Factors Related to Retention and Self-Efficacy of Special Education Teachers Working with Students with Autism Spectrum Disorder in Tabuk-Saudi Arabia: Teachers’ Interviews

Abdullah M. Alatawi

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Factors Related to Retention and Self-Efficacy of Special Education Teachers Working with Students with Autism Spectrum Disorder in Tabuk-Saudi Arabia: Teachers’ Interviews

BY

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DISSERTATION

Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy Special Education

The University of New Mexico
Albuquerque, New Mexico

December, 2020
DEDICATION

To the spirit of my mother, Fatimah, who died at the beginning of my Ph.D. program at the University of New Mexico.

I did not stand next to her in the last moments of her life …
ACKNOWLEDGMENTS

بسم الله الرحمن الرحيم

In the Name of Allah, the Most Gracious, the Most Merciful

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FACTORs RELATED TO RETENTION AND SELF-EFFICACY OF SPECIAL
EDUCATION TEACHERS WORKING WITH STUDENTS WITH AUTISM
SPECTRUM DISORDER IN TABUK, SAUDI ARABIA: TEACHERS’ INTERVIEWS

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ABSTRACT

Special educators' self-efficacy and retention may be negatively impacted due to many factors related to work conditions and internal factors related to teachers themselves. In this qualitative methodology, I aimed to explore factors that influence teachers of students with autism spectrum disorder (ASD) to stay in their careers and factors affecting their self-efficacy to teach students with autism in Tabuk-Saudi Arabia. This study was based upon Bandura's theoretical construct of self-efficacy and conceptual models of special educators' retention. Six participants: four male and two female special educators participated in semi-structured interviews. After using the qualitative data analysis program Dedoose to analyze data, six themes emerged that described the self-efficacy and retention of teachers of students with ASD's. These themes are educators’ stress, educators’ positive relationships with others,
educators’ motivations, personal qualities of effective special educators, educators’ expertise, and occupational decisions. This study recommending future research should study the topics that emerged from this current research with a larger sample that includes males and females from different regions of the Kingdom of Saudi Arabi.

*Keywords:* special educators’ self-efficacy, special educators’ retention, in-services teachers of ASD
Table of Contents

LIST OF FIGURES..................................................................................................................xv

LIST OF TABLES ..................................................................................................................... xvi

CHAPTER 1 INTRODUCTION ................................................................................................. 1

Introduction............................................................................................................................. 1

Background of the Problem .................................................................................................... 3

   The Saudi Arabian education system................................................................................. 3

   Special education in Saudi Arabia.................................................................................... 4

       Special education teachers in Saudi Arabia................................................................. 6

Statement of the Problem ....................................................................................................... 9

Purpose of the Study ............................................................................................................... 12

Questions to be Addressed ...................................................................................................... 12

Operational Definitions .......................................................................................................... 12

Self-Efficacy Theory ............................................................................................................... 15

       Sources of self-efficacy................................................................................................. 19

       Efficacy-activated processes ....................................................................................... 21

Conceptual Models of Teacher Retention ............................................................................. 22

Rationale of this Study ........................................................................................................... 25

Importance of the Study ........................................................................................................ 26

Positionality and Assumptions .............................................................................................. 26

Scope and Delimitations of the Study .................................................................................. 28
CHAPTER 2 REVIEW OF RELATED LITERATURE

Background of Autism Spectrum Disorder

Definition of Autism Spectrum Disorder

Clinical Definition

Educational Definition

Types and Characteristics of Autism Spectrum Disorder

Pervasive Developmental Disorder

Asperger’s Syndrome

Childhood Disintegrative Disorder

Rett Syndrome

National Efforts to Address Teacher Attrition Rates

Factors Influencing Special Education Teachers

Internal Factors

Job Stress

Burnout

Commitment

Job Satisfaction

Personal Qualities of Effective Teachers

Special Education Teachers’ Expertise

External Factors
School Climate ................................................................. 54
Administrative Support .................................................... 54
Support from Colleagues .................................................. 55
Support from Parents ....................................................... 57
Professional Development in Special Education ..................... 59
Induction and Mentoring .................................................. 63
Salary ........................................................................ 64
Paperwork ..................................................................... 65
Class Size ...................................................................... 66
Self-efficacy of Teachers Working with Students with ASD: A Systematic Review ..... 67
Eligibility Criteria .............................................................. 68
Results ........................................................................ 68
Job Satisfaction ................................................................ 84
Burnout .......................................................................... 85
Inclusion ........................................................................ 87
Teachers of Students with ASD ......................................... 88
Commitment ................................................................... 89
Work Conditions ............................................................. 90
Curriculum ...................................................................... 91
Instruction Strategies, Classroom Management, and Student Involvement 91
Attitudes to Teaching Students with Autism Level of Self-efficacy .................92

Level of Self-efficacy .........................................................................................92

Conclusion ............................................................................................................93

CHAPTER 3 METHODOLOGY ............................................................................95

Introduction ............................................................................................................95

Research Design ....................................................................................................95

Selection of Participants .......................................................................................98

Recruitment Procedures .....................................................................................100

Consent procedures ............................................................................................101

Withdrawal ............................................................................................................101

Data Collection and Recording .........................................................................102

Interviews .............................................................................................................102

Recording .............................................................................................................103

Data Processing and Analysis .........................................................................103

Transcription .......................................................................................................103

Translation ...........................................................................................................104

Data Analysis ......................................................................................................104

Member Checking ...............................................................................................106

Validity Threats ....................................................................................................106

Ethical Considerations .......................................................................................107
Workload.........................................................................................................................130

Classroom Management Challenges.................................................................130

Curriculum Challenges .......................................................................................135

Excessive Paperwork .........................................................................................137

Lack of Classroom Resources...............................................................................139

Ineffective Related Services ..............................................................................142

Theme 2: Educators’ Positive Relationships with Others.................................143

Positive Relationships with Students ...............................................................144

Positive Relationships with Teachers ..............................................................145

Positive Relationship with Parents ..................................................................147

Theme 3: Educators’ Motivations.................................................................149

A Sense of Success ............................................................................................149

Praise from administrators ..............................................................................151

Salary .................................................................................................................152

Annual Evaluations ............................................................................................154

Theme 4: Personal Qualities of Effectives Special Educators..........................155

Patience .............................................................................................................155

Persistence .......................................................................................................156

The Desire for Self-Improvement ....................................................................157

Theme 5: Educators’ Expertise ........................................................................158
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training Workshops</td>
<td>158</td>
</tr>
<tr>
<td>Learn from Expert Special Educators</td>
<td>160</td>
</tr>
<tr>
<td>Years of Teaching</td>
<td>161</td>
</tr>
<tr>
<td>Theme 6. Occupational Decisions</td>
<td>163</td>
</tr>
<tr>
<td>Continuing Education</td>
<td>163</td>
</tr>
<tr>
<td>Obtaining a Higher Position</td>
<td>164</td>
</tr>
<tr>
<td>Transferring to Other Schools</td>
<td>165</td>
</tr>
<tr>
<td>Conclusion</td>
<td>166</td>
</tr>
<tr>
<td>CHAPTER 5 DISCUSSION</td>
<td>168</td>
</tr>
<tr>
<td>Research Purpose and Questions</td>
<td>168</td>
</tr>
<tr>
<td>Summary of Findings</td>
<td>168</td>
</tr>
<tr>
<td>Educators’ Stress</td>
<td>168</td>
</tr>
<tr>
<td>Educators’ Positive Relationships with others</td>
<td>171</td>
</tr>
<tr>
<td>Educators’ Motivations</td>
<td>172</td>
</tr>
<tr>
<td>Personal Qualities of Effective Special Educators</td>
<td>173</td>
</tr>
<tr>
<td>Educators’ Expertise</td>
<td>173</td>
</tr>
<tr>
<td>Occupational Decisions</td>
<td>173</td>
</tr>
<tr>
<td>Discussion of Findings</td>
<td>174</td>
</tr>
<tr>
<td>Educators’ Stress</td>
<td>175</td>
</tr>
<tr>
<td>Educators’ Positive Relationships with others</td>
<td>184</td>
</tr>
</tbody>
</table>
List of Figures

Figure 1 Bandura’s Triadic Reciprocal Determinism Model..........................17
Figure 2 Sources of Self-Efficacy.................................................................20
List of Tables

Table 1 Causes of Stress Identified in the Literature .........................................................38
Table 2 Summary of Skills and Characteristics of Effective Teachers .................................48
Table 3 Studies Included Special Education Teachers’ Self-efficacy .................................69
Table 4 Demographic of the Participant .............................................................................113
Table 5 Themes, Child Codes, and Grandchild Codes ......................................................118
Chapter 1

Introduction

Teachers are the main pillars and the most important components in the educational process because of their significant influence on the learning of students and the imparting of skills and proper social behaviors. Educators, along with parents, play a primary role in developing students’ psychological and social knowledge—a responsibility that extends to all stages of the education that students undergo (Hughes et al., 2012). Teachers are almost incomparable to any other specialist in any professional domain owing to the fact that they simultaneously shape the futures of learners of different personalities and characteristics who are at various phases of growth (Ruppar et al., 2017).

Given the essential nature of the teaching profession, and the education of students with disabilities in particular, special education teachers bear considerable responsibilities that expose them to overwhelming work pressure, stress, and anxiety. Special educators assume many academic and nonacademic duties both in and out of the classroom. These include instructional support, supervision, planning, and assessment (Vannest & Hagan-Burke, 2010). For this reason, some teachers are frustrated, lack a sense of achievement, and are unable to successfully complete all their work tasks. This leads to professional stress and psychological burnout.

Self-efficacy, as an internal personal factor, may positively affect job satisfaction and enhance the protection of special education teachers against the dangers of burnout (Schwarzer & Hallum, 2008). Bandura (1995) stated that self-efficacy is “the belief in one’s capabilities to organize and execute the courses of action required to manage prospective situations” (p. 2). Increasing special educators’ self-efficacy is advantageous not only to them, but also to efforts to elevate the quality of student learning and create a positive overall
school climate, wherein positive relationships with administrators and colleagues is cultivated (Hughes et al., 2012; Vannest & Hagan-Burke, 2010).

Having a special education teacher who is highly qualified makes a difference in student outcomes (Darling-Hammond & Youngs, 2002). It is important to retain these highly qualified teachers in the classroom for as long as possible, especially when a positive relationship has developed between teacher and student. Murray and Pianta (2007) noted that a positive relationship between teachers and students can protect special education students from experiences of failure that may otherwise occur. The absence of a qualified special education teacher and substitution with a less qualified teacher hurts students first, followed by the educational process (Connelly & Graham, 2009). Therefore, retaining highly qualified special education teachers is essential for student wellbeing.

Previous research has shown that special education teachers who adjust positively to the school climate and enjoy teaching students with special needs are more satisfied than their colleagues who are less committed to their jobs (Billingsley, 2004; Caprara et al., 2003; Conley & You, 2017; Cross & Billingsley, 1994; Davis & Wilson, 2000; Gersten et al., 2001). However, many factors affect job satisfaction among special education teachers, including self-efficacy, burnout, and commitment to the job. External factors, such as relationships with colleagues, interaction with school administration, workload, and salary also affect job satisfaction (Conley & You, 2017; Vittek, 2015). Having a high degree of self-efficacy has been shown to have a positive correlation to job satisfaction (Schwarzer & Hallum, 2008). This suggests that when teachers have positive beliefs and perceptions about their work, they are eager and driven to perfect their work. Such teachers are willing to work hard to achieve milestones with their students (Bandura, 1994; Shaukat et al., 2019).
Conversely, frequent stress, a heavy workload, poor relations with colleagues, and a lack of encouragement from school administration undermine job satisfaction and increase feelings of burnout (Conley & You, 2017).

**Background of the Problem**

Teachers who work with students with Autism Spectrum Disorder (ASD) face particular challenges beyond the typical challenges faced by teachers. When special education teachers work closely with other teachers and are supported by professional school administrators, they can create a healthy environment and high-quality teaching for their students with ASD. To fully understand the reality of the problem and the importance of self-efficacy among teachers of students with ASD in Tabuk schools, I will briefly present the education system, with a special focus on the special education system, special education teachers, responsibilities of teachers of students with ASD, and responsibilities of administrators.

