that teachers initially appeared not to want special needs children in their classes, due to the lack of understanding around the concept of inclusion and children reaching their full potential as well as the time it takes for this attitude to change.

Sometimes, parents do not openly communicate with school officials, despite its importance. In addition, many parents do not attend school meetings and do not show an interest in their child's academic and behavioural problems, placing the full responsibility of the child's education

on teachers. This finding in the literature might partly explain the perceived negative attitude of teachers regarding the inclusion of children with disabilities in mainstream schools, and they may think that uncooperative parents may complicate an already difficult task for them. This is in addition to the amount of work that is required from them in order to meet the needs of the child with ASD.

It has been acknowledged that, “parents’ attitudes affect the success of inclusion and their attitude have been shown to be more favorable when allowed input into the decision-making process” (Elzein, 2009, P. 165). The literature review and the results of this study confirm that both parents and educational professionals have many concerns regarding inclusion, and that determining whether parents or professional educationalists are correct is very controversial. The findings of this study therefore concur with the results obtained by Bhatnagar and Das (2014), who discovered that while teachers recognise that more attention needs to be paid to children with autism and other special needs students, which can make teaching difficult in a mainstream classroom, effective preparation would help to mitigate these difficulties. These findings are useful when analysing the data from this study. Saudi Arabia is still not very advanced in terms of school

inclusion, and while most of these findings are predictable, more research is needed to prove what works best in terms of inclusion and to that the needs of children with autism should be put first. As Bhatnagar and Das (2014, p. 18) stated, “it is what these teachers believe and do in classrooms that has the potential to make inclusion a success”. Among all of these concerns according to the parents in this study, the obvious barrier to inclusive practices is the lack of experience in mainstream schools among teachers and staff, and this will be discussed next.

### **7.3.3 Lack of experience among mainstream school teachers**

The survey results of this study show that few of the samples of teachers in Saudi Arabia have experience working with children with autism, and because the survey was distributed to both private and mainstream schools, it is likely that the few teachers who reported having experience are from private schools. In fact, one of the interviewee’s mothers pointed out that she is a teacher and did not know about autism until her son was diagnosed. In this case, it is possible that a lack of experience affects teacher’s attitudes towards ASD inclusion. Furthermore, because of the lack of awareness and knowledge, children with ASD may be assumed to be lazy or naughty.

Training programmes are essential for providing teachers a clear sense of how to work with children with autism and to think positively about inclusion. In addition, most parents pointed out that mainstream teachers' lack of experience is the main barrier preventing children with autism from being educated in mainstream schools. Because of this, many parents reported that they have resisted placing their child in a mainstream setting, and they explained that this is because they know their children will not benefit from inclusion, and that schools should prepare themselves to teach ASD students beforehand. To this point, Al-Sharbati et al. (2015) explained how teachers in Oman reported having little knowledge of autism, and that many misconceptions about ASD exist among mainstream teachers.

The idea of having shadow teachers in the classroom emerged frequently in the study results, particularly from the parents' point of view. Many parents indicated that in order to be able to enroll their children in mainstream schools, shadow teachers must be provided to help their child integrate with other children and look after them (see Chapter 5). This finding runs contrary to those of previous studies, which suggest that special needs education is the responsibility of all teachers in a school, and that general education teachers should help make school environments supportive for the

inclusion of students with disabilities, and that the Ministry of Education must make this position clear (Alnahdi, 2014). Furthermore, Alnahdi (2014) found that general education teachers claim students with disabilities are only the responsibility of special education teachers, because these education teachers are paid 30% more than other teachers. This notion emerged in the answer to the open-ended question of the research survey, in which some teachers suggested that only special education teachers should teach students with ASD.

Another study by Huang et al., (2013) supported the finding of this study which is although there a lack of knowledge and expertise in autism exists among many general education teachers, these schools are often not affordable for parents, even if it appropriate for children with autism. Moreover, many children who have both autism and mild to moderate cognitive impairment attend special schools, and their parents pay either reduced or no tuition (Huang et al., 2013). The results of this Chinese study were similar to those of his study and showed how a lack of knowledge and inexperienced teachers can affect the education of children with autism. Clearly, along with a proper attitude, teachers require sufficient specialised knowledge and skills to ensure inclusive school practices. These two factors

are linked, as teachers who do not have a positive attitude towards inclusion will employ less effective strategies within the classroom (Bhatnagar and Das, 2014). Another important result of this study concerns a lack of training programmes for both parents and teachers which will be discussed in more detail in the following section.

#### **7.3.4 Lack of training programme for both parents and teachers**

In this study, the results showed the respondents felt strongly that more training programmes are needed for parents and teachers in Saudi mainstream schools. Most of the parents in this study sample argued that very few training programme exist to help them to understand how they should care for their children, and what to do to reach them in a more effective way. Several researchers have advocated intensive training for all teachers in order to effectively cope with students with special educational needs within an inclusive setting (Heina et al., 2014). According to one senior educator interviewee, the shortage of teacher training programmes is a dilemma facing the Saudi Ministry of Education, as there is no clear plan for how teachers will be able to undertake in such training. Moreover, as Abed et al. (2014) demonstrated, in Saudi Arabia, some universities offer modules about educating children with special educational needs as one element of

various bachelor's degrees, but students do not receive specific training on autism. This also supports earlier observations, which showed that the demand exists for teacher training in the area of autism and special needs in schools (Reed et al., 2012). In addition, according to the study findings, teachers and parents feel they should be well prepared to help children with autism, as this will benefit the government in being able to follow UNESCO's Salamanca agreement of "education for all" (Phadarig, 2007). However, the Saudi state often does not provide sufficient resources to implement this directive, despite policies already in place, and along with a lack of teachers with appropriate training and experience (Bhatnagar and Das, 2014).

This research shows the importance for the Saudi Ministries of Education and Health to implement a well-planned training programme in Saudi Arabia that increases awareness and access to centers, which provide the diagnosis of ASD. Such training programmes should be run throughout the year so that they can include a large number of parents and teachers. Also, a training programme specifically for teachers who have children with autism in their classes is essential, and the Ministry of Education should help these children to be understood and not feel isolated. According to Byrne (2013), a primary

concern among parents of ASD children is the way that these children may become isolated in mainstream schools; therefore, an educational programme within mainstream schools could help them work according to their abilities and feel a sense of achievement (Byrne, 2013). Finally, Frederickson, Jones, and Lang (2010) pointed out that these challenges are particularly difficult for teachers who consider their work an interactive and social activity. Despite the fact that special education services have increased dramatically over the past 15 years in Saudi Arabia, the quality of these services has not improved much, and the expected outcomes have remained much the same (Alnahdi, 2014).

The researcher found that there are a number of major challenges regarding the existing school provision for children with autism in KSA. But perhaps the most important and wide-reaching implication revealed by the findings, derived from the data in this study, is the urgent need for teacher training and support for understanding children with ASD. This research suggests that the current provision of in-service teacher training for general teachers is insufficient according to the opinions of the participating professionals. Hence, much more needs to be done by the Ministry of Education in order to meet the teachers' needs, with specific focus on the identification processes

and effective teaching strategies for ASD student which can be utilised in the classroom to better meet the needs their need. This can be achieved by offering specially developed training programmes for teachers, to develop students and the school as a whole.

The researcher acknowledges that this is a real challenge facing the Saudi Ministry of Education at present, but adequately and effectively meeting this requirement could be a real force for change as research has consistently found that professional development programmes have the potential to improve teaching practices and increase inclusive education overall achievements (Vescio et al., 2008). Therefore, well-designed, well-developed and consistently delivered teacher training programme have the potential to benefit all students with ASD in Saudi classrooms and would also benefit teachers and raise educational standards as a whole.

## **7.4 Conclusion**

This discussion chapter highlighted the gap in practice of the inclusion aspect which includes lack of awareness, training programmes and lack of experience. This underscores the need to increase public awareness of ASD in Saudi Arabia through various initiatives, specialised training for

professionals to increase early detection rates, and the implementation of early interventions for autism spectrum disorder.