**The Saudi Arabian Education System**

The Ministry of Education for males in Saudi Arabia was established in Makkah in 1950 (Al-Mousa, 1999). In 1960, the General Presidency for Girls’ Education was established in Riyadh (Ministry of Education, 2015). At that time, King Fahd bin Abdulaziz was the country’s first minister of education. Both ministries followed the same policies and guidelines in providing education to male and female students, and they provided education separately for three education levels (i.e., elementary, middle, and high school) in both government and private schools (Al-Mousa, 1999). The Ministry of Education established 14 school districts for the 14 regions of the country, making each responsible for implementing and enforcing all educational policies in Saudi Arabia across the three main stages of
education: elementary education, middle education, and high education (Ministry of Education, 2015). A recent report noted that Saudi Arabia had 2,424,831 male students and 2,645,139 female students (Saudi Arabia General Authority of Statistics [SAGAS], 2019). Although the general education system consists of both government and private schools, the Ministry of Education provides a free curriculum for both males and females at all education levels (Alquairini, 2011). Furthermore, in 2019, Saudi Arabia was home to more than 200,000 teachers, including special education teachers (SAGAS, 2019).

**Special Education in Saudi Arabia.** Saudi Arabia is considered one of the leading Arab countries in implementing modern educational methods for boys and girls of school age with special needs (Al-Mousa, 1999). In Saudi Arabia, new teaching methods and techniques that consider individual differences are applied within a less restrictive pedagogical educational framework (Al-Mousa, 2010). The kingdom has made great strides in moving individuals with special needs from isolated environments to normal school environments—which now absorb most of these individuals (Aldabas, 2015). According to Al-Mousa (2010), special education in Saudi Arabia began in 1952 with individual efforts and was focused on teaching students with visual impairments. Individual efforts in this area continued until the establishment of the first government institution for the blind in Riyadh in 1960, followed in 1962 by the decision to establish the first department of special education for teachers of students who are blind, deaf, or have intellectual disability. This department was transformed into three separate departments addressing the three aforementioned disabilities in late 1972. Meanwhile, according to Al-Mousa, the special education administration became known as the General Directorate. In 1996, the General Directorate of Special Education made a decision to include other disabilities under its umbrella—e.g.,
visual impairment, hearing impairment, learning disabilities, emotional and behavioral issues, autism, communication struggles, and other types of disabilities (Aldabas, 2015). The first special day school comprising two Al-Amal Institutes—one for boys and another for girls—was opened in Riyadh in 1964 (Al-Mousa, 2010). After that, the General Directorate of Special Education continued opening special education programs, e.g., segregated special education schools and inclusion classrooms in general education schools, until the total number of special education programs covering all disabilities, whether mild or moderate, reached 9,080 in 2019 throughout Saudi Arabia (Al-Mousa, 2010). In the same year, students with disabilities totaled 31,415, and teachers numbered 14,039 (SAGAS, 2019).

Saudi Arabia was one of the first Arab countries to apply the concept of inclusion to schools, with the first classroom opening in Al-Hoff in 1984 (Al-Mousa, 2010). Since then, the Ministry of Education has continued to open special education programs until there are more than 50 special education schools and 9,080 classrooms for students with disabilities in Saudi Arabia (SAGAS, 2019). There are two types of educational placements for students with disabilities: mainstreamed, inclusion schooling and separate institutions (Al-Mousa, 2010). Inclusion in Saudi schools includes full and partial inclusion. In full inclusion programs, students with disabilities arrive at school by 8:00 a.m. and attend general education classes like typically developing students; however, they receive support at school from resource rooms or from special educators who attend general education classrooms (Al-Mousa, 2010). These students finish their classes by 12:30 pm. Students in this type of inclusion setting are typically diagnosed as having visual impairments, hearing impairments, learning disabilities, or autism (Al-Mousa, 2010). By contrast, students enrolled in partial inclusion programs go to special education classrooms in general education schools, but they
may attend some classes in general education classrooms (Al-Mousa, 2010). Students in this type of inclusion program have been diagnosed as having visual impairments, hearing impairments, learning disabilities, autism, behavioral issues, emotional impairments, communication difficulties, and other types of disabilities (Al-Mousa, 2010).

The second type of special education system in Saudi Arabia is institutional care, or full segregation. Within this framework, Saudi Arabia’s educational system provides students diagnosed with moderate to severe disabilities with two types of support services. These are residential schools and day schools (Al-Mousa, 2010). The Ministry of Labor and Social Development established the first residential schools in the 1960s (Al-Mousa, 2010). These institutions provide full-service support in addition to an education, including social and medical services, as well as a residence for individuals with disabilities (Al-Mousa, 2010). Today, there are 37 residential schools in Saudi Arabia. The second type of support, special day schools, was introduced in Riyadh in 1964 (Al-Mousa, 2010). The special day school is for individuals diagnosed with mild, moderate, or severe disabilities. Students with disabilities come to school by 8:00 a.m. to receive various services and educational support, and they return to their homes by 2:00 p.m. (Al-Mousa, 2010).

Special education teachers in Saudi Arabia. In 1984, King Saud University established the first department of special education to qualify teachers to work with students with disabilities (Ministry of Education, 2015). For many years, this department was the only one to provide a bachelor’s degree in special education (Aldabas, 2015). To address a deficit in teachers, the Ministry of Education brought in teachers from neighboring countries. Today, Saudi Arabia has more than 30 universities, and more than 15 of these have a department of special education (Ministry of Education, 2019). Most such departments award
students a four-year bachelor’s degree with a concentration in one disability type. Students in
the special education field spend their first two to three years studying the history,
philosophy, and methods behind special education (Ministry of Education, 2019). Then,
education students conduct observations and teach children and teenagers in special
education classrooms for at least one or two semesters (Ministry of Education, 2015).

After graduating from university, most teachers find teaching jobs in the Ministry of
Education. To accomplish this, prospective teachers must first register for the teacher
qualification examination provided by the National Center for Assessment (Ministry of
Education, 2019). Teachers who score 50% or higher pass the exam, while those who do not
must wait six months to repeat it (Ministry of Education, 2019). Once a prospective teacher
has passed the exam, he or she is invited to interview with the Ministry of Education. Only
after passing the interview is the candidate legally qualified to join the waiting list for a job
(Ministry of Education, 2019).

Unlike the government system, most private schools (special day schools), which
provide educational services to students with mild, moderate and severe disabilities, do not
require teachers to pass a qualifying exam to teach special education (Ministry of Education,
2019). Instead, they usually require a four-year undergraduate degree in special education
and an interview with the school’s administration (the Ministry of Education, 2019). If a
school accepts the teacher, the two parties enter into a contract. However, private schools
usually only pay teachers a basic salary, with no additional benefits such as medical
insurance (Ministry of Education, 2019). For example, I worked at a private special
education school for one year, and I was paid around $300 a month without any other
benefits. For this reason, I decided to find a government teaching job. In a recent report dated
2019, 405 special education teachers were reported to be working at private schools throughout Saudi Arabia (Ministry of Education, 2019). The issue of low wages and lack of benefits is one of the primary factors that influence teachers’ levels of self-efficacy negatively. Kavenuke (2013) found that, in developing countries, salary is important in influencing teachers’ decision whether or not to stay in their jobs—so much so that most teachers stay because of their salaries over any other reason.

In the Saudi education system, special education teachers are directly responsible for providing curricular and extracurricular activities to students with disabilities (Al-Mousa, 2010). Special education teachers must deliver at least 18 classes of 50 minutes each, in addition to a minimum of four hours of administrative work, per week (e.g., committees or supervision) (Al-Mousa, 2010). Furthermore, teachers of students with disabilities must establish relationships with students’ parents, providing educational consulting, as one of the performance criteria in their yearly evaluation is parent satisfaction with teachers (Al-Mousa, 2010). In the Saudi educational system, the Ministry of Education provides curricula to all male and female special education teachers. Therefore, teachers do not need to spend endless hours reinventing the curricular wheel; however, they must still develop Individualized Education Programs (IEPs) and prepare daily lesson plans (Al-Mousa, 2010). Special education teachers must write and submit daily reports to parents to clarify students’ progress in school. Teachers also have to develop at least one extracurricular activity to perform in front of parents every semester (Al-Mousa, 2010).

In the Saudi special education system, there are two categories of administration: special education institutions and special education classrooms within public schools (Aldabas, 2015). Article 26 of the Organizational Rules for Special Education Institutes and
Programs (2006) assigns responsibilities to the directors of special education institutes or schools. These responsibilities include: (a) general supervision of special education programs and confirmation that they are fulfilling requirements; (b) follow-up on the attendance and work quality of special education teachers (preparation of units of study, correction of duties, classroom visits, exchange visits, applied lessons, etc.); (c) follow-up on students’ attendance and efforts to contact parents in the event of absence; and (d) yearly teacher evaluations (p. 25). This last point is particularly important because it assigns school principals the task of evaluation, regardless of their educational background. The education and work background of the school principal is a very important issue in evaluation because principals may not understand special education teachers’ roles, either in the school in general or in teaching students with disabilities. Furthermore, one of the responsibilities of the principal is providing special education teachers with resources such as technology tools. A school principal with a background in something other than special education may not approve when teachers request material, based on the mere fact that they do not understand the needs of these teachers.

**Statement of the Problem**

In the special education field, there are many academic and nonacademic responsibilities on which special education teachers spend their time both in and out of the classroom, such as instructional support, supervision, planning, and assessment (Vannest & Hagan-Burke, 2010). A tremendous amount of this time is “off the clock” and thus, for all intents and purposes, unpaid time. At the same time, Hughes et al. (2012) stated that the responsibilities of special education teachers are not well understood by most administrators who evaluate them annually. Moreover, the evaluations that administrators carry out are
usually designed for general education teachers (Jones & Brownell, 2014) and need to be modified to evaluate special education teachers’ skills (Ruppar et al., 2017). Ruppar et al. (2017) stated that special education teachers are expected to be leaders with regard to any issue concerning students, curricula, or assessments, so developing their expertise is important.

In Saudi Arabia, Abdul-Jabbar and Abdelaziz (2004) confirmed that special education teachers had less job satisfaction than general educators in terms of workload. Furthermore, Mohammed and Sammie (2013) indicated that the problems that special education teachers usually face, such as the lack of supportive services in schools, the lack of materials or equipment, and relationships among teachers and administrators may affect job satisfaction. According to the Ministry of Education (2015), the special education teacher attrition rate in Saudi Arabia ranges between 1.0% and 1.5% of all teachers. This means that the attrition is considered low compared to the retention of those teachers. Yet the same report (Ministry of Education, 2015) revealed that more than 20,000 teachers with 25 years of experience requested early retirement.

Furthermore, researchers indicated that there may be many contributing factors influencing the retention rate among teachers of students with ASD: lack of knowledge of the disability, lack of experience, lack of school administrator support, workload, salary, yearly evaluations, lack of teacher collaboration and lack of professional development (Billingsley, 1993, 2004; Conley & You, 2017; Smith & Ingersoll, 2004; Snell et al., 2005; Jones et al., 2013). Likewise, Starr et al. (2001) confirmed that parents of students with ASD feel that teachers need more training and education to meet their children’s needs. Furthermore, Fix et al. (2015) showed that a lack of administrator knowledge about special education teachers’
role in a school increased the likelihood of those teachers leaving the field and reduced administrators’ ability to properly evaluate them.

Bandura (1994) pointed out that teachers with low self-efficacy blame their failures or lack of success on their individual lack of ability. I often noticed that teachers who work in groups are more satisfied than those who work alone, because teachers in groups can exchange their thoughts and share experiences of teaching students with ASD. It is cathartic to share in the experience. Yet, many teachers of students with ASD work in isolated environments. I discovered that some teachers of students with special needs, especially teachers of students with ASD, have low expectations of their students because, when they do not know how to teach a skill, they usually attribute their failure to students’ abilities rather than their teaching approach. Finally, I found that most teachers lack good relationships with their school administrators because the latter do not understand the role of special education in an inclusion school or come from different fields and fail to provide support.

There are many gaps in the existing research with regard to special education in Saudi Arabia. The New Saudi Education Vision 2030 addresses one of the most important aspects, which is linking the yearly salary increase with teachers’ annual evaluations and professional development hours. Furthermore, the Ministry of Education required teachers to take a qualification exam every five years. These measures may negatively impact teachers’ self-efficacy (Ministry of Education, 2019).

The purpose of this study was to explore special education teachers’ perceptions of their abilities to teach students with ASD in Tabuk, Saudi Arabia. I expected the findings of this study to highlight some of the factors that influence their ability to teach students with
ASD and affect their decision to stay in the profession. I hope the results will be used to support teachers in ways that develop and maintain their skills as a means of providing high quality teaching to students with ASD.

**Purpose of the Study**

The purpose of the study was to explore the beliefs and perceptions of teachers of students with ASD in Tabuk about their self-efficacy and desire to continue in their profession. More specifically, I aimed to understand what factors appeared to most strongly influence teachers’ perceptions of their ability to teach students with ASD. Furthermore, I aimed to identify the most important factors that influence their desire to continue working with students with ASD in their current city.

**Questions to Be Addressed**

The primary questions guiding this research were:

1. What factors do special educators in Tabuk, Saudi Arabia, identify as influencing their desire to continue working with students with ASD?

2. What factors do special educators of students with ASD in Tabuk, Saudi Arabia, identify as influencing their self-efficacy in teaching?

**Operational Definitions**

For the purposes of this research, the following definitions will be used.

Administrative support: School administration is defined as all of the coordinated efforts and activities carried out by school staff—which consists of the principal, assistants, teachers, administrators, and technicians—to achieve educational goals inside and outside the school and, in line with the community’s aims, to educate children properly and on a sound basis (Balfour, 2001). For the purpose of this study, administrative support refers to the
relationship between school administrators and teachers of students with ASD that supports and facilitates (or hinders) the performance of teachers in classrooms and schools.

Autism spectrum disorder (ASD): According to the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition* (DSM-5), ASD is a pervasive neurodevelopmental disorder characterized by impairments in social communication and restricted, repetitive patterns of behavior, interests, or activities (2013).

Burnout: Freudenberger (1974) defined the term burnout as: “the state of physical and emotional depletion resulting from conditions of work” (p. 160). In another definition, burnout is “a type of psychological distress—a chronic negative psychological condition that results as day-to-day work stressors take their toll” on educators (Roloff & Brown, 2011, p. 453). Furthermore, burnout has been described as a “syndrome of emotional exhaustion, depersonalisation and reduced accomplishment which is a special risk for individuals who work with other people in some capacity” (Leither & Maslach, 1988, p. 347).

Caseload: it refers to “the number of students with IEPs for whom the special education teacher is the IEP manager and each student is counted as “one” no matter the needs or severity” (Yecke & Hale, 2001, p. 3).

Collaboration: Mastropieri and Scruggs (2004) stated that “collaboration involves cooperative, effective communication, shared problem solving, planning, and finding solutions” (p. 37). For this study’s purpose, it refers to cooperation between special education teachers and other school community members.

Expertise: Ericsson (2006) defined expertise as “the characteristics, skills, and knowledge that distinguish experts from novices and less experienced people” (p. 3). Furthermore, Ericsson and Smith (1991) defined expertise as “what distinguishes outstanding
individuals in a domain from others” (p. 2). Ericsson has highlighted the amount of knowledge that distinguishes between experts and novices in a specific domain. For purposes of this study, expertise refers to teachers of students with ASD develop their knowledge by attending specialized workshops.

Job Satisfaction: Locke (1976) provided the definition of job satisfaction: “the pleasurable emotional state resulting from the appraisal of one’s job as achieving or facilitating one’s job values” (p. 316). Furthermore, Evans (1997) combined “job comfort” and “job fulfillment” together to define job satisfaction as “a state of mind determined by the extent to which the individual perceives her/his job-related needs to be being met” (p. 833). The recent definition of job satisfaction was also described as “a positive or pleasant emotional state resulting from a person’s appreciation of his/her own job experience” (Demirtas, 2010, p. 1069).

Job Stress: This is defined as an event or situation at work that is seen as threatening or challenging (Hardie et al., 2005). In the education setting, it is also defined as a negative impact derived from working as a teacher (Kyriacou & Sutcliffe, 1978).

Self-Efficacy: According to Bandura’s theory of self-efficacy, the concept refers to “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performances” (Bandura, 1986, p. 391). For the purpose of this study, self-efficacy refers to special education teachers’ belief that they can positively affect student performance and achievement (Tschannen-Moran & Hoy, 2000).

Teacher Retention: "Teachers who remain in the same teaching assignment and the same school as the previous year” (Billingsley, 2004, p. 40). For this study’s purpose,
retention refers to remaining in the profession of special education as a special education teacher.

Workload: it refers to "all of the responsibilities required of the special education teacher and is based on the severity of student needs" (Yecke & Hale, 2001, p. 3).

Self-Efficacy Theory

The concept of self-efficacy was developed by Bandura (1977) when he published a seminal article entitled *Self-efficacy: Toward a Unifying Theory of Behavioral Change*. The term “self-efficacy” is a crucial component of social learning theory. According to Bandura (1986), beliefs about self-efficacy refer to “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performances” (p. 391). In addition, Bandura (1995) stated that self-efficacy is “the belief in one’s capabilities to organize and execute the courses of action required to manage prospective situations” (p. 2). At the same time, Ramachandran (1994) defined self-efficacy as “people’s beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives” (p. 71). These definitions highlight a paradox in judgment in which individuals have high expectations of their capability exceeding their actual ability in a particular field (Bandura, 1997; Pajares, 1996). Bandura (1997) stated that, when people’s assessment of themselves exceeds what they can actually do, their efficacy is higher, thereby increasing opportunities to overcome problems and obstacles. Maddux (2002) described self-efficacy as “the belief that I can perform the behavior that produces the outcome” (p.5). Maddux added that “self-efficacy is not a perceived skill; it is what I believe I can do with my skills under certain conditions” (2002, p. 5).
These definitions describe self-efficacy in terms of people’s understanding of their abilities and what helps them to develop new skills. In another definition of self-efficacy, Schwarzer (1992, as cited in Schwarzer & Hallum, 2008) stated that general self-efficacy “aims at a broad and stable sense of personal competence to deal effectively with a variety of stressful situations” (p. 154). In addition, Bandura (1997) asserted that “people’s level of motivation, affective states, and actions are based more on what they believe than on what is objectively true” (p. 2). Furthermore, Schwarzer indicated that self-efficacy motivates people to face up to and deal with difficult situations and difficult times.

Bandura affirmed the importance of self-efficacy as a mediating factor in behavior modification and an indicator of expectations about a person’s ability to overcome and successfully execute different tasks. Self-efficacy also affects patterns of behavior and thinking directly, entailing that it can be positive or negative (1987). Bandura proposed that individuals who have a positive sense of self-efficacy tend to analyze problems and try to come up with logical solutions that affect their behavioral efficacy. Meanwhile, individuals who feel low self-efficacy tend to be confused when confronted with tasks, hesitant in their behavior and underestimating their own competence, while being unable to use their knowledge effectively (1987).

When people interpret the outcomes of their own performance, they can understand and change their environments and beliefs, which in turn affects learning and changes subsequent performance. This is the basis of Bandura’s (1986) concept of mutual inevitability. Figure 1 below demonstrates the tripartite reciprocity involved in the construction of self-efficacy. The three aspects of Bandura’s theory are: (a) personal factors in the form of cognition, influence, and biological events, (b) behavior, and (c)
environmental influences. Bandura stated that personal factors—which he also called cognitive factors—include knowledge, attitudes, and expectations. In addition, behaviors involve skills, self-efficacy, and practice. Environmental influences include access to a community, social norms, and the ability to change one’s own environment. In this regard, Bandura confirmed that human functioning comes from the dynamic interaction of these factors (Crothers et al., 2008). These factors—behavioral, personal, and environmental—are not equal in strength and do not occur concurrently (Wood & Bandura, 1989). For example, in terms of teachers’ performance in schools, “behavioral factors” are affected by how the teachers perceive themselves “cognitively” according to the school’s policies pertaining to “environmental factors” (Wood & Bandura, 1989). In general, Bandura presented a concept of human behavior in which people’s beliefs are essential elements in the exercise of control and personal agency, with individuals seen as producers of their own physical and social environments.

**Figure 1**

*Bandura’s Triadic Reciprocal Determinism Model (Miller, 2010)*
Bandura (1997) proposed two types of expectations—outcome expectations and efficacy expectations—that affect teachers’ choices and their efforts to reach the target result. He stated that outcome expectations refer to the belief that a given action will lead to a certain result; for example, when teachers accomplish tasks at a specific level, they will probably obtain a certain result. Bandura (1995) stated that self-efficacy is “the belief in one’s capabilities to organize and execute the courses of action required to manage prospective situations” (p. 2). Based on Bandura’s work (1997), teachers’ convictions that they can master the necessary behaviors to complete tasks successfully relates to positive self-efficacy. Therefore, if teachers have doubts about their ability to perform a task, they may not even attempt the task. Thus, self-efficacy is not related to how much effort teachers expend, but rather how well and how long teachers will persist in the face of obstacles.

Gibson and Dembo (1984) stated that there are two types of self-efficacy that can be applied to teaching: (a) personal teaching self-efficacy and (b) general teaching self-efficacy. According to these two researchers, personal teaching self-efficacy concerns teachers’ beliefs in their capability to complete specific interventions to promote positive student outcomes. Meanwhile, general teaching efficacy reflects “a teacher’s sense of teaching efficacy, or belief that any teacher’s ability to bring about change is significantly limited by factors external to the teacher, such as the home environment, family background, and parental influences” (Gibson & Dembo, 1984, p. 574).

A study conducted by Hoy and Spero (2005) found that pre-service teachers’ self-efficacy increased during the first year of a preparation program. During teaching, however, the authors indicated that while general teaching self-efficacy increased, personal efficacy
decreased. This uncomfortable shift was prompted by the difficulty of managing a class independently for the first time.

Romi and Leyser (2006) suggested that teachers with a high sense of efficacy tend to organize and plan activities more effectively than other teachers. Therefore, teachers with high self-efficacy may be more open to new ideas, more inclined to apply new teaching methods, and more effective in teaching. Moreover, Moeller and Ishii-Jordan (1996) asserted that teachers with a high level of self-efficacy have a greater ability to manage their classrooms and support student success. Egyed and Short (2006) pointed out that colleagues’ support is a very important factor in helping new teachers to build their self-efficacy.

Educators who have a high level of self-efficacy can achieve positive outcomes in terms of the performance of their students in the classroom, giving them the capability to face and overcome subsequent negative environmental influences (Coladarci & Breton, 1997). In addition, teachers who have high levels of self-efficacy are more likely to: (a) develop creative and relevant teaching methods, (b) incorporate new approaches to learning, (c) improve learner independence, and (d) accept students with special needs (Ross, 1998). In general, teachers with strong self-efficacy spend more time teaching and experience less boredom (Gibson & Dembo, 1984).

**Sources of Self-Efficacy**

Self-efficacy can be improved through four main sources, as determined by Bandura (1994). Figure 2 illustrates the four sources of self-efficacy: (a) mastery experiences, (b) vicarious experiences, (b) social persuasion, and (c) psychological traits (p. 73). The first element is what Bandura (1994) described as mastery experiences: if the individual succeeds in the tasks he performs, this leads to increased self-efficacy, while failure limits the
experience of success. In addition, Bandura mentioned that, when individuals are exposed to failure in their life experiences, they may learn that success requires hard work. The second way to strengthen self-beliefs is through vicarious experiences. The idea here is that modeling has a very strong impact on both the positive and negative aspects of self-efficacy. When an individual observes other people with the same abilities carrying out a task, this can encourage successful performance of the task; for example, when people see someone similar to them carrying out a task, they will try to copy those actions and master the task themselves (Bandura, 1994). The third source of self-efficacy is social persuasion. Individuals’ surroundings may convince them that they can succeed in a task if they expend sufficient effort (Bandura, 1994). The fourth and final element of self-efficacy is psychological traits.

**Figure 2**

*Sources of Self-Efficacy (Bandura, 1997)*

The more intense the emotion, the more extensively it will affect the individual’s sense of self-efficacy. But if it is of average intensity, the person is likely to perform the task with a
high level of success, which will in turn reflect positively on the individual’s sense of competence (Bandura, 1994).

**Efficacy-Activated Processes**

Bandura (1994, 1995) believed that self-efficacy factors are determinants of the motivation of an individual. These factors are: (a) cognitive factors, (b) motivational factors, (c) effective factors, and (d) selection processes, and these factors work dynamically rather than in isolation (Bandura, 1995). The first factor that Bandura (1995) discussed is cognitive processes. He stated that individuals who believe in their own effectiveness in solving problems can think and make decisions when complex tasks are performed. However, when individuals have doubts and distrust their self-efficacy in solving problems, then their thinking is superficial, and they lack the ability to make correct decisions when facing problems. Their thinking is slow when carrying out work.