To conclude, this study gathered and analysed data that can help to address the gaps in the literature with respect to understanding the perspectives of parents and teachers regarding children with autism in Saudi Arabia. To date, very little is known about the inclusion of children with autism in Saudi mainstream schools or how the system of segregation in schools by gender affects school provision for children with autism. According to Boswell et al. (2014), the potential exists to improve the ASD diagnosis and prognosis process and strengthen the care system for children with disabilities in schools. In addition, Saudi Arabia should consider the obligation to improve both the quality of education and quality of life of children with autism, which is the responsibility of the whole society, rather than just the parents (Xiang Sun<sup>1</sup> et al., 2015). Concerning schools in India, Bhatnagar and Das (2014) argued that a major part of inclusion involves acceptance by society as a whole, and that this is necessary to ensure problems within education are properly addressed.

This discussion of the study results and the literature review presented an idea about the importance of the research findings for this study and discussed how this research provides a valuable contribution to the knowledge in this area. This contribution is further explained in Chapter 8 (see section 8.4). In sum, the study results suggest that what is extremely challenging in Saudi Arabia at this time is providing every child with autism with an individualised and appropriate education and proper intervention services. Moreover, these findings highlight the need to implement public awareness initiatives and training for Saudi professionals to promote early ASD detection and, consequently, early intervention for autism spectrum disorder, and reveal the importance of these initiatives in encouraging early diagnosis and intervention initiatives for ASD in Saudi Arabia.

This study contains a number of limitations and recommendations, which are discussed in the following chapter.

# CHAPTER EIGHT: CONCLUSION

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## 8.1 Introduction

The overall aim of this study was to investigate the nature of the awareness of and school provision for children with autism in Saudi Arabia. This chapter proposes suggestions and recommendations that address this aim and draws a number of conclusions that emerged from the study results.

Using a mixed-methods approach, this study addressed four research questions as a means to explore the views of its participants. To reiterate, those research questions are:

1. What do parents and educational professionals feel are the barriers to and enablers of effective educational provision for children with autism in Saudi Arabia?
2. How do parents and educational professionals feel about the general awareness of autism in Saudi Arabia?

3. What do parents and educational professionals feel are the barriers to and enablers of achieving a diagnosis of autism in Saudi Arabia?
4. What other factors do parents and educational professionals feel are the barriers to and enablers of the provision of education for children with autism in Saudi Arabia?

This final chapter is designed to draw the conclusions of this research. In addition to this introduction, the chapter outlines the research framework and summarises the main study findings, its contribution to the literature, and its implications and recommendations. Finally, this chapter addresses the limitations of this study and summarises the thesis.

## **8.2 Research framework**

A mixed-method approach was applied in this study to collect the data necessary to address its research questions. Interview, Twitter and survey data collected from parents of children with autism and Saudi educational professionals were the primary data sets analysed in this research. Based on this data, the researcher used the experiences of parents and educational professionals to frame the analogical and epistemological foundation of this thesis.

Furthermore, participants' perspectives regarding the awareness of and school provision for children with autism were extremely valuable to this research. Saudi awareness of autism and school provision for ASD children were the social phenomena that the researcher aimed to investigate, including what participants know about these phenomena and how they know it.

This research approach allowed participating parents and teachers the opportunity to share their views regarding the awareness of and school provision for children with autism. As a result, the researcher gained a greater understanding of these phenomena by enabling the participants involved to provide their opinions and express their experiences, thus informing the three data sets.

General System Theory was applied in this research. This theory was chosen because this study examined the Saudi education system specifically and its cultural system in general, and thus it was useful in investigating how these systems function and could better help children with autism. A discussion of the General System Theory framework applied in this thesis appears in

Section 3.9.1 and Figure 3.1. The following section summarises the main findings of this research.

### **8.3 Summary of the main research findings**

This study concentrated on assessing the level of awareness of and school provision for children with autism in Saudi Arabia. The main finding that the researcher discovered is that both the parent groups and professional educators who participated in this research agreed that a lack of awareness exists surrounding autism in Saudi Arabia. In turn, this lack of awareness affects Saudi children with autism and their families in many different ways. The main effects concern the prevalence of late or incorrect diagnoses as well as the state of school provision for children with autism.

In terms of the data collected from parents of children with ASD, which was analysed in Chapter 5, it was clear that most parents agreed on a general lack of awareness in Saudi Arabia regarding the needs of children with autism. Some parents stated that they saw some new initiatives for raising awareness regarding children with autism, especially with respect to Saudi participation in World Autism Awareness Day. This rising awareness from some of the hospitals and particularly in the capital city of Saudi Arabia is still not

enough as other cities in Saudi Arabia also need more work on increasing awareness of children with autism. Media, such as TV and radio, has a great influence on people and should be used in increasing awareness of children with autism.

Furthermore, the majority of parents pointed out that school provision for children with autism is not accessible in Saudi Arabia, and more importantly, that they struggle to find a proper place to obtain diagnoses for their children or even secure early interventions for them. Lack of a proper diagnosis center and early intervention means that Ministry of Health and Ministry of Education should work side by side in improving the services on offer to diagnose children with autism and provide an accessible way to achieve early interventions.

In addition, some barriers arose in this study that parents mentioned either in interviews or on Twitter, such as the inaccessibility of ASD training programme for parents, general fatigue in raising children with ASD, advice from other parents, fear of the future, issues surrounding non-ASD siblings and concerns about diet and medical care for ASD children. If the government concentrates on training programme to rise the awareness for

children with autism, all the barriers that appear in this study will gradually decrease. Raising awareness of children with autism for parents by providing training programmes will give the parents strength to overcome most of the barriers they face.

The analysis of the data collected from educational professionals, which is discussed in Chapter 6 section 6.2.2, also suggests a general lack of awareness of the issues regarding children with autism. The interviews conducted with senior Saudi educators were helpful in terms of clarifying the recent legislation stating that nursery school-aged children with disabilities are now all accepted in Saudi schools, no matter what kind of special educational needs they may have. In addition, both the senior educator interview data and survey data analysis corroborated a lack of adequate Saudi training programmes regarding children with autism and the general lack of Saudi teacher experience in working with children with autism. Furthermore, the results showed that although all schools included in this study were technically inclusive schools, none of them have currently admitted any pupils diagnosed with autism. That fact that Ministry of Education strongly needs to improve and work harder to get the school,

teachers, student and all staff in the school ready and able to deal with children with autism and understand their needs as well.

Generally speaking, all participants in this study agreed that there is a need to raise awareness in Saudi Arabia on the issues surrounding children with autism and inclusive practices for special needs children. Obviously, analysis of this data suggested some recommendations to address these issues, which could help to improve the situation of children with autism in terms of awareness, diagnosis and school provision. These recommendations are discussed later in this chapter section 8.5.

## **8.4 Contribution to knowledge**

This research is unique in that it investigates the views of parents and educational professionals regarding the awareness of and school provision for children with autism in Saudi Arabia. Very few Saudi studies have been published about autism in general, as school provisions and inclusive practices for children with autism and other disabilities are new phenomena in their very early stages in the Kingdom. There are several important areas where this study makes an original contribution to the education sector, data collection methods and society.

#### **8.4.1 For the education sector**

The results of this study enrich the current body of literature with respect to the awareness of and educational provision for children with autism in Saudi Arabia and the effects these factors have on Saudi children and their families. This research has highlighted the lack of awareness in Saudi Arabia regarding children with autism, and how this phenomenon affects the diagnostic services and school provision for these children. This study could assist the Saudi Ministry of Education in considering and understanding the needs of children with autism and how they and their parents could be helped. For the data analysis, it is clear that training programmes and good facilities and encouragement is what the Ministry of Education should work on for the next few years as a matter of urgency.

#### **8.4.2 For data collection methods**

This study used an innovative method to collect some of the qualitative data by using social media accounts (Twitter). This is considered a novel research tool that has rarely been used to date in published papers across the world. This is particularly innovative in KSA and is a way of accessing a wide variety of parents as well as addressing the social norms that limit data

collection in some cases. The use of this new method is a contribution to knowledge. The use of this new method could be considered a baseline for collecting Twitter account data in future research projects, as other studies could benefit from this approach.