The second factor that Bandura (1995) proposed is motivational processes. He believed that individuals develop high self-efficacy by the exercise of forethought, which assists them in organizing and guiding their behavior. There are three forms of cognitive motivation: (a) causal attributions, (b) outcome expectancies, and (c) cognized goals. First, Bandura described causal attributions in terms of individuals who have high self-efficacy blaming their failures on unexpected situations or making little effort, while people who have low self-efficacy blame their fiascoes or lack of success on their own lack of ability. According to Bandura, people who do not give in to failure easily have a strong belief in their ability to overcome the greatest hardships. Self-efficacy determines the goals that people set for themselves and for how long they persevere when faced with difficulties in achieving these goals, as well as their ability to cope with failure. With regard to outcome expectancies,
Bandura stated that motivation stems from the expectation that a particular course of behavior will lead to certain results, based on the value of those results. But people’s actions are based on their beliefs about what they can do and their beliefs about the likely consequences of their performance (1994). Finally, Bandura discusses cognized goals, arguing that beliefs about self-efficacy play a key role in motivation: people stimulate themselves and form beliefs about what they can do, create goals for themselves, and plan courses of action designed to achieve high-value future outcomes. This could be called self-influence.

The third self-efficacy process identified by Bandura is the effective process, in which individuals with high self-efficacy focus their thinking on the demands and challenges of the task, responding to a task or activity with enthusiasm and optimistic expectations of effective performance. In contrast, Bandura stated that individuals who suffer from self-inefficacy are anxious, frustrated, and expect failure or experience pessimism, while lacking the ability to carry out tasks.

The final factor that effects self-efficacy is selection processes. Here Bandura underlined that most individuals choose activities that they can perform successfully because success leads to higher self-efficacy, while they avoid activities that lead to failure or any probability of failure. For example, teachers are likely to select activities that they can adapt to successfully and avoid activities that are beyond their capacity or to which they cannot adapt.

**Conceptual Models of Teacher Retention**

In the beginning, the explanation of teacher attrition was based on an interpretation of social education theories that assume that psychological performance is based on the result of
interactions between teachers’ personal characteristics and human behavior. One of the most famous attempts to formulate a conceptual framework about attrition was conducted by Chapman (1983). Chapman hypothesized that there are five variables that play a prominent role in influencing a teacher’s decision to remain in or leave the teaching profession. Chapman posited that a teacher’s decision is influenced by his/her personal characteristics, the nature and quality of the teacher’s previous training, social interaction within the profession, the external environment, or the teacher’s general sense of professional satisfaction. Chapman later added professional commitment and family characteristics to his model. Another study that identified factors influencing special education teachers to remain in their careers was conducted in Colorado by Mani (1989). Mani surveyed 354 special education leaders, building administrators, special education teachers, general education teachers, and special education teachers-in-training. The researcher identified six factors that motivate educators to remain in their career, including school support, consumer factors, teacher expectations, commitment, job satisfaction, and job responsibilities. According to Mani (1989), teachers identified ten key reasons to stay in their profession. The top reason given was, “The desire to work with children with disabilities, support from the building principal, cooperation from regular classroom teachers, support from the special education director, adequate equipment and materials for teaching, and adequate preparation in the area of special education” (p. 86).

Billingsley’s research (1993, as cited in Billingsley, 2004) revealed that occupational decisions involve three options: (a) stay in the job, (b) transfer from the job, and (c) leave the job. Within this model, there are three main components that are influential in the decision-making process: (a) external factors, (b) job factors, and (c) personal factors. Billingsley
(2004) stated that external factors, such as economic, societal, or institutional circumstances surrounding teachers can affect their decisions indirectly, via job and personal factors. Employment factors include direct and indirect influences on teachers’ decisions, such as (a) professional qualifications, (b) work conditions and rewards, (c) commitments to the school, district, and teaching field, and (d) the teaching profession (p. 193). Billingsley hypothesized that “when professional qualifications and work conditions are not as favorable, teachers are likely to experience fewer rewards and, thus, become less committed. Whether teachers actually leave though, depends on a host of personal, social, and economic factors” (p. 146).

The personal factors that may directly or indirectly affect teachers’ decisions include demographic, family, and cognitive effects (Billingsley, 1993).

In 1993, Brownell and Smith presented a conceptual model explaining the elements that affect the retention or attrition of teachers in the teaching profession in both public and special education. Their model was based on the assumption that “it is the relationship of historical factors, external personal factors, and environmental interactions in the workplace that leads to a person’s successful or unsuccessful integration into teaching and, ultimately, their decision to stay in or leave the classroom” (Brownell & Smith, 1993, p. 271). More specifically, Brownell and Smith (1993) stated that historical influences include age, academic ability, gender, ethnic background, socioeconomic status, initial commitment to education, coping strategies for dealing with stress, and level of preparedness (p. 272). To understand the environmental interactions within an educational context, Brownell and Smith (1993) adapted the Bronfenbrenner (1976) ecological model to suit the educational environment. Brownell and Smith mentioned that theBronfenbrenner ecological model consisted of four overlapping systems that were modified to explain factors affecting teachers
in schools. They indicated that the four factors in the model after modification are as follows: a) the microsystem, including the classroom and student-teacher interactions there; b) the mesosystem, which refers to the school and the teachers who interact with their surroundings; c) the ecosystem, which refers to the social factors that influence teachers’ workplaces, such as state and federal policies; and d) the macrosystem, which refers to the dominant cultural beliefs and economic conditions.

**Rationale of this Study**

To achieve the educational goal of providing an effective education to students, namely students with disabilities, in Saudi Arabia, it is important to consider all aspects of the educational process, including teachers, students, curriculum, and surrounding environmental conditions. In the field of special education, teachers’ competencies—including both their personalities and academic backgrounds—are crucial for delivering effective education and interventions that meet the unique needs of students with ASD. Education remains one of the main forms of treatment for people with ASD (Brookman-Frazee et al., 2009; National Research Council, 2001). Students with ASD display challenging behaviors more than typically developing students (Rotheram-Fuller et al., 2010), so educators with low self-efficacy may not deal with these students appropriately, thereby increasing the probability of failure (Allinder, 1994). I hope to find a way to improve the self-efficacy of teachers of students with ASD in Saudi Arabia because, though international research has identified many factors that influence self-efficacy, there is a lack of research studying the sense of self-efficacy of teachers of students with ASD in Saudi Arabia specifically. Moreover, most researchers studying the sense of self-efficacy of teachers of students with ASD lack an international approach. This study will fill the gap in
research by exploring self-efficacy among teachers of students with ASD with a narrowed focus on teachers in Tabuk, Saudi Arabia.

**Importance of the Study**

This study was the first ever to understand this subject matter in Tabuk, Saudi Arabia. It is important to understand the factors that influence the sense of self-efficacy of teachers of students with ASD because special education teachers generally spend 24 hours per week, including time spent on administrative duties, teaching students with special needs in Saudi schools (Al-Mousa, 2010). This is a relatively heavy workload and may cause burnout in these teachers. Furthermore, if the teachers have a low sense of self-efficacy, this may negatively affect the student behavior because students with ASD may already have problematic behaviors (Coladarci & Breton, 1997). An ineffective teacher and students with problematic behaviors are likely to interact in a cycle of escalating tension. Bandura (1994) pointed out that teachers with low self-efficacy blame their failures or lack of success on their capabilities. Therefore, individuals who feel low self-efficacy tend to be confused when confronted with tasks, hesitant in their behavior, and to underestimate their own competence, while being unable to use their knowledge effectively (Bandura, 1987). Furthermore, educators with low self-efficacy may not deal with students appropriately, thereby increasing the probability of failure (Allinder, 1994). Therefore, it might be important for school leaders to consider this issue and find ways to reduce factors that could negatively influence teachers’ abilities in Saudi Arabia. I will review this literature in greater depth in Chapter 2. From this point, the current study focuses on identifying factors that influence the abilities of teachers of students with ASD in the Tabuk region.

**Positionality and Assumptions**
Although I work at the university level, I believe that there is a need to deepen the recognition of teachers of students with ASD of their own desire, or lack thereof, to teach students with special needs. As an educator who spent years teaching students with disabilities, my experience has convinced me that such students must receive high-quality teaching to meet their needs. For that to happen, I strongly believe that teachers who have positive expectations of their students’ abilities and possibilities for success provide a higher quality education compared to those teachers who have low expectations of their students.

All of the assumptions I have touched upon have fostered my belief that improving the self-efficacy of teachers who teach students with ASD affects not only teachers, but also the students and their families. Understanding the conditions that affect teachers can help to improve their support services. I argue that an ideal environment involves supportive relationships between teachers, their colleagues, and their administrators—who must meet the educational needs of the teachers and provide professional development. All these factors help teachers maintain and improve their sense of self-efficacy, which in turn helps them to be more engaged in the classroom, resulting in a higher quality of teaching. The aim of this study, then, was to explore how teachers’ experiences influence their decision whether or not to remain in their current roles, as well as what factors most influence their sense of self-efficacy.

There are many ways to describe researcher positionality, and my position within the framework of the current research is not without the potential for bias. Working with participants is a vital part of this study, but it was also difficult because issues of subjectivity can arise in the collection and interpretation of the data. Moreover, as a researcher and fellow educator, I realize that there was the possibility of developing working relationships with
potential participants in the current study; however, these relationships remained limited to the context of the study. I purposefully did not build any strong relationships with participants outside the context of this study in order to eliminate the potential for bias. I understand that my assumptions and beliefs might have affected how I analyzed the data or the way that I presented the results, and that this may have affected the validity of my study. Because of that, I attempted to avoid such issues by remaining objective and systematic in collecting, analyzing, and presenting the data.

**Scope and Delimitations of the Study**

In this study, I focused on the perceptions and beliefs of the sense of self-efficacy of teachers of students with ASD in the Tabuk region. General educators or teachers of students with other types of disabilities will be excluded from this study. In addition, I focused on the teachers’ perceptions of the factors that influence their sense of self-efficacy the most, and how they have dealt with successive school administrations. I did not actually observe teachers’ performance in the classroom, nor did I make a determination of the quality of their teaching practice. The participants in the study were male and female teachers of students with ASD in the Tabuk region. Due to the time and labor extensive nature of this proposed study, I did not examine the perceptions of special educators in other regions of Saudi Arabia.
Chapter 2

Review of Related Literature

In this chapter, I present the most important topics raised through the literature review relevant to the research questions. The research questions were:

1. What factors do special educators in Tabuk, Saudi Arabia, identify as influencing their desire to continue working with students with ASD?
2. What factors do special educators of students with ASD in Tabuk, Saudi Arabia, identify as influencing their self-efficacy in teaching?

In this research review, I explored the beliefs and perceptions of teachers of students with ASD in Tabuk about their self-efficacy and desire to continue in their profession. More specifically, I aimed to understand what factors appear to most strongly influence teachers’ perceptions of their ability to teach students with ASD in their classrooms. Furthermore, I strived to identify the most important factors that influence their desire to continue working with students with ASD in Tabuk. I organized the main sections below as: (a) background of Autism Spectrum Disorder, (b) national efforts to address teacher attrition rates, (c) factors influencing special education teachers, and (c) self-efficacy of teachers working with students with ASD—a systematic review.

Background of Autism Spectrum Disorder

The word *autism* comes from the Greek word *autos*—meaning the self. Historically, according to Gadia et al. (2004), a Swiss physician named Eugen Bleuler first used the term autism in 1911 to “designate loss of contact with reality, which caused great difficulty in or incapacity of communication” (p. 1). Later, in 1943, Dr. Leo Kanner used the same term to describe the group of symptoms now known as schizophrenia (Gadia et al., 2004). In his
study, Kanner observed a group of 11 participants who shared distinctive common features before the age of three and first named their condition *Kanner Syndrome*. He later called it *early infantile autism*. In his article, “Autistic Disturbances of Affective Contact,” Kanner reported that 11 children showed common distinctive features such as the inability to connect with others and communication, social, and emotional difficulties. Kanner noted that the children did not seem to relate to other people, lacked imagination, and had stereotyped patterns of behavior (Barrett, 2011; Liedel, 2008).

In 1944, about the same time as Kanner’s research on autism, Austrian pediatrician Hans Asperger was investigating four children ranging in age from 6–8 years old (Buckendorf, 2008). His participants showed a set of social deficits, repetitive stereotyped patterns of behavior, poor eye contact, and poor motor coordination (Buckendorf, 2008). Furthermore, Asperger reported that those children exhibited intelligence levels ranging from low to above average, as well as showing unusual gestures and unusual facial expressions (Bishop, 2011; Buckendorf, 2008; Scheuerman & Weber, 2002).

In the 1950s and 1960s—in the absence of clear biological evidence on the causes of autism—the medical community blamed parents, especially mothers, for causing their child’s autism. It was widely believed that parents caused autism in their children by “being obsessed with perfection, domineering, or cool and aloof” (Barrett, 2011, p. 1). These were the so-called *refrigerator mothers*. At that time, these parental behaviors were assumed to prompt in children emotional regression and social isolation (Barrett, 2011). There was subsequently a move away from this unwarranted theory to a new perspective focusing on brain development and its function in the disorder (Barrett, 2011). In the late 1970s, a revolution in nuclear medicine (CT scans, MRIs) emerged to enhance our understanding of
the causes of autism (Barrett, 2011). The new technologies allowed researchers to identify and to understand the differences between the brains of normal children and those of children with autism (Barrett, 2011; Matson & Minshawi, 2006).

In 1977, researchers who studied families with twins brought forward evidence that autism was not caused by parents (Amaral, 2017; Barrett, 2011). In 1978, the International Classification of Diseases (WHO, ICD-9) officially listed autism as a unique disorder (Cotugno, 2011; Matson & Minshawi, 2006). Cotugno (2011) stated that, in 1980, the concept of infantile autism was listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM-III) and was officially distinguished from childhood schizophrenia. Furthermore, Cotugno added that the term Asperger’s syndrome was used by Wing for the first time to describe a group of characteristics similar to those described by Dr. Hans Asperger. Meanwhile, the term high-functioning autism was used by DeMyer, Hingtgen, and Jackson (1981). DeMyer et al. (1981) used the term high-functioning infantile autism rather than the term schizophrenia to refer to a group of symptoms that appear in the first two years of a child’s life. In the late 1980s, the DSM-III-R dropped the term infantile autism and used the term autistic disorder so as not to restrict the diagnosis to individuals of any particular age or developmental level (Cotugno, 2011; Matson & Minshawi, 2006). In 1988, Wing used the term autistic continuum to describe the range of autism from profound to mild (Cotugno, 2011).

In the 1990s, a new version of the DSM, the DSM-IV-TR (American Psychiatric Association, 2000), listed five disorders under the heading of pervasive developmental disorder (PDD): autism, Asperger’s syndrome (AS), childhood disintegrative disorder (CDD), Rett syndrome (RS), and Pervasive Developmental Disorder (Not Otherwise
Specified) (PDD-NOS) (Cotugno, 2011). Three criteria were added to diagnose children with autism: (a) social skills deficits at the age of three, (b) lack of communication, and (c) stereotyped patterns of behavior, restricted or repetitive (MacFarlane & Kanaya, 2009). In 2013, the newest version of the DSM, the DSM-5, was published by the American Psychiatric Association (APA). It included significant changes, in which Autism Spectrum Disorder (ASD) included all of the following categories: (a) autistic disorder (AD), (b) AS, (c) CDD, and (d) PDD-NOS. RS was no longer included (Yaylaci & Miral, 2017).

**Definition of Autism Spectrum Disorder**

*Clinical Definition*

According to the APA’s DSM-5, ASD is a pervasive neurodevelopmental disorder characterized by impairments in social communication and restricted, repetitive patterns of behavior, interests, or activities (2013). In other words, ASD is a complex set of disorders characterized by a lack of communication and social reciprocity and repeated, specific, and standardized behavior patterns (Lord & Jones, 2012). Also, individuals with ASD show a range of cognitive, sensory, and motor difficulties and, more specifically, linguistic delays, behavior problems, and mental retardation (Chakrabarti & Fombonne, 2005). This definition of ASD implies that ASD will be with a person forever as a developmental disorder characterized by social difficulties and repetitive behaviors (Doris, 2012).

*Educational Definition*

In 1990, the U.S. federal government identified autism as a special education category under the Individuals with Disabilities Education Act (IDEA) (Cotugno, 2011). IDEA (2004) defines autism as follows:
Autism means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three, that adversely affects a child’s educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences (34 C.F. R § 300.8 (c)(1)).

Types and Characteristics of Autism Spectrum Disorder

The definition of ASD has changed over time, as described above. In this dissertation, I will reference both current definitions, according to IDEA (2004) and the DSM-5. However, in Saudi Arabia, the Office of Diagnosis still uses the DSM-IV-TR. Therefore, below I present the diagnostic categories as currently used in Saudi Arabia—the context for this study.

In the DSM-IV-TR (2000), five categories of disorders were included under the PDD heading: autism, AS, CDD, RS, and PDD-NOS. However, the DSM-5 currently includes all of the categories previously identified under PDD into the umbrella of ASD, with the exception of RS. The categories are designated by deficits in social communication and interaction and by restricted repetitive behaviors, interests, and activities. Individuals are identified according to their level of functioning (e.g., high-functioning ASD) (APA, 2013; Matson & Minshawi, 2006; Yaylaci & Miral, 2017).

Pervasive Developmental Disorder (Not Otherwise Specified)

The diagnosis of PDD-NOS was previously given to children who did not meet the criteria for specific disorders (i.e., autism, AS, RS, CDD)—though many individuals
exhibited characteristics similar to disorders such as autism or RS (APA, 1994; Matson & Minshawi, 2006). According to Matson and Minshawi (2006), PDD-NOS referred to:

Children with severe and pervasive impairment in social interaction, deficits in non-verbal communication, and/or stereotyped behaviors and interests who do not meet the criteria for a specific PDD (i.e., autism, AS, Rett’s Disorder, CDD), schizophrenia, avoidant personality disorder, or schizotypal personality disorder (p. 21).

Walker et al. (2004) indicated that individuals with PDD-NOS can be placed into one of three subgroups: (a) a high-functioning group similar to AS but representing individuals with temporary language delay or mild cognitive disorder, (b) resembling autism, but with severe cognitive delays or too young for the full diagnostic criteria of other disorders, and finally (c), not meeting the criteria for ASD due to not displaying some repetitive behaviors.

**Asperger’s Syndrome**

Asperger’s syndrome is a disorder characterized by milder impairment in social interaction, restricted interests, and restricted activities, but lacking a clinically significant general delay in language or a significant deficit in IQ or adaptive behavior (APA, 1994; Matson & Minshawi, 2006; Myles & Simpson, 2003). According to Frith (1989), Asperger’s syndrome is a disorder among teenagers and adults, and it is unlike other disorders.

**Childhood Disintegrative Disorder**

Childhood disintegrative disorder is also known as Heller’s Syndrome. Children with childhood disintegrative disorder usually develop normally up to the age of three and then show severe regression in social and communication skills, repetitive behaviors, and maladaptive behaviors (Volkmar et al., 1997, as cited in Matson & Minshawi, 2006).
Rett Syndrome

This disorder was first described by Andreas Rett (1979). Rett syndrome occurs only in girls, and it is characterized by normal development followed by a loss of previously acquired speech or stereotypic hand movement and swaying shoulder movement (Van Acker, 1991, as cited in Matson & Minshawi, 2006).

National Efforts to Address Teacher Attrition Rates

Retaining talented and qualified special education teachers to educate students with special needs has been a clear challenge in the education sector for many years in both advanced economies and developing countries (Billingsley, 2004; Perrachione et al., 2008; Mason-Williams, 2015). This has led to several countries investigating, diagnosing, and addressing the issue (Conley & You, 2017; Mason & Matas, 2015). In the United States in late 1997, President Bill Clinton announced an initiative to “promot[e] excellence and accountability in teaching” (Office of Postsecondary Education, 2016). It highlighted several points, including improving teacher quality, practice, preparation, and qualification in all states (Horm-Wingerd & Hyson, 2000).

In 1990, the United States reauthorized the Education for All Handicapped Children Act 1975 (PL 94–142) (Thornton et al., 2007). The law, commonly known as the Individuals with Disabilities Education Act (IDEA), required that states provide free, high-quality educational services for all children with disabilities (Thornton et al., 2007). In 2002, the No Child Left Behind (NCLB) Act was signed by President George W. Bush, representing a new trend in measuring teacher performance by their students’ achievements and progress in learning (Thornton et al., 2007). With this legislation, students with disabilities were expected to meet state learning standards. Teachers of students with special needs, therefore,
needed to have strong teaching skills to ensure students met these evaluation standards (Brownell et al., 2018; Johnson & Semmelroth, 2014; Thornton et al., 2007).

In 2015, the Every Student Succeeds Act (ESSA) was signed by President Barack Obama. This law replaced the NCLB Act and gave more flexibility to states to develop their own education standards—the most important of which was the end of teacher evaluation through student outcomes and the removal of the requirement that teachers reach “highly qualified teacher” standards (Office of Postsecondary Education, 2016).

Although the ESSA lifted the requirement that teachers be “highly qualified” in the United States, students with special needs still require qualified teachers (Billingsley, 2005). Because the education of special needs students requires distinguished effort and performance from teachers, and because achieving goals with special needs students requires firm commitment from teachers, some universities around the world set challenging standards for the admission of hopeful teachers in special education departments (Darling-Hammond & Youngs, 2002; Ministry of Education, 2015). For example, the Ministry of Education in Saudi Arabia requires applicants to undergraduate programs in special education to have a strong high school Grade Point Average (GPA) and good test scores (Ministry of Education, 2015).

In the United States, the percentage shortfall in special education teacher numbers is considered high compared with that of general education teachers. According to the U.S. Office of Special Education Programs (n.d.), the number of special education teachers in 2005 was over 420,000 and fell to around 347,000 by 2015, meaning that 17% of special education teachers in the United States left the field over 10 years. In 2016, the Office of Postsecondary Education reported special education teacher shortages in 46 states, with
12.3% leaving the profession per year. The same report added that special education was one of the highest demand fields from 1990 to 1991 and 2017 to 2018. Podolsky and Sutcher (2016) also found that, of the 75% of school districts in California that reported teacher shortages, 88% reported a shortfall in qualified teachers in special education in 2016—more than in any other field. In addition, 40% of California special education teachers changed their careers within three years of starting teaching, while the rate for general educators was 25% (Farrell, 2016; Zhang & Zeller, 2016). Researchers have also indicated that special education teacher attrition represents 20-50% of all teacher attrition within the first five years (Clara, 2017; Mansfield & Beltman, 2014; Zhang & Zeller, 2016). Internationally, Lindqvist et al. (2014) reported that 30-50% of special education teachers in the United Kingdom and the United States leave their careers within five years of starting their careers, while five percent of special education teachers leave their jobs within five years in France and Germany. According to the Saudi Arabian Ministry of Education (2015), the special education teacher attrition rate in that country ranges between 1.0% and 1.5% of all teachers per year.

Factors Influencing Special Education Teachers

The studies I reviewed related to factors influencing teacher retention classified these factors into two primary groups: internal and external. Internal factors include job stress, job satisfaction, burnout, and level of commitment (Billingsley, 1993, 2004; Conley & You, 2017). External factors include work environment factors such as overall school climate, salary, administrator support, collaboration with parents, relationships with colleagues, professional development, induction programs, and mentoring (Billingsley, 1993, 2004a; Conley & You, 2017).
Internal Factors

In this section, I review internal factors relevant to special education attrition and retention, including job stress, burnout, commitment, job satisfaction, personal qualities of effective teachers, and special education teachers’ expertise (Billingsley, 1993, 2004; Conley & You, 2017). Each is discussed in greater detail below.

Job Stress

This section highlights the relationship between job stress and self-efficacy. In addition, it discusses the effects of job-related stress on teachers of students with disabilities. Several definitions of stress have been offered in the literature. Job stress is defined as a threatening or challenging event or situation within the bounds of work (Hardie et al., 2005). In the context of schools, job stress has been described as the negative effects of being a teacher (Kyriacou & Sutcliffe, 1978). In Table 1 below, I identify the many causes of stress experienced by teachers, including factors related to their own personalities, according to the reviewed literature on the topic.