### **8.4.3 For society**

As a further contribution to the literature, this research could benefit society, particularly families of children with autism, in understanding the views of teachers and educational professionals regarding the awareness of and school provision for ASD children. More broadly, this research could advance societal knowledge about autism and raise autism awareness, which could help contribute to better school environments and advanced community consciousness. This adds a new perspective and new knowledge to the literature in the Saudi context that will help society to evaluate and address the needs of children with ASD and their families.

Study implications and recommendations are an essential aspect of all research, as they could benefit future researchers. The following section discusses the implications and recommendations of this study that should be considered within a Saudi context.

## **8.5 Study implications and recommendations**

This study has yielded a number of implications and recommendations. The first clear implication of this research is that increasing awareness of children with autism in Saudi Arabia should be a priority. This push could stem from the Saudi Ministries of Education, Health (i.e. through hospitals and other health units) and Media. The researcher recommends that these ministries should play a role in improving this lack of ASD awareness among parents and teachers and throughout society as a whole. Another implication of this study concerns the general lack of autism diagnosis centers and expertise in Saudi Arabia. In particular, the Saudi Ministry of Health should act quickly to address these issues and work with the Ministry of Education to provide better diagnostic services for children with disabilities.

Another implication of this study relates to the state of school provision for ASD children. The study data suggests that many barriers exist that affect children with autism in Saudi mainstream schools. One obvious barrier is the lack of ASD awareness, which affects teachers and students simultaneously. It is also recommended that ASD awareness should be increased in schools

so that teachers and students are more cognizant of how to treat children with autism. For example, Saudi schools could implement workshops on how to more effectively teach children with ASD, or screen films that explain autism, how the condition affects children and what people can do to help care for ASD children. In addition, the researcher recommends that more advanced Saudi students could be assigned projects that address the needs of children with disabilities. Many parents interviewed for this study stated that providing shadow teachers for children with autism could allow them to feel more comfortable with including their child in mainstream school settings. At present, the Saudi education system does not provide either shadow teachers or teachers' assistants.

Another implication identified in this study concerns the apparent lack of professional training for children with special needs, which stands as another barrier affecting awareness and diagnosis of and the school provision for ASD children. This study greatly supports the need for special needs training programmes for teachers and parents. Another recommendation related to the Saudi Ministry of Education is that the Ministry should provide more teacher and staff training in schools that teach children with autism, a measure that could simultaneously benefit school staff, teachers and

students. Parents are also in need of ASD training programmes, which the Saudi Ministries of Health and Education could provide. The study data shows that parents often stated that they need training programmes and expertise to help them understand and care for special needs children. In addition, this study recommends that parents could also turn to online training programmes for assistance.

Finally, the Saudi Ministry of Media could help children with autism in a variety of ways. First, as media outlets are one of the single best avenues for changing societal awareness, these outlets could help parents to not feel ashamed of their ASD children and be proud to interact with them outside the home. For example, Saudi media outlets could create children's programmes that give children with autism an opportunity to express themselves or that relate stories that present how to educate children with autism. The potential impact of media attention could be significant with respect to these issues, and the researcher strongly recommends that Saudi Ministry of Media should work to address them. The following section outlines the limitations of this study.

## **8.6 Study limitations and future suggestions**

This section discusses a number of study limitations and recommendations for future research.

### **8.6.1 Study limitations**

This research employed a mixed-method approach, as discussed in Chapter 4. By definition, this type of approach requires gathering quantitative and qualitative data. For this study, the quantitative data comprised of 242 surveys, and the qualitative data consisted of 10 interviews with parents and 5 interviews with senior educators, as well as approximately 60 Twitter comments.

As a result, the first limitation of this study is the fact that generalisations of the views of parents of children with autism or across all educational professionals cannot be applied. However, the researcher considers the sample sizes used in this research sufficient to draw meaningful conclusions, considering the geographical area that this study covered. In addition, the results of this study cannot be easily generalised with respect to Saudi Arabia as a whole, as quantitative data collection was conducted primarily in Riyadh. Some of the qualitative data was collected through twitter from

parents from other cities in Saudi Arabia. Thus, any generalisations based on this study cannot be applied to the entire population of professionals and parents in Saudi Arabia. However, the researcher considers the sample to be of a sufficient size to facilitate the drawing of meaningful conclusions.

Moreover, this study used an opportunity sample to gather parent's data. Hence, this data is assumed to be the opinions of those interviewed, and thus not indicative of the entire population of families of ASD children.

Secondly, an obvious limitation of this study is that it was conducted within the context of Saudi Arabia's gender segregated school system. As a result, the female researcher could not enter boys' schools to distribute her survey. Section 2.3 in Chapter Two explains the segregated Saudi school system in more detail. Moreover, the majority of parents and senior educator interviewees in this study are women, which suggests that differing views could have surfaced had the interviews been conducted with men. Hence, there is a limitation to applying these findings to other cultural contexts.

The third limitation of this study is with regards to the use of social media data (i.e. Twitter accounts). As discussed in Chapter 4.7.3, several factors

should be considered when applying this data collection method. Firstly, many people do not have access to the Internet or social media which would allow them to express their views and perspectives. Secondly, the researcher could not be certain that all Twitter participants were in fact parents, even though they presented themselves as such.

A fourth limitation concerns the procedure for collecting the semi-structured interview data, which was conducted by phone. As a result, the researcher could not interact with interview participants in person, and thus was not able to read their facial expressions, which could have limited the researcher's ability to capture some of their feelings and ideas. However, the parents who were interviewed did explain their views and concerns in-depth and in their own words, which could be considered an advantage of this method.

The data was collected over a relatively short period of three months. A greater period of time available for data gathering might lead to a better understanding and provide more or better insights into the awareness and school provision for children with autism in Saudi Arabia.

### **8.6.2 Future recommendations**

This study has raised several questions that merit possible future research exploration, including:

- Studying the views of ASD children regarding their school provision;
- Collecting a larger data sample from parents through interviews and surveys;
- Conducting case study research on mainstream Saudi schools that include both identified and potential ASD children;
- To examine the available diagnostic services for children with ASD;
- Observing lessons in mainstream schools to assess any lack of experience regarding ASD children.
- Doing a case study for a number of ASD children and their life story possibly using the social media method to support the research.

The final section of this chapter summarises this thesis.

## **8.7 Summary of the thesis**

This thesis comprises eight chapters that address its research aims. The first chapter introduced the study and the structure of the thesis, and the second chapter situated this research in the context of Saudi Arabia. The third

chapter presented a review of the relevant literature and identified existing gaps in this literature with respect to children with autism, particularly in Saudi Arabia. The methods used in this research were discussed in the fourth chapter, and the fifth and six chapters in this thesis presented the results of the data analysis procedures. Chapter seven discussed the research findings and compared these with those of the existing literature. This final conclusion chapter summarises the research findings, the study's contribution to broader knowledge, its implications and future recommendations, and the limitations of this research.

It should be noted that *System Theory* was the theoretical perspective applied in this mixed-method study. Moreover, three discrete data sets were collected for this study, including 10 interviews with parents and 5 interviews with senior educators, 242 surveys of the views of educational professionals, and 60 Twitter comments.

Analysing this data allowed the researcher to explore the perspectives of parents and professional educators on the awareness of and school provision for children with autism in Saudi Arabia. Broadly speaking, the data analysis revealed a lack of awareness about and proper diagnosis of Saudi children

with autism. In addition, the data showed a general deficiency in the area of school provision for ASD children, an issue that the Saudi government should act quickly to address in order to improve school facilities and assist parents and educational professionals in meeting the needs of special needs children.

The researcher acknowledges that these issues represent a serious and pressing challenge facing the Saudi Ministry of Education. However, adequately and effectively addressing this challenge could bring about a real force for change, as the literature has consistently demonstrated that professional educational development programmes have the potential to improve teaching practices. Therefore, well-designed, well-developed and consistent teacher training programmes could benefit students of all abilities in Saudi classrooms, including children with autism. Furthermore, such programmes could also benefit teachers and raise educational standards as a whole. Finally, the Saudi Ministries of Health and Media could play a significant role in improving the lives of children with autism in Saudi Arabia.