Table 1

Causes of Stress Identified in the Literature

<table>
<thead>
<tr>
<th>Causes of Stress</th>
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<tr>
<td>Low monthly incomes</td>
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<tr>
<td>Student behavioral problems</td>
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<tr>
<td>Inadequate facilities (classroom equipment, teaching tools)</td>
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<tr>
<td>Poor relationships with administration, students, colleagues</td>
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<td>Lack of collaboration with parents</td>
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<td>Lack of related services</td>
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<tr>
<td>Larger class sizes</td>
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<tr>
<td>Teaching students with ASD</td>
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<td>Excessive paperwork</td>
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<tr>
<td>Curriculum implementation (specialized curricula for students with disabilities and curriculum changes)</td>
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A relationship between perceived stress and perceived self-efficacy has been observed. High self-efficacy was found to contribute positively to teachers’ motivations to face prospective problems in their schools. Therefore, these teachers experienced a low sense of perceived stress (Bandura, 1977; Erdem & Demirel, 2007). Teachers with low self-efficacy were less able to manage the daily problems they encountered in their schools. This increased their feelings of stress and had adverse effects on their teaching (Bandura, 1977; Betoret, 2006).

There are a number of studies that explain the relationship between self-efficacy and stress, though the literature is generally related to general education teachers. Vaezi and Fallah (2011) confirmed an inverse relationship between self-efficacy and job stress. Teachers with high self-efficacy often experienced less stress in their work. Self-efficacy allows teachers to manage job stress (Schwarzer & Hallum, 2008). In another study that examined the relationship between self-efficacy and job stress, Collie et al. (2012) investigated 664 elementary and secondary educators’ perceptions of school climate and social-emotional learning on job stress, self-efficacy, and occupational satisfaction. Their survey found that job stress had a negative influence on self-efficacy. This important study found that there was a relationship between the stress caused by problematic student behavior and teachers’ low job satisfaction and low self-efficacy. This result was supported by Klassen
and Durksen (2014), who conducted a mixed-methods study of 150 teachers. They found a relationship between perceived self-efficacy and perceived job stress.

More specifically, several studies have focused on the influence of job stress on special education teachers. Hastings and Brown (2002) asserted that teachers of students with disabilities generally experienced more stress than educators in other fields. They found that special education teachers felt more anxiety at school. Their results indicated that teachers of students with disabilities reported feeling less supported and more uncomfortable being at work. Furthermore, Skaalvik and Skaalvik (2010) conducted a study of 2,249 general education teachers and teachers of students with disabilities in Norway to examine the relationship between self-efficacy and stress. They also found an inverse relationship between self-efficacy and stress.

Al-Zayoudi (2007) examined the sources of psychological stress and burnout among teachers of special education and their relationship to variables such as gender, age, social status, teaching experience, and educational qualifications. The qualitative study was comprised of 110 male and female teachers and indicated that the male teachers had experienced more stress than the female teachers. Furthermore, teachers with lower monthly incomes were more subject to pressure than those with higher monthly incomes (Al-Zayoudi, 2007). The findings highlighted the greatest sources of stress: low monthly incomes, workload, student behavioral problems, inadequate facilities, poor relationships with the administration, teaching hours and lack of school-based services such as occupational therapists, physical therapists, and speech and language pathologists. The researcher also indicated that teachers cited larger class sizes, poor relationships with students, insufficient financial incentives, lack of collaboration from colleagues, and low self-esteem in educators
as factors that cause stress. In a similar study, Kokkinos et al. (2009) addressed the sources of professional stress for special education teachers. They conducted a self-reported study of 373 teachers focused on job stress, its perceived causes, and educators’ demographic and professional characteristics (Kokkinos et al. 2009). Their results indicated that more than half of the educators surveyed reported that teaching students with ASD was their main source of stress, with curriculum implementation also considered difficult. In addition, they reported an absence of specialized curricula for students with disabilities and poor communication with peers, parents, and special education supervisors. Teachers also reported that a lack of administrative support and great variance in students’ needs were stressors.

As indicated above, there are many reasons for the stress experienced by special education teachers related to classroom management. White and Mason (2006) examined the effectiveness of preparation programs on experienced special education teachers’ management of the classroom behavior of students with disabilities. A survey of 147 special education teachers from different states found that 60% were concerned about students’ undesired behaviors. They indicated that they needed assistance in the classroom. In addition, 70% of the teachers reported the lack of classroom materials as a stressor, 54% identified the lack of collaboration with general educators as a stressor, and 84% considered excessive paperwork to be their greatest stressor (White & Mason, 2006).

Furthermore, Meister and Melnick (2003) examined new educators’ perceptions of classroom management and the time it entailed, communication with parents, and their academic preparation. Thirty-three percent of the 273 educators surveyed in that study reported that their biggest concern was their inability to manage the classroom behavior of students with disabilities. Furthermore, Lindsay et al. (2013) identified that the most
significant obstacles were faced by teachers of students with ASD. They interviewed 13 teachers in Ontario, Canada, who indicated that their greatest challenges were understanding and managing classroom behavior and dealing with large class sizes, inadequate training, and lack of support from parents and other teachers. They confirmed the importance of receiving training and support to enhance their teaching.

The beliefs of teachers, especially those who work with students with severe disabilities, exert a powerful influence on their effectiveness. Fraser (1996) asserted that the degree of disability had an effect on teachers’ classroom performance. That study found a relationship between disability severity and teachers’ stresses and frustrations, due to the negative effects of students’ undesired behaviors on teachers and other students. Ruppar et al. (2016) conducted a survey of 104 teachers of students with disabilities regarding their readiness to teach students with severe disabilities in their classrooms. The results revealed that teachers’ perceptions were influenced by their levels of education, years of teaching experience, and types of teaching licenses. Teachers with master’s degrees in education felt more ready to teach students with severe disabilities, and those with more than 10 years of experience had positive perceptions of their abilities. In one qualitative study, Daane et al. (2000) explored the perceptions of general educators and teachers of students with disabilities regarding collaborating in inclusive education. Their results indicated that all special education teachers and general educators in the study reported feeling uncomfortable working with each other. Furthermore, their results indicated that the teachers believed that several students needed pull-out services because of their low levels of independence in inclusion environments. Similarly, Kniveton (2004) found that the more severe the students’ disabilities, the less positive were general educators’ attitudes about inclusion, because
students with severe disabilities were perceived as a major factor in teacher stress. Yet academic isolation from general educators has been identified by special education teachers as a stressor. Kilgore et al. (2003) conducted interviews with 36 special education teachers to identify the most influential drivers of stress after three years of teaching. They reported that classroom discipline or behavior management, the lack of curricular materials, the absence of collaboration with general educators, and the lack of support from supervisors were all factors increasing stress. The researchers indicated that the educators described feeling isolated from the general education community, general educator peers, and administrators. However, they indicated that the special educators in the study received positive support from other special educators.

In a survey of 41 educators at special and mainstream London schools, Williams and Gersch (2004) addressed the relationships among “age taught, class size, hours per week spent teaching, hours spent on paperwork, absences, media influences and the total level of stress” (p. 1). The researchers reported that the teachers identified positive influences on their careers to be rewards, student achievements, supportive colleagues, and positive parental feedback (Williams & Gersch, 2004). Negative influences on their careers were curriculum changes, undesired behaviors, insufficient respect from administrators or other teachers, inadequate resources, and paperwork (Williams & Gersch, 2004). The study found a relationship between stress and student age, class size, work hours, and school type.

Furthermore, Loeb et al. (2005) reviewed a survey of 1,071 teachers conducted by Louis Harris (2002) to identify the workplace stressors that influenced retention. They found a relationship between stress and building age, facilities, and classroom size. The next section will focus on burnout as a factor that influences teachers—especially special educators.
**Burnout**

Burnout is one of the most influential factors in a teacher’s decision to stay in or leave the field. Burnout is described in the literature as a three-component construct that includes a lack of a sense of accomplishment, depersonalization, and exhaustion (Maslach et al., 2001). Studies indicated that burnout among teachers is negatively correlated with self-efficacy and job satisfaction. Therefore, the higher the degree of burnout, the lower the self-efficacy and the lower the satisfaction of the teacher. There are several manifestations associated with increased burnout among special education teachers (Robinson et al., 2019; Maslach et al., 2001; Matheny et al., 2000; Nichols & Sosnowsky, 2002; Shoji et al., 2018; Cieslak, Smoktunowicz et al., 2016; Zabel & Zabel, 1982):

- **a)** Lack of a sense of accomplishment. This means that teachers with a high degree of burnout may not meet students’ educational needs or feel the benefits of success when they do achieve.

- **b)** Difficulties in personal or professional relationships. Teachers who have a high degree of burnout usually isolate themselves because of their workloads. It compounds their stress rather than relieving it.

- **c)** Neglect of other responsibilities. This may include evasion of business responsibilities.

- **d)** Emotional exhaustion. Teachers may not form relationships outside the school domain because they do not have the time or energy.

Cancio et al. (2018) and Nichols and Sosnowsky (2002) stated that special education teachers leave their jobs due to burnout and stress. Special education teachers who experience low levels of job satisfaction are more likely to feel a high level of burnout in...
their professional careers and, therefore, may leave their jobs (Robinson et al., 2019).

Brunsting et al. (2014) reviewed 23 research papers on burnout among special education teachers from 1979 to 2013; their results indicated that lack of experience, role conflict, and teaching students with disabilities were factors linked with burnout. In another study, Billingsley (2004) found that stress and a lack of administrative support are factors that cause burnout among special education teachers; conversely, positive administrative support is important for reducing burnout (Van Maele & Van Houtte, 2015).

**Commitment**

Mowday et al. (1982) defined commitment as “(a) a strong belief in and acceptance of an organization’s/profession’s goals and values, (b) a willingness to exert significant effort on behalf of the organization/profession, and (c) a strong desire to maintain membership in the organization/profession” (p. 5). To distinguish between job satisfaction and commitment, Mowday et al. (1982, as cited in Conley & You, 2017, p. 6) clarified that “commitment as a construct is more global, reflecting a general affective response to the organization as a whole. Job satisfaction, on the other hand, reflects one’s response either to one’s job or to certain aspects of one’s job.” Miller et al. (1999) indicated that teachers with a high level of commitment to teaching are more likely to stay in the careers, and vice versa. In special education, high commitment is linked with factors such as administrative support, greater experience, lower stress, and high levels of satisfaction (Cross & Billingsley, 1994; Gersten et al., 2001; Littrell et al., 1994). Student outcomes also influence teacher commitment. In an interesting study, Mărgărițoiu (2015) found that teachers’ commitment positively correlated with achievement and positive feelings toward students with disabilities. Positive support from administrators also increases teachers’ commitment to special education. On this point,
Conley and You (2017) analyzed a survey of 2,060 U.S. secondary school special education teachers from the National Center for Education Statistics (NCES) national database for 2007-2008. Their findings revealed that administrative support and teacher team efficacy were direct factors influencing teachers’ decisions to leave the field. Conley and You (2017) noted that commitment is one of the factors that influences teacher attrition, with poor socioeconomic and human conditions being linked to work commitment. In another important study, Berry (2012) surveyed 203 educators of students with disabilities in rural settings; they found that support from general educators and administrators, shared responsibility with other teachers, and understanding of their roles were factors that influenced teachers’ satisfaction and commitment. Stress and burnout were not the only negative factors that affect special education teachers in the field; job satisfaction was also a factor that influenced whether teachers decided to stay or leave their careers.

**Job Satisfaction**

One of the key factors contributing to special education teacher attrition is low job satisfaction, while high job satisfaction is one of the main factors convincing special educators to remain in their jobs (Conley & You, 2017; Emery & Vandenberg, 2010; Paquette & Rieg, 2016; Robinson et al., 2019). Locke (1976) defined job satisfaction as a “pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (p. 1300). Job satisfaction among special education teachers increases or decreases based on factors that can be categorized as external or internal (Conley & You, 2017). Researchers indicated that self-efficacy has an important positive influence on job satisfaction; when teachers have high self-efficacy, they also have high job satisfaction, controlling for other factors. High self-efficacy generates a sense of commitment to the
educational process and an appreciation of those working in the school; teachers with high self-efficacy tend to value and enjoy the work of their colleagues, contributing to a fruitful and stimulating educational environment and increasing job satisfaction for those around them (Billingsley, 2004; Caprara et al., 2003; Conley & You, 2017; Cross & Billingsley, 1994; Davis & Wilson, 2000; Gersten et al., 2001). However, self-efficacy is not only the factor that influences teachers’ job satisfaction. According to Vittek (2015), other factors include staff support, workload, and the stress of teaching students with special needs. In another study to identify factors that influence job satisfaction among special education teachers, Farinde-Wu and Fitchett (2018) found that administrative support, commitment to the job, and positive experiences in teaching all increased job satisfaction. Fish and Stephens (2010) surveyed 57 special educators and found that increased salary, administrative support, and workshops related to teaching students with disabilities increased job satisfaction, although the authors also indicated that a feeling of accomplishment in teaching special needs students also led to high job satisfaction. Perrett (2001) indicated that achieving positive results with students with special needs enhances teachers’ sense of job satisfaction. The teacher’s sense of achievement is an important factor in increasing motivation to continue going to work every day and working hard.