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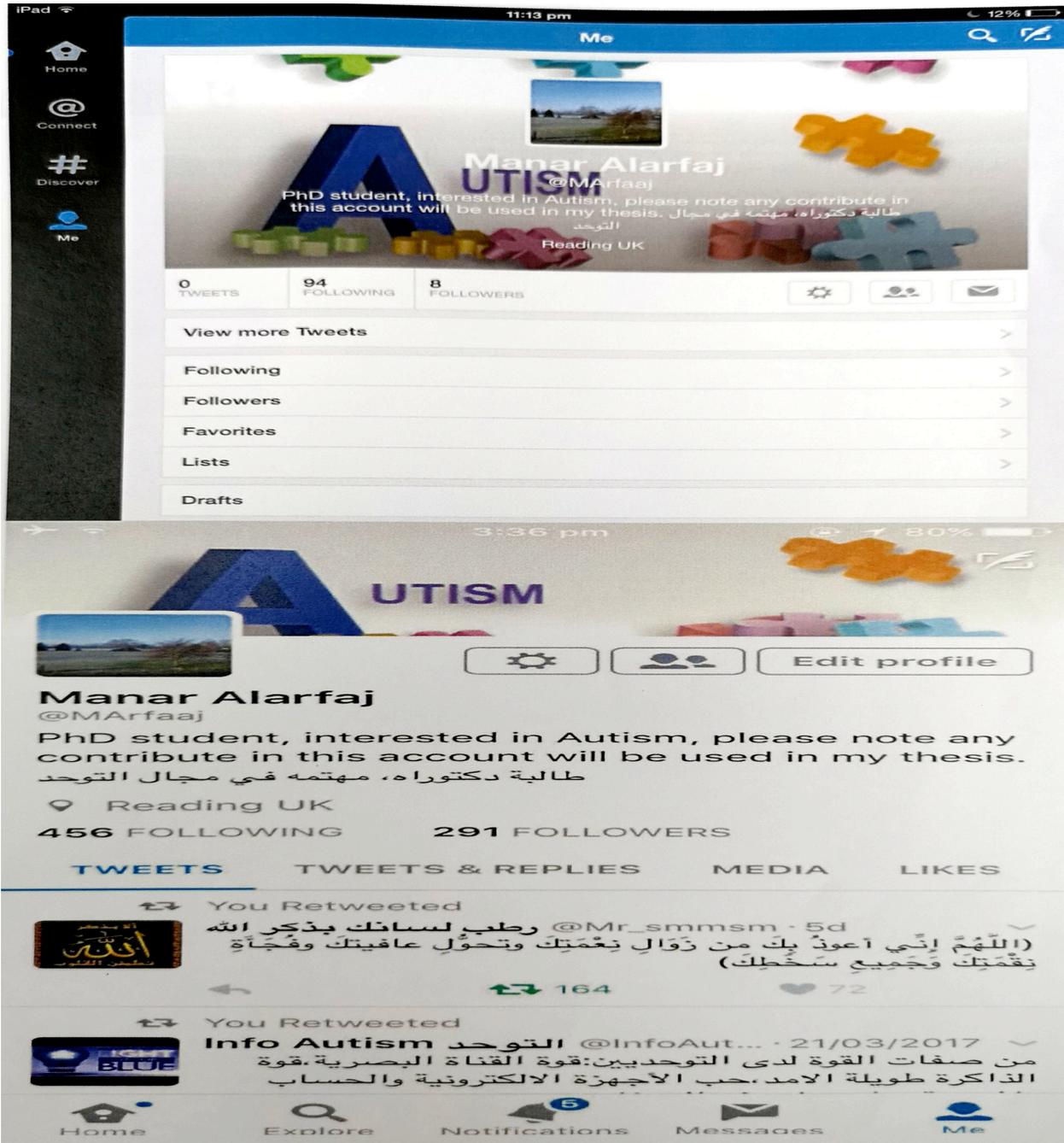
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# Appendix A



## Appendix B

### Section 1: General information

Please check () the appropriate answer for each question below which best describes you at the current time:

1. Education level:

- Diploma degree                       Bachelor's degree
- Postgraduate degree             others (specify).....

2. Education area:

- Special education             general education
- Others (specify).....

3. What is your dominant teaching field?

- Science     art             language     religion
- Others (specify).....

4. Have you received any or specific training programme in special educational needs?

- Yes     No

5. Have you received any or specific training programme in special educational needs mainly Autism?

- Yes     No

6. In which level of school are you?

- Primary                                       secondary
- Other please list.....

7. What is the gender of the school?

- Male     female

8. What is your role in school?

- Leadership                       teacher                       social  
worker  
 Others.....

9. Teachers experience:

- Less than 1 year     1-5 years     6-10 years     11- 15  
years  
 16 -20 years     More than 20 years

10. Do you have any family member or closer relative with special educational needs?

- Yes                                       No

11. Do you have any family member or closer relative with Autism?

- Yes                                       No

12. Have you had a student in class with special educational needs?

- Yes                                       No

If yes,

13. Have you had a student in class with Autism?

- Yes                                       No

## Section 2: knowledge of Autism

Please answer the following questions using true or false. If you believe the statement is true, please circle T. if you believe the statement is false, please circle F.

1. T F If someone has autism, it only lasts for about a week.
2. T F Students with autism often have a difficult time looking at other people.
3. T F Students with autism sometime repeat what is said to them.
4. T F Autism does not affect a person's brain.
5. T F Students with autism cannot do normal activities that other people can do, even with help from another person.
6. T F Students with autism sometimes rock back and forth and wave their hands around.
7. T F Some students with autism might have trouble talking or expressing themselves.
8. T F Students with autism do not have difficulty changing activities and can easily move from one activity to another.
9. T F Sometimes students with autism need extra help to learn how to read and write.
10. T F You can catch autism by spending time with someone who has it, like you can catch a cold.

Taken From: (Jonathan M. 2010)

### Section 3: Belief Scale

“Please indicate to what extent you agree or disagree with the following statements. Enter (✓) in the cell corresponding to one of the five responses on the line next to each item.

No	Question	Strongly agree	Agree	uncertain	Disagree	Strongly Disagree	N/A
1	Only special education teachers should be expected to work with students with Autism.						
2	The school’s facilities are not sufficient to support the needs of students with disabilities.						
3	I have referred student for additional support because I suspected they may have autism.						
4	Lack of experience of dealing with autism limits the teachers’ ability to teach these students effectively						
5	I feel that a lack of knowledge about autism is the main reason which limits the teachers’ ability to teach students with autism effectively.						
6	There are sufficient resources for me to meet the needs						

	of all of the children in my classroom.						
7	The school leadership team supports my efforts to provide an appropriate educational provision for all the children in my classroom.						
8	Inclusion is a goal that can never be achieved.						
9	My experience makes me confident that I can work with children with autism in my classroom.						
10	Successful integration of students with autism into regular classroom depends on the availability of supporting materials, facilities, and staff.						
11	Students with autism should be taught in separate schools.						
12	I am happy with the training on autism and other special needs that I received in my pre-service training.						

13	Inclusion is an effective way for mainstream students to become aware of different disabilities including autism.						
14	Integration of students with autism within a mainstream public education classroom will improve the academic ability of all students.						
15	I don't have a comment because I have no experience of working with children with autism.						
16	I've successfully worked with a child with autism.						
17	My senior leadership team has sufficient experience and knowledge of autism.						
18	The school governors support the inclusive ethos of the school.						
19	I often use/would use my own money to buy resources to make sure I can meet the additional needs of the children with autism.						

20	I know I can go to the senior leadership team for support when I have difficulties managing the children with autism in my classroom.						
----	---	--	--	--	--	--	--

Section 4: Opinion

1. Do you have any other comments about working with students with autism in general?
  
2. Do you receive any specific support from the school that help you to work with students with autism? If yes, please list.
  
3. Do you have specific recommendations about improving the awareness of children with autism in schools?

Thank you for your time...