Furthermore, McLeskey and Waldron (2012) noted that positive communication between special educators and administrators increased job satisfaction among educators, encouraging them to remain in special education. Conversely, studies have shown that there are factors that negatively impact job satisfaction. According to Conley and You (2016), these include paperwork, stress, and burnout. Previous studies have also shown that a lack of teaching equipment, work overload, lack of experience, and lack of administrative support...
negatively impact job satisfaction among special education teachers (Bettini et al., 2017; Brunsting et al., 2014; Fernet et al., 2016; Kaff, 2004). Personal characteristics also play a role in influencing teachers’ decisions, as presented in the next section.

**Personal Qualities of Effective Teachers**

Special education is one of the most difficult fields in education, and teachers often face daily challenges and pressures. Special educators deal with significant differences in students’ abilities, which can range from hidden to apparent, and students’ disabilities, which can range from mild to severe. These differences require the application of highly individualized teaching methods and strategies that can be easy or complex. This may limit teachers’ effectiveness (Crutchfield, 1997; Emery & Vandenberg, 2010).

In this section, I highlight the most important qualities of effective teachers that emerged clearly and prominently during the literature review. First, a simple question must be answered: What is an effective teacher? A clear and comprehensive definition of what an effective teacher is must account for their personal, emotional, and behavioral characteristics. The word “effective” originates from the Latin word *effectīvus*, which means creativity or production (Gao & Liu, 2013). As shown in Table 2, Stronge (2007) identified five criteria to describe an effective teacher, namely: the teacher as a person, the ability to manage and organize the classroom, the ability to organize education, the ability to implement instruction and the ability to monitor students’ progress.

**Table 2**

*Summary of Skills and Characteristics of Effective Teachers*

<table>
<thead>
<tr>
<th>Characteristics and Skills of Effective Teachers</th>
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<tbody>
<tr>
<td>Mastery of communication skills</td>
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<tr>
<td>Building positive relationships with students, colleagues, and administrators</td>
</tr>
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</table>
Ability to listen to their students, colleagues, administrators, and their students’ parents
Tenderness, patience, and gentleness
Empathy, warmth, and a love of children
Ability to understand disability
Ability to teach students
A belief that extra hours and effort spent preparing and planning lessons is worthwhile in achieving their goals
Use a variety of strategies in teaching
Desire to improve knowledge
Desire for self-improvement
Talent
Persistence

To clarify the idea of the teacher as a person, the first criterion, Stronge (2007) indicated that, first, effective teachers possess personal characteristics that distinguish them from other teachers. These include the ability to provide care to their students by building positive relationships with them, considering their students’ success as their own success, and creating a positive classroom environment. Second, effective teachers have the ability to listen to their students, colleagues, administrators, and their students’ parents when making important decisions about their students. They demonstrate this understanding through tenderness, patience, and gentleness. Third, effective teachers are always empathetic and enjoy getting to know their students. They treat their students as people first and then as students. They communicate with their colleagues. They further believe that the extra hours and effort spent preparing and planning lessons is worthwhile in achieving their goals, and they value teamwork. Finally, effective teachers do not attribute failure to their students, but rather take personal responsibility and try to do more (Stronge, 2007).

For the second criterion, which relates to classroom management and organization, Stronge (2007) stated that effective teachers look to excel by organizing and planning the educational process. Effective teachers invest their time in enhancing their students’
performance and classroom discipline. They also arrange the classroom environment to allow students to communicate with each other, while simultaneously allowing themselves to communicate with them all.

Organizing education, Stronge’s third criterion, means that effective teachers plan their lessons properly and in an organized way, which includes preparing materials and resources before starting to teach (Stronge, 2007). During the lesson implementation phase, effective teachers use a variety of strategies that best suit the nature of the content. Effective teachers are furthermore aware of their students’ different abilities in the classroom and have realistic expectations of their students’ performance in the classroom. Finally, effective teachers follow their students closely to ensure that the learning process is proceeding as planned.

Many studies in the broader literature have examined the characteristics of effective teachers in general. Some authors, such as Cruickshank and Haefele (2001, as cited in Stronge, 2007, p. x), also mentioned that effective teachers have at different times been called “ideal, analytical, dutiful, competent, expert, reflective, satisfying, diversity-responsive, and respected.” A qualitative study of special education conducted by Woolf (2019) aimed to identify the skills that appear most critical for special education teachers to be effective in their careers. To achieve this, the researcher collected data from 140 special educators and general educators. The educators identified three domains describing the most critical skills. The first critical skill was the ability to understand disability and its impacts on learning, which included fundamental knowledge, seeing beyond disability, individualization, and “patience, empathy, warmth, and [a love of] children” (p. 137). The second critical skill was integrated expertise—namely, blended expertise, mastery of the
general education curriculum, utilizing evidence-based practices, and ensuring “‘ultimate’ valued outcomes” (Woolf, 2019, p. 137). The final critical skill identified by the educators was instructional flexibility, meaning “simultaneity, immediacy, creativity,” and “anticipatory skills” (p. 137).

Similarly, Soulis (2009) conducted a study that aimed to evaluate the qualities of effective special education preschool teachers. This was achieved by surveying 226 special education teachers. The study’s results demonstrated that special educators need to love to work with students, desire to improve their knowledge, and be committed to their work. The study participants also identified communication skills and the basic ability to teach as essential characteristics of effective teachers. In another study, Feng (2012) surveyed 362 special and general education teachers in China regarding their attitudes toward special and inclusive education and to determine what motivated them in their profession. The researcher used a mixed-methods design to identify the motivational factors in teaching. The teachers identified six factors that motivated them to become teachers: parental influence, family economic pressure, a love of children/teaching, the government’s city-dwelling policy, job opportunities, and a childhood dream. Sixteen percent of the participants indicated that they were motivated by their love of teaching students with disabilities.

In 2006, Polk conducted a research review to examine the relationship between 10 characteristics of effective teachers. The results indicated that effective teachers show excellent prior academic performance, a mastery of communication skills, talent and creativity, a good background in education, a mastery of teaching skills, the ability to self-improve, and the ability to use multiple strategies in teaching. The researcher also noted that all of the characteristics of effective teachers discussed in the review were interrelated.
Researchers (e.g., Dweck & Leggett, 1988; Wheatley, 2002) identified persistence as a factor that can help educators teach their students well. The researchers pointed out that persistence is a characteristic of teachers who have a mastery orientation to their lives and work.

**Special Education Teachers’ Expertise**

After several years of teaching experience, teachers may become expert teachers (Palmer et al., 2005, p. 1). Although teachers are generally thought to need three to five years of direct teaching experience in a certain field to be considered expert teachers, Allen and Casbergue (1997) stressed that teachers should have at least 10 years of teaching experience. However, there seems to be no agreement regarding the years of experience needed to become an expert. In the special education field, there are many academic and nonacademic responsibilities on which special education teachers spend their time both inside and outside of the classroom, such as instructional support, supervision, planning, and assessment (Vannest & Hagan-Burke, 2010).

At the same time, Hughes et al. (2012) stated that the responsibilities of special education teachers in teaching students with disabilities are not understood by most of the administrators who evaluate them annually. Moreover, the evaluations that administrators carry out are usually designed for general education teachers (Jones & Brownell, 2014) and need to be modified to evaluate special education teachers’ unique skills (Ruppar, Roberts, & Olson, 2017). Ruppar et al. (2017) stated that special education teachers should be thought of as leaders regarding any issue concerning students with disabilities, including curriculum and assessments, so developing their expertise is important. Jones and Brownell (2014) argued that special education teachers who are highly qualified have different methods of teaching
students with disabilities because they have developed different educational and personal strategies over the years to ensure that their students receive a high-quality education.

Jones and Brownell (2014) underlined that highly qualified special education teachers have a well-integrated pedagogical knowledge base, understand the disability or disabilities that characterize their students, and have deep content knowledge. Berliner (2004) suggested that approximately 7,000 hours of teaching experience, or 1,000 hours of study in an education program, may be considered indicators of expertise for teachers. Berliner stated that special education teachers may not be surprised when something happens in their school after three to five years of teaching while, after five to seven years, these teachers may be considered experts. Bereiter and Scardamalia (1993) and Berliner (1994) confirmed that teachers who demonstrate flexibility and autonomy may be considered expert teachers.

Many factors influence an expert’s performance in their chosen domain (Ericsson & Charness, 1994). Ericsson (2006) identified seven factors that may limit experts’ performance during an in-service period and pointed out that “expertise is domain-limited” (p. 24). Therefore, experts require additional experience to be successful in other domains (Ericsson, 2006). Experts can also limit their capabilities by being overconfident in their domain (Ericsson, 2006). Another factor that may affect experts is glossing over, which means that experts sometimes recall only surface features and overlook details because they might expect others to already understand the details of the situation (Beck, 2015). Experts may also rely too heavily on contextual cues within their domain (Ericsson, 2006).

**External Factors**

External factors refer to the working environment, including school climate, administrative support, support from colleagues, support from parents, professional
development in special education, induction and mentoring, paperwork, and class size (Billingsley, 1993, 2004b; Conley & You, 2017). Each is discussed in greater detail below.

**School Climate**

The promotion of collaboration between special education teachers, general educators, and administrators in decision-making regarding students and school activities can assist in creating a positive school climate for everyone. When the school climate is positive, teachers of students with disabilities feel they have an important role in the school, which makes teaching more enjoyable for both students and teachers. A positive school climate also enhances teacher retention (Billingsley, 2004; Brownell et al., 2005; Miller et al., 1999). Increasing collaborative work among general and special education teachers creates a sense of belonging that further helps teacher retention (Jones et al., 2013). Hagaman and Casey (2018) found that a lack of positive school climate was one of the reasons that new teachers planned to leave, while a positive relationship with administrators helped them to feel supported in difficult situations they might face.

**Administrative Support**

Support from the administration is one of the main external factors that influence special education teachers in deciding to stay or leave their teaching careers (Billingsley, 2004). In a survey of 263,500 special educators, Luekens et al. (2004) found that 41.9% of teachers indicated that they were uncomfortable with the level of support they received from their administrators, while 33.9% of educators pointed out that workplace conditions affect their satisfaction in their schools. A study conducted by Wong (2004) revealed that administrator support is a critical factor that affects teacher retention. According to his results, principals can provide a positive environment in which teachers are encouraged to
freely collaborate with other teachers in their schools. In the 651 surveyed special education teachers, Nichols (2008) found that special education teachers feel affirmed and comforted when they receive support from their leadership. According to his results, a low level of leadership support causes teachers to feel stress and anxiety in their careers. In a similar study, McLaurin et al. (2009) suggested that effective administrators help teachers to stay in their profession. According to Nance and Calabrese (2009) and Cancio et al. (2014), lack of administrative support contributes to special education teachers planning to leave.

Misunderstanding the role of special education teachers, their responsibilities, or how they teach students with the disabilities that they specialize in is a key issue that emerges between administrators and teachers. Frost and Kersten (2011) analyzed the knowledge of 132 elementary school administrators regarding teachers’ roles in special education; they found that administrators who had degrees in special education were far more understanding of how to deal with or support special education teachers in their schools. These results concur with Fix et al. (2015), who conducted five interviews with administrators in school districts that included special education teachers. Their findings revealed that a lack of administrator knowledge about special education teachers’ roles and needs increased the likelihood of those teachers leaving the field, perhaps especially because administrators who did not understand the teachers’ roles may not be able to effectively evaluate them.