References:

Jonathan M., C., Brian D, Barger (2010). "Middle School Students Knowledge of Autism." Springer Science **10**.

## Appendix C

### Parent/carer information sheet

**Research Project:** The views of educational professionals and families on the awareness of children with autism and school provision in Saudi Arabia.

**Project Member Researcher:** Manar Alarfaj

**E-mail:** m.a.i.alarfajr@pgr.reading.ac.uk

**Supervisor:** Dr. Catherine Tissot

**E-mail:** c.tissot@reading.ac.uk

I would like to invite you to take part in a research study about school provision in Saudi Arabia for children with autism.

### What is the study?

The study is a part of a PhD project that I am undertaking at the Institute of Education, University of Reading in the UK. It aims to investigate the views of educational professionals and families on the awareness of children with autism and the school provision, and how they are provided. The researcher will request to do an interview with you as parents of child with autism.

### Why have I been chosen to take part?

You have been chosen to take part in this research as you have a child with autism and have had some experience in school provision and how they allocated the children.

### Do I have to take part?

It is entirely up to you whether your child participates. You may also withdraw your consent to participate at any time during the project, without any repercussions, by contacting the Project Researcher Manar Abdulrahman I. Alarfaj email: m.a.i.alarfajr@pgr.reading.ac.uk.

### What will happen if I take part?

If you agree to take part, please fill in the consent form attached, and the researcher will contact you in the time as you indicated in the consent form to do an approximately 20 minutes interview.

## **What are the risks and benefits of taking part?**

The information you give will remain confidential and will only be seen by the researcher and the supervisor listed at the start of this letter. Neither you nor the school that your child on will be identifiable in any published report resulting from the study from the document intended for professionals, but labelled Parents

## **What will happen to the data?**

Any data collected will be held in strict confidence and no real names will be used in this study or in any subsequent publications. The records of this study will be kept private. No identifiers linking you or the school to the study will be included in any sort of report that might be published. Participants will be assigned a number and will be referred to by that number in all records. Research records will be stored securely in a locked filing cabinet and on a password-protected computer and only the research team will have access to the records. The data will be destroyed securely once the findings of the study are written up, after five years. The results of the study will be presented at national and international conferences, and in written reports and articles. We can send you electronic copies of these publications if you wish.

## **Who has reviewed the study?**

This project has been reviewed following the procedures of the University Research Ethics Committee and has been given a favourable ethical opinion for conduct.

## **What happens if I change my mind?**

You can change your mind at any time without any repercussions. If you change your mind after data collection has ended, I will discard your data.

## **What happens if something goes wrong?**

In the unlikely case of any concern or complaint, you can contact the Project Researcher Manar Abdulrahman I Alarfaj email: [m.a.i.alarfaj@pgr.reading.ac.uk](mailto:m.a.i.alarfaj@pgr.reading.ac.uk).

## **Where can I get more information?**

If you would like more information, please contact the Project Researcher Manar Abdulrahman I Alarfaj email: [m.a.i.alarfaj@pgr.reading.ac.uk](mailto:m.a.i.alarfaj@pgr.reading.ac.uk)

I do hope that you will agree to participate in the study. If you do, please complete the attached consent form.

This project has been reviewed following the procedures of the University Research Ethics Committee and has been given a favourable ethical opinion for conduct.

Thank you for your time.

Yours sincerely

A handwritten signature in green ink, appearing to be 'Manar Abdulrahman I Alarfaj', written in a cursive style.

Manar Abdulrahman I Alarfaj

**Research Project:** The views of educational professionals and families on the awareness of children with autism and school provision in Saudi Arabia.

**Parent/Carer Consent Form**

I have read the Information Sheet about the project and received a copy of it.

I understand what the purpose of the project is and what is required of me. All my questions have been answered.

Please tick as appropriate:

I consent to participating in an interview Yes  No

I consent to this interview being recorded. Yes  No

Name:

Signed:

Date:

Time:

## Appendix D

### Parent's interview

Section one (general information):

How old is your child?

When and how did you find out that your child has autism?

When was your child diagnosed with autism?

Does he/she take any medicine or is he/she on a special diet?

What are the challenges you face as a parent of a child with autism?

What are your child's strengths? What does he/she enjoy doing?

What kind of struggles does your child have because of his disability?

Does your child have any siblings?

How does having a child with autism affect your other children?

What kinds of treatments or therapies have been successful for your child?

Have there been any treatments or therapies you did not want to try?

Is there any critical incidents about your child that you would like to share us?

Section two (school provision):

How is your child's education funded (if he/she goes to a private school)?

Why didn't you send your child to your local public school?

Do you have any concerns about the school provision for your child?

Do you think including your child in a mainstream school will help him/her to improve his/her ability?

What advice would you give to other parents who are going through a similar situation?

What progress have you seen in your child since he/she started going to school?

What concerns do you have for your child's future?

What level of awareness do you think society has regarding autism?

Is there any things you want to say regarding having child with Autism, or the school provision?

## Appendix E

**Researcher:** Manar Alarfaj

**E-mail:** [m.a.i.alarfaj@pgr.reading.ac.uk](mailto:m.a.i.alarfaj@pgr.reading.ac.uk)

**Supervisor:** Dr. Catherine Tissot

**E-mail:** [c.tissot@reading.ac.uk](mailto:c.tissot@reading.ac.uk)

### Participant information sheet

#### **Invitation to join the study**

**Research Project:** The views of educational professionals and families on the awareness, and school provision for, children with autism in Saudi Arabia.

#### **Dear Participant,**

You are being invited to take part in my study to investigate the awareness of children with autism in schools and the educational provision for this group of students.

Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take your time to read the following information carefully. Ask the researcher if there is anything that is not clear or if you would like more information.

This research is being supported by the Saudi Ministry of Higher Education and has permission from the Ministry of Education to proceed.

#### **What is the study?**

The study is a part of a PhD project that I am undertaking at the Institute of Education, University of Reading in the UK. It aims to investigate the views of educational professionals and families on the awareness of children with autism, their school provision, and how they are provided for. To investigate these issues, the researcher will request an interview with educational professionals who are working in the Ministry of Education (Special Needs Department).

#### **Why have I been chosen to take part?**

You have been invited to take part as you are an educational professional in the Ministry of Education, and your opinion will be highly valued in this project.

#### **Do I have to take part?**

No, your participation is entirely voluntary. You may also withdraw at any time during the project, without any repercussions to you, by contacting the researcher using the email address above.

#### **What will happen if I take part?**

If you agree to take part, please fill in the consent form attached, and the researcher will contact you in the time as you indicated in the consent form to do about approximately 20 minutes interview.

#### **What are the risks and the benefits of taking part?**

All information that is collected about you during the research will be kept strictly confidential. The transcript of the interview will be destroyed at the end of the research. Your name, or any contact details will not be recorded during the interview. My academic supervisors will have access to

the raw data, but I will be the only person to have access to the original recordings of the interview.

I anticipate that the findings of this study will be used to help teachers and educators as they support the learning of students with autism and identify areas of greatest need for development as well as spread good practice. I know how busy you are, but I highly value the information which only you can provide regarding educational provision for students with autism, and I hope that you will be able and willing to contribute to this research project. A summary of the results can be provided upon completion of the research by contacting me at the email address above.

### **What will happen to the data?**

Any data collected will be held in strict confidence and no real names will be used in this study or in any subsequent publications. The records of this study will be kept private. No identifiers linking you to the study will be included in any sort of report that might be published. Participants will be assigned a number and will be referred to by that number in all records. Research records will be stored securely in a locked filing cabinet and on a password-protected computer and only the research team will have access to the records. The data will be destroyed securely once the findings of the study are written up, after five years. The results of the study will be presented at national and international conferences, and in written reports and articles. I can send you electronic copies of these publications if you wish, by contacting me on the email address above.

### **What happens if I change my mind?**

You can change your mind at any time without any repercussions. If you change your mind after data collection has ended, we will discard your interview.

### **What happens if something goes wrong?**

In the unlikely case of any concern or complaint, you can contact Dr Catherine Tissot email: [c.tissot@reading.ac.uk](mailto:c.tissot@reading.ac.uk) .

### **Where can I get more information?**

If you would like more information, please contact the Project Researcher Manar Abdulrahman I Alarfaj [email.m.a.i.alarfajr@pgr.reading.ac.uk](mailto:email.m.a.i.alarfajr@pgr.reading.ac.uk) or her supervisor Dr Catherine Tissot email: [c.tissot@reading.ac.uk](mailto:c.tissot@reading.ac.uk)

This application has been reviewed following the procedures of the University Research Ethics Committee and has been given a favourable ethical opinion for conduct.

I hope that you will agree to participate in the study. Thank you for your time.

Manar Abdulrahman I Alarfaj

**Researcher:**

Name Manar Alarfaj  
Phone: 00447850660201  
Email: m.a.i.alarfaj@pgr..reading.ac.uk

**Supervisor:**

Name Dr. Cathy Tissot  
Phone: +44 (0)118 378 5946  
Email : [c.tissot@reading.ac.uk](mailto:c.tissot@reading.ac.uk)

## Consent Form

Project title: The views of educational professionals and families on the awareness of children with autism and school provision in Saudi Arabia.

I have read and had explained to me by Manar Alarfaj the Information Sheet relating to this project.

I have had explained to me the purposes of the project and what will be required of me, and any questions have been answered to my satisfaction. I agree to the arrangements described in the information sheet in so far.

I understand that participation is entirely voluntary and that I have the right to withdraw from the project (at) any time, without giving a reason and without repercussions.

I have received a copy of this Consent form and of the accompanying information sheet.

I consent to participating in an interview Yes  No

I consent to this interview being recorded. Yes  No

Name:

Signed:

Date:

Time:

## Appendix F

# Draft Interview

### Basic information:

How long have you been working in the education sector? How many students with special educational needs are there in Riyadh primary schools currently?

### Inclusive practice:

- What kind of disabilities do we have in Riyadh primary schools?  
Roughly how many children do you consider to be disabled?  
How are children recognized as having disabilities diagnosed?
- How did the Ministry of Education enable schools to be recognised as being inclusive schools?
- Do you support the idea of inclusion?
- How does the Ministry of Education organise training programmes of special educational needs for teachers?
- Do you think you need more training programmes to be available for teachers and head teachers? What kinds of training programmes would you like to be offered?
- Do you think that there are students with autism spectrum disorders in the schools but have not been diagnosed?
- When did the schools start to include students with disabilities?
- Do you feel that schools have enough resources to support the teaching staff educating students with autism?

- Do you have any suggestions or concerns for including students with disabilities?
- How would you know that including children with autism are successful and that it works out well?

### Autism:

- How would you define autism?
- Do you have any experience in working with students with autism? If yes,
- Do you feel that schools can meet the needs of this group of learners? If not, what would you do to change this?
- Do you think that students with autism are more difficult to look after than other disabilities?
- Do you think that there is a lack of awareness regarding autism? If so, how would you improve it?

## Appendix G

University of Reading  
Institute of Education  
**Ethical Approval Form (version November 2012)**

Tick one:

Staff project: \_\_\_ PhD

**Undergraduate project: \_\_\_\_\_**

Name of applicant (s): Manar Abdulrahman I. Alarfaj

Title of project: The views of educational professionals and families on the awareness of children with autism and school provision in Saudi Arabia.

Name of supervisor (for student projects): Dr Cathy Tissot

**Please complete the form below including relevant sections overleaf.**

	YES	NO
<b>Have you prepared an Information Sheet for participants and/or their parents/carers that:</b>		
a) explains the purpose(s) of the project	✓	
b) explains how they have been selected as potential participants	✓	
c) gives a full, fair and clear account of what will be asked of them and how the information that they provide will be used	✓	
d) makes clear that participation in the project is voluntary	✓	
e) explains the arrangements to allow participants to withdraw at any stage if they wish	✓	
f) explains the arrangements to ensure the confidentiality of any material collected during the project, including secure arrangements for its storage, retention and disposal	✓	
g) explains the arrangements for publishing the research results and, if confidentiality might be affected, for obtaining written consent for this	✓	
h) explains the arrangements for providing participants with the research results if they wish to have them	✓	
i) gives the name and designation of the member of staff with responsibility for the project together with contact details, including email. If any of the project investigators are students at the IoE, then this information must be included, and their names provided	✓	

k) explains, where applicable, the arrangements for expenses and other payments to be made to the participants			n/a
j) includes a standard statement indicating the process of ethical review at the University undergone by the project, as follows: ‘This project has been reviewed following the procedures of the University Research Ethics Committee and has been given a favourable ethical opinion for conduct’.	✓		
k) includes a standard statement regarding insurance “The University has the appropriate insurances in place. Full details are available on request”.	✓		
<b>Please answer the following questions</b>			
1) Have you sought written or other formal consent from all participants, if they are able to provide it, in addition to (2)?	✓		
2) Have you provided participants involved in your research with all the information necessary to ensure that they are fully informed and not in any way deceived or misled as to the purpose(s) and nature of the research?	✓		
3) Is there any risk that participants may experience physical or psychological distress in taking part in your research?			✓
4) Have you taken the online training modules in data protection and information security?	✓		
5) Does your research comply with the University’s Code of Good Practice in Research?	✓		
	YES	NO	N.A.
6) If your research is taking place in a school, have you obtained the permission in writing of the head teacher or other relevant supervisory professional?	✓		
7) Has the data collector obtained satisfactory CRB clearance?			✓
8) If your research involves working with children under the age of 16 (or those whose special educational needs mean they are unable to give informed consent), have you sought parental consent or given parents/carers the opportunity to decline consent?			✓
9) If your research involves processing sensitive personal data <sup>1</sup> , have you obtained the explicit consent of participants?			✓
10) If you are using a data processor to subcontract any part of your research, have you got a written contract with that contractor which (a) specifies that the contractor is required to act only on your instructions, and (b) provides for appropriate technical and			✓

<sup>1</sup> Sensitive personal data consists of information relating to the racial or ethnic origin of a data subject, their political opinions, religious beliefs, trade union membership, sexual life, physical or mental health or condition, or criminal offences or record.

organisational security measures to protect the data?			
11a) Does your research involve data collection outside the UK?	✓		
11b) If the answer to question 11a is “yes”, does your research comply with the legal and ethical requirements for doing research in that country?	✓		
12a. Does the proposed research involve children under the age of 5?		✓	
12b. If the answer to question 12a is “yes”: My Head of School (or authorised Head of Department) has given details of the proposed research to the University’s insurance officer, and the research will not proceed until I have confirmation that insurance cover is in place.			
<b>If you have answered YES to Questions 2 and/or 3, please complete Section B below</b>			

PLEASE COMPLETE **EITHER SECTION A OR B** AND PROVIDE THE DETAILS REQUIRED IN SUPPORT OF YOUR APPLICATION, THEN SIGN THE FORM (SECTION C)

<b>A:</b> My research goes beyond the ‘accepted custom and practice of teaching’ but I consider that this project has <b>no</b> significant ethical implications.	
<p>Give a brief description of the aims and the methods (participants, instruments and procedures) of the project in up to 200 words. Attach any consent form, information sheet and research instruments to be used in the project (e.g. tests, questionnaires, interview schedules).</p> <p>Please state how many participants will be involved in the project: <i>This form and any attachments should now be submitted to the Institute’s Ethics Committee for consideration. Any missing information will result in the form being returned to you.</i></p>	
<p>This research focuses on the views of educational professionals and families in Saudi Arabia on awareness and school provision of students with autism. I will contact a sample of 10 educational professionals working in the Ministry of Education to conduct an interview lasting approximately 20 minutes.</p> <p>I will distribute an information sheet to do an interview. Then I will conduct the interview (with consent) with the staff who have indicated an</p>	

interest on the consent form.

Further interviews with parents will be conducted and this will be through the private school that is run solely for Autistic children. I will go there and distribute the information sheets and the consent forms. Up to 15 interviews will be conducted with the parents who have indicated an interest on the consent form.

<b>B:</b> I consider that this project <b>may</b> have ethical implications that should be brought before the Institute's Ethics Committee.	
<b>Please provide all the further information listed below in a separate attachment.</b>	
<ol style="list-style-type: none"><li>1. title of project</li><li>2. purpose of project and its academic rationale</li><li>3. brief description of methods and measurements</li><li>4. participants: recruitment methods, number, age, gender, exclusion/inclusion criteria</li><li>5. consent and participant information arrangements, debriefing (attach forms where necessary)</li><li>6. a clear and concise statement of the ethical considerations raised by the project and how you intend to deal with the.</li><li>7. estimated start date and duration of project</li></ol>	
<i>This form and any attachments should now be submitted to the Institute's Ethics Committee for consideration. Any missing information will result in the form being returned to you.</i>	

**C: SIGNATURE OF APPLICANT:**

I have declared all relevant information regarding my proposed project and confirm that ethical good practice will be followed within the project.

Signed:  
Date... 10/6/2014.....

Print Name...Manar Alarfaj

## Appendix H

KSA Embraces Th... 4:26 pm 100%

**Tweet**

2 Retweets 2 Likes

 **@AEsaily** · 05/05/2015  
Replying to **@MARfaaj**

 **@MARfaaj**  
ضعف مستوى المسؤولية الاجتماعية للقطاعات الخاصة  
عموما وللإعلام صاحب الضمير خاصة.

   1 

 **@abulaith1397** · 05/05/2015  
Replying to **@MARfaaj**

 **@MARfaaj**  
السبب ان الجهات  
المعنية لاهية عن معاناتنا

   1 

 **@MARfaaj** · 05/05/2015  
Replying to **@MARfaaj**

 **@MARfaaj**  
ربما مشكل المواطن  
بفهمة للاعاقاة بالذات في الوطن العربي وقلة الخبرات  
التي تعامل معهم

   1 

Add another Tweet



## Tweet



Manar Alarfaj @MARfaaj · 25/02/2015

Replying to @MARfaaj

وش اكثر ما يثير قلق أهالي التوحد في السعوديه ؟ وما  
وضع المدارس ؟ @MARfaaj



4



3



@MARfaaj · 25/02/2015

Replying to @MARfaaj

أكثر شي يخوف انه مافيه مراكز حكوميه للتوحد امنه  
ومتخصصة نفس الأردن وكل المدارس مايقبلون الدمج  
وش استفدنا



@MARfaaj · 25/01/2015

Replying to @MARfaaj

@MARfaaj

أين يشخصون أطفالهم ؟  
أي مركز أفضل لهم ؟  
وهل أصلا في مراكز تستوعبهم ؟

المدارس والدمج فيها " مأساة"  
توجد جهود ولكنها ضعيفة



Add another Tweet



Tweet



[Redacted] 30/03/2015

Replying to @MARfaaj

ضعف التوعية وقلة الاهتمام بأهالي التوحديين كذلك عزوف الأهالي عن الدورات التوعوية



[Redacted] 30/03/2015

Replying to @MARfaaj

السبب هم أسر وعائلات من لديهم طفل توحد انهم لا يتحركون وكس لانين ما يطالبون بحقوق ابنائهم اذا تحركوا الاعلام يسלט الضوء عليهم



[Redacted] 30/03/2015

Replying to @MARfaaj

لايوجد تعاون وترابط بين المؤسسات والمراكز والمدارس والأهالي والمجتمع



Add another Tweet





## Tweet



[Redacted] 20/01/2015

Replying to @MARfaaj

لاشئى مقدم لهم وفوق ذا تخرجون بنات وشباب من نفس قسم ولا في وظائف لهم بالعربي الاهمال من التربيه الخاصه



[Redacted] 20/01/2015

Replying to @MARfaaj

موجودين وفي ازدياد ادا الخلل اين هو لماذا مستمرين في فتح اقسام التربيه الخاصه ادا لم نمارس عملنا



[Redacted] 20/01/2015

Replying to @MARfaaj

المدارس والمعاهد الخاصه ايضا المستشفيات القادرة على التشخيص الدقيق ايضا التكاليف الماديه الهائله



Add another Tweet



Tweet

@MARfaaj التوعية مو ضعيفه الان الدورات التعريفيه بالتوحد بازدياد سواء من الخريجين او الباحثين فالمجال او العاملين فيه وقليل حضور الاهالي



30/03/2015

Replying to @MARfaaj

@MARfaaj عدم وجود حملات توعوية لنشر الوعي اغلب الندوات و ورش العمل و الدورات غالية الثمن



30/03/2015

Replying to @MARfaaj

@MARfaaj من وجهة نظري ان احد الاسباب هي : عدم الايمان بقدرات اطفال التوحد عدم اهتمام الدولة بفتح مركز حكومي شامل ليتهم مثل دبي



30/03/2015

Replying to @MARfaaj

@MARfaaj عدم وجود أسباب واضحة لمرض التوحد خاصة الأسباب الي قبل الولاده

Add another Tweet



# Appendix I

وأفضلهم هو مركز الأمير ناصر بن عبدالعزيز للتوحد X  
الأجابة الأولى :-

17) أصبح التوحد شائع وشخصه معروف على حد كبير لأنهم وانضموا إلى المجتمع ليكون  
صحيح وانتموا X

From time to time the rescher indicate that every information you provide here help is a hug - help to my study.  
Another question was what is your suggestion to improve the level of the awareness in Saudi Arabia.

الأجابة الأولى :-

18) قطع خبر لا يتجاوز 90 ث يتم طرح تقرير يوم وطريقة كثير الفهم لدى الأطفال وليس  
لغيره إشارة الشفقة X

Continued  
بالأكثر أن تكون سلة مقاطع الفيديو من مواقع الانترنت (كما هو متوقع من قبله  
على زاد الوعي X

Is the family of ~~Autistic~~ children with autism with inclusive education or against?

الأجابة الأولى :-

19) صعب حالة الطفل إذا كان توحد بسيط وقد بدأ الاستمرار برامج العلاج فحين ذمه  
لأن إعلان اسمه تكثر الناس وتعلم منه وقد ينقل عليه سلباً وتشتت  
سلوكياتهم كما منسوبه من الأطفال الصغار فيه X

الأجابة الثانية :-

20) نعم العج وكن معهم في مدارسهم قبل مع الفهم (الفهم لشخصك الأخرى) X

Is there any training programme for parents to help them deal with their children?

الأجابة الأولى :-

21) ورش عمل على المستوى :- لكن كالتواصل بالبريد X

ALADIB.net

منه الحضارة

مع تكرار سؤال : what the parents think about the level of the awareness in Saudi Arabia?

- ١٢١) لأن ارتفاع مستوى الوعي أكثر من قبل ولقد ما زالت حتى الانس تجاهه الروحي أكثر.
- ١٢٢) الأصل لهم من يحتاجون لتوعية بكتيافية التعامل مع الفطن التو صدي اما التو صديا لخاصو التو صديا تزال تطرح لك فضل

الإجابة الثالثة :-

١٢٣) هل هناك صعوبات (أصل الدمج يتبع خطه يقوم بدمجهم)

أغلب المتخصصين يفضل الدمج لأنهم السبل الواقعية للطفل

الإجابة الرابعة :-

١٢٤) إذا وجد معلم الطفل وكادره فكلهم يريدون أن تقع بذلك

what are the difficulties or obstacles faced by the families of children with autism?

الإجابة الخامسة :-

١٢٥) تكاليف العلاج والتشخيص وتكاليف الغذاء التي لا يمكن وقلة الأمانه المتوفرة لهم

١٢٦) تكاليف العلاج والتشخيص والتكاليف التي لا يمكن وقلة الأمانه المتوفرة لهم

١٢٧) في التشخيص والمدارس ووجوه وظروف الاستقبال وقوفهم

What is most worrying families of autistic in Saudi Arabia?

الإجابة السادسة :-

١٢٨) بالتكاليف قلة المدارس والمعاهد التي لا يمكن كذلك الخوف من المستقبل وصحة الروايات المتكلمة

١٢٩) الخوف من المستقبل وصحة الروايات المتكلمة

الإجابة السابعة :-

١٣٠) كالمدرسة ولا يستطيعون أن يتعلموا وهم في خوف من أن يتخربوا بشيء ليس لهم من صحتهم

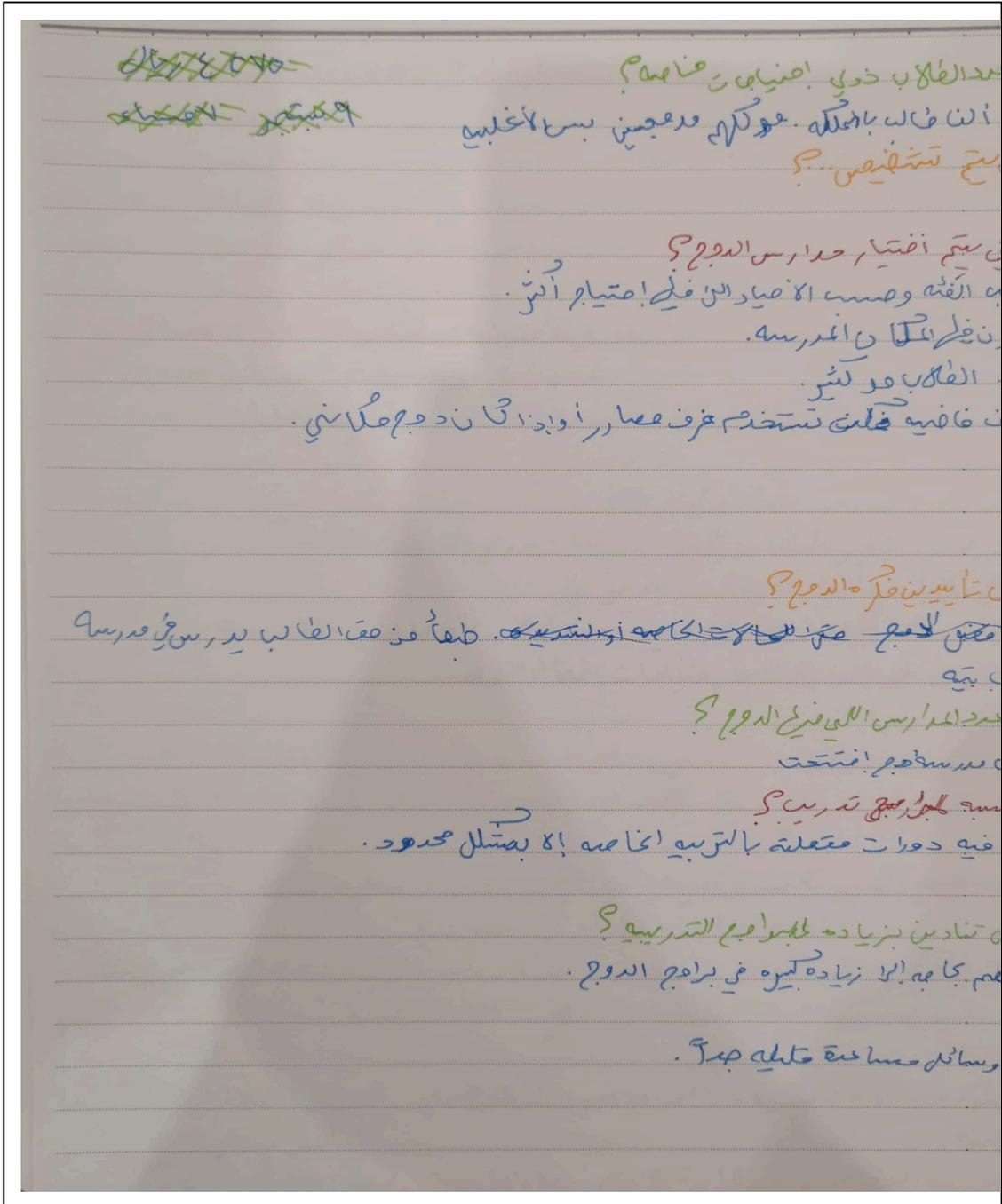
١٣١) التمييز الكافي والوعي والتخلف

الإجابة الثامنة :-

١٣٢) كالمدرسة ولا يستطيعون أن يتعلموا وهم في خوف من أن يتخربوا بشيء ليس لهم من صحتهم

١٣٣) التمييز الكافي والوعي والتخلف

## Appendix J



يشخصون أطفالهم في مركز أخصائيين؟

في مراكز متخصصة؟

الدولة "عامة" توجد جهود ولكن ضعيفة

السبب ١:

شعور خوف إعطائه مراكز خاصة للتوحد لأنه وقت خصصه لنفس الأهل

وأن يقبلون الدمج ويشعرون بالثقل

السبب ٢:

تعليمهم المهام وليس مناهجهم المناسبة لهذه الفئة كذلك إعطائه دمج

في المدارس

السبب ٣:

ولم يهتم التشخيص المبكر للمنتهين نسبة كبيرة من مجرد إقناع وقت من الصبح

ويقال "استقبلوا الطفل في البيت وأن يكون"

What is the reason for the low level of awareness of children autism in Saudi Arabia?

السبب ٤:

ضعف الوعي بالنسبة لأهل التوحد في كل مناطق المملكة خاصة في المناطق الريفية

وعدم اهتمام الجهات المختصة

بعدم وعي جهة التوحد في وزارة الصحة والوقاية من الأمراض

دورها ضعيف في مجال التوحد والأطفال ذوي صعوبات التعلم

في الرياض ووزارة التعليم لا يهتمون لديهم وعيهم ضعيف جداً ولا يهتمون

99% of people the researcher spoke or tweet here said that awareness about children with autism are very weak in

What is the reason

السبب ٥: ان عدم الاهتمام من الجهات المختصة

في التوحد في كل مناطق المملكة خاصة في المناطق الريفية

نفسه أغلبهم أكثر هي لأعمالهم لديهم الأطفال كونه أو ذوي احتياجات خاصة X  
غير برامج التوجيه الخاصة X عندنا إلا ما كان صوملاً به استوعبها يوجد X  
صنفاً هذا من الدرجة؟

عشر خا - الذين لزورون المدارس أكثر الأعداد في حقل الحساب + مدبره  
قبله + أن يكون لديهم حاجة لترك المصادر + فترتفع للوزن في هذا مضمون ومع  
بول من الوراثة لتأثير من المدارس ثم شتى وكان أيضاً يترك مع الدرجة X  
من ماضيه إمكانيات - تقدير لدرجات الاحتياجات الخاصة "الكالات العصبه الامانه أمان  
ة الدرجة أفضل ... كنا نقول المفضل أفضل لكن مع الوقت ثبتت أنهم ماضيه  
صحت لدرجة فلما نرى فقط فهمناك فوالد للذخائر والأعمال - منظر أفضال المدرسة لا تترك  
للأطفال

X مدارس تتعامل في الرياض X

تغيير عيشنا نالين إحصائيات ذري الاحتياجات الخاصة؟

ة ماضيه لتفهمي توصي كثير X

لا أكلهم إذا دمج التوهمين نأجر أو لا ... لأن ما عتري حالات دمج توهم  
غير عكسه كالتربية إحتياجات الأطفال التوهم ...

"Concerns"

الخافهم ... وإنما قصص صحي أسباب ... انتشار الظواهر ... لكن  
ليس وحقاً ... هناك مجلس أفضل من غيره ... لكن بالنظر ... التفسير ... ماضيه

التدريب؟ بين من يحمي الترتيب الكالمه ودورات ماضيه دورات

عنان طامع ماضيه لزيادة المراجع التدريبية

في تعليم التوهم والتوجيه والاشرف والوسائل لمساعدته غالباً من جهد العمل

هناك فلول في المدارس العادية وليس مهم مستخدمين

ناصيه المنزائيه ... لكن ما تعرف كدومة هذي هناك ماضيه - وظائفها

هو ليس ما تعرف

لتعلم توهم وقارة فلا بناه أفضل المدارس وتوهم أفضل الكود لكن كم كرك