Support from Colleagues

Although studies have indicated that rates of attrition are associated with many elements—as described above—one important factor is the support of colleagues (Miller et al., 1999). Furthermore, Billingsley (2004) indicated that support from coworkers is most important when teachers are in the early stages of their careers. Moreover, new teachers who
have received effective support from their coworkers are more likely to have confidence that they can maximize students’ academic outcomes and mitigate behavioral challenges. Relationships among teachers is a key support factor for special education teachers in particular (Billingsley, 2004). Those who have positive relationships with other teachers find that it helps them to engage with the school community (Hagaman & Casey, 2018). Respect, appreciation, and understanding are all factors that create positive relationships among teachers (Berry, 2012). Researchers have found that the lack of peer support is a key reason that teachers to drop out of the field, and the inverse is also true: colleague support is in itself a factor that helps teachers to stay in the field (Berry, 2012; Billingsley, 2004; George et al., 1995). When teachers encourage each other they foster a positive mood even among trying circumstances with challenging students, resulting in both increased job satisfaction and increased commitment to teaching (Berry, 2012; Farinde-Wu & Fitchett, 2018; Jones et al., 2013). With positive relationships at work, job satisfaction for teachers increases; the higher a teacher’s degree of job satisfaction, the greater their degree of self-efficacy (Berry, 2012). The beliefs adopted by teachers affect their social relations (Berry, 2012), making it important for new teachers in a school building to believe that they are valued and respected from the start. Berry (2012) conducted a study of 203 special education teachers related to teacher satisfaction and job commitment that focused on relationships at work. It found that positive relationships with colleagues and administrators increased teacher satisfaction and commitment to work. In another study, Jones et al. (2013) examined relationships between general and special education teachers and how it impacted special education teachers’ feelings about remaining in their careers. They found that such relationships increased the sense of belonging to the school and increased job satisfaction. In a similar study, Horrison-
Collier (2013) noted that special educators indicated feeling comfortable in their schools when they were given opportunities to work collaboratively with their colleagues, while the inverse was also true. Whitaker (2003) conducted a study that examined in-service teachers’ perceptions to identify their needs after the first year of teaching in a special education classroom. The researcher evaluated the assistance teachers received to address their needs and who helped them. Whitaker surveyed 156 in-service special education teachers in South Carolina. The results of the study revealed that new special educators have the greatest needs in the area of special education policies and paperwork, emotional support, school learning systems, and materials and resources for the classroom. Participants in this study mentioned that they received more support from special education colleagues—specifically their assigned mentors—than from general education teachers or special education administrators.

**Support from Parents**

If parents engage in social participation with their children’s schools, a partnership can form between educators and parents (Wenger, 1998). The first relationship at school is that between the student and the teacher. However, teaching students with disabilities is not the special education teacher’s only role in the school. It instead revolves around the entire academic community, including parents, since learning is an inherently social activity (Bandura, 2014; Wenger, 1998). Support for this collective and social teaching process is based on Bandura’s (1997) theory of self-efficacy, which confirms that self-efficacy stems from the teacher’s beliefs about his/her ability to influence events in the workplace, including collective persuasion. The need for feelings of self-efficacy is shared by both teacher and parents. Hence, the teacher who possesses strong self-efficacy will be better able to build a positive relationship with the parents. The opposite is also true; low self-efficacy may
negatively affect the strength of the relationship between the teacher and parents and between the teacher and student (Bandura, 1997; Walker and Hoover-Dempsey, 2000). A lack of parental support is identified as one of the primary factors affecting self-efficacy among special education teachers. More specifically, Yeunjoo Lee et al. (2011) conducted a study aimed at identifying factors that influence special education teachers’ self-efficacy in terms of demographics, paperwork, knowledge, support from parents and school districts, and teacher preparation programs. The researchers surveyed 154 special education teachers. Their results revealed that there was a distinct correlation between the self-efficacy of special education teachers and the availability of resources (e.g., curriculum, technology, supplies, and budget), workload (e.g., number of students in the class, variety of student needs, split shifts, number of subjects taught, and paperwork), allotted teaching time, parental and administrative support, and relevant skills or training.

The importance of parental participation in special education programs lies in their role in improving the quality of learning provided to students with disabilities in their schools (Hallahan & Kauffman, 2000). Much research has been done on this subject. For example, in 2004, Gallagher et al. conducted a study that investigated the contribution of parents as parent educators in children’s educational programs for both general and special education. They found that parents who participated in their child’s academic program helped educators to teach their students more effectively and enabled them to manage the students’ educational progress more productively inside and outside of the classroom. Their results also showed that teachers benefited from the relationship that was formed with parents through the program by gaining greater insight into their student’s social and academic needs. Furthermore, students with disabilities showed improvement in their abilities when their
parents participated constructively with their teachers, as Gargiulo (2003) reported. Ysseldyke et al. (2000) stated that parent-teacher relationships have been found to positively support student performance in schools.

Despite the importance of building positive relationships between teachers and parents, there are many obstacles that interfere with this relationship. The lack of support from parents is one of the biggest challenges teachers face in the special education field (Miller et al., 1995). Furthermore, Billingsley and Gross (1991) and Patt and Olsen (1990) reported that lack of support may influence special education teachers to transfer and thus impact the stability of schools in providing a reliable and consistent education to students. Brownell and Smith (1992) also confirmed that low support of special education teachers adversely affects these teachers’ self-efficacy and adds to their job-related stress. One of the barriers hampering the parent-teacher relationship is the lack of parental responses to teachers’ notes. The results of a study performed by Galinsky (1990) confirm that teachers feel stress or frustration when they are unable to collaborate with parents. The factors discussed above to not only affect teachers of students with ASD; they also impact all special educators and general educators to some degree. The following section discusses the impact of ongoing training specifically on teachers of students with ASD.

**Professional Development in Special Education**

In this section, I highlight the importance of providing professional development training to in-service special education teachers, especially those responsible for students with ASD. I then present the need for and benefit of rendering specialized training workshops on autism to teachers. The literature indicated professional development as an important issue in the retention of special education teachers (Billingsley, 2004; Cancio et al.,
2014), as such an endeavor enables the cultivation of skills and knowledge that educators need to build positive experiences and avoid student failure (Billingsley, 2004). Professional development training also helps teachers to understand practical aspects that allow them to expand the use of effective educational strategies (Cancio et al., 2014). Most investigators have pointed to the importance of professional development in teaching, and a good understanding of teaching methods, as well as how to use educational interventions, increases job satisfaction among teachers (Billingsley, 2004; Cancio et al., 2014; Gersten et al., 2001).

The Organisation for Economic Co-operation and Development (OECD) (2009) has also stated that support in the form of professional development training helps increase teachers’ self-efficacy and, therefore, their job satisfaction. This observation was confirmed by Bray-Clark and Bates (2003), who found that one key to success in schools is providing professional development initiatives to teachers. The authors stated that self-efficacy is considered an important factor in teaching effectiveness because of its relevance to teacher behaviors and student outcomes. In their literature review, the researchers indicated that previous studies verified self-efficacy and skill development as being influenced by the level of professional development undergone by teachers. Similar results were obtained by Leblanc et al. (2009) in their investigation of the influence exerted by autism-centered training workshops on 105 beginning teachers. The experiments showed that the teachers exhibited increasingly positive perceptions and beliefs regarding knowledge of students with ASD and evidence-based practices. The researchers also demonstrated that providing even a limited number of training workshops aided the teachers in reducing stress and anxiety.

A similar but more recent study is that of Horan and Merrigan (2019), who adopted a mixed-methods design in examining the impact of specialized training workshops on the
level of educators’ perceived efficacy regarding teaching students with ADD in elementary schools. The researchers recruited 50 special education teachers, among whom seven were chosen for follow-up semi-structured interviews. To determine differences between teachers, the researchers divided the participants into two groups: 16 educators were assigned to the group featuring little to no training, or those who took part in four training workshops or fewer, whereas 23 were categorized in a group comprising highly trained individuals. Their results indicated that the highly trained educators showed higher self-efficacy than that observed among their minimally trained counterparts.

In many studies, teachers of students with autism have called attention to their constant need for career development to help them overcome the obstacles that they face in teaching students. In Corkum’s (2014) mixed-methods study on the requirements of teachers as to training workshops in schools, the author administered a survey to 225 educators and conducted focus group interviews with 33 teachers. The results reflected that the teachers faced problems meeting the different needs of students with ASD in the classroom. These problems included lack of support from other teachers and lack of resources and specialists. The teachers reported their need for professional development training at different levels and aspects at all times as a means of support when they are confronted with challenges in teaching students with ASD.

Finlay et al. (2019) determined the challenges that teachers of students with ASD experience in their classes and investigated their perceptions regarding the types of specialized training that are considered the most beneficial for them. In line with the purpose of the study, Finlay et al. (2019) surveyed 125 special educators of students with ASD. The most taxing factors that they identified were the challenging behaviors of students and
curriculum chaining as a means of teaching students. Their results also indicated that teachers need specialized professional development training to overcome these challenges.

Tiwari and John (2017) conducted a descriptive cross-sectional research study on the level of knowledge and training of 47 teachers of students with ASD in India. Overall, the participants displayed a low understanding of autism and poor knowledge regarding the teaching methods appropriate for students with ASD. The researchers also confirmed the necessity of increasing the participants’ knowledge through professional development training. Another study was directed toward identifying the most important needs of teachers with respect to professional development training related to teaching students with ASD; this included determining the types of training that the participants received regarding evidence-based practices (Brock, 2014). The investigation revolved around the points of view of administrators and teachers (Brock, 2014). Brock (2014) administered a survey to 400 participants, among whom 241 were special education teachers, 33 were general educators, and 126 were school administrators. They reported that the teachers exhibited low confidence in applying evidence-based practices in their classes, but both administrators and teachers had positive perceptions regarding the benefit of training workshops in their teaching—especially those associated with evidence-based practices.

Professional development enhances teachers’ educational experiences, making them more knowledgeable in teaching their students. Numerous researchers (e.g., Latouche & Gascoigne, 2019; Higginson & Chatfield, 2012) demonstrated that enhancing the competencies of special educators through specialized training workshops makes a difference in their practice and knowledge. For example, Higginson and Chatfield (2012) found that teachers of students with ASD expanded their knowledge and evidence-based teaching
methods and learning strategies after they participated in specialized training. Latouche and Gascoigne (2019) examined the effectiveness of a professional development program in increasing the knowledge and sense of self-efficacy among teachers of students with attention deficit hyperactivity disorder (ADHD). The researchers recruited 274 special education teachers to participate in an experiment and divided them into intervention and control groups. They then provided training on ADHD to the intervention group. After a month, both knowledge and self-efficacy increased in the intervention group, demonstrating that training workshops favorably affect both of these variables.

**Induction and Mentoring**

Induction and mentoring are important factors in preventing new teachers from dropping out (Billingsley, 2004). A good school induction program outlines the school’s educational and pedagogical policies and highlights the problems and obstacles faced by new teachers (Billingsley, 2004; Billingsley & Tomchin, 1992). Discussing potential pitfalls before the school year begins fosters a safe environment in which new teachers are encouraged to share the problems they are having instead of bottling them up and attributing them to their own lack of competence. Whitaker (2000) found that beginning special education teachers who attended school induction programs were better prepared for the school’s demands than those who did not. Kennedy and Burstein (2004) investigated the Beginning Teacher Support and Assessment (BTSA) program in California and found that the program contributed to the retention of teachers. Albrecht and Johns (2014) found that the main support factor for new special education teachers remaining in the field was induction and mentoring programs from administrators. Mentoring programs also contribute to increased job satisfaction of special education teachers by increasing their feelings of
success (White & Mason, 2006). Increasing teachers’ positive experiences contributes to increased self-efficacy (Bandura, 1994). For example, when a new teacher learns how to organize paperwork efficiently and collaborate with other teachers, opportunities for early engagement are increased and stress at school is reduced.

**Salary**

Salary is the single most important factor influencing special education teachers’ decision to stay or leave (Farrell, 2016). The issue of salaries for special education teachers—and all teachers—is related to several factors, including economic status, average incomes, and the demands of the field (Glewwe, Hanushek, Humpage, & Ravina, 2011; Kelly, 2004). Miller et al. (1999) and Singer (1992) noticed that special education teachers who work in school districts that pay higher-than-average teacher salaries are less likely to leave the profession prematurely, while researchers confirmed that the opposite is also true. In a similar investigation that examined the factors leading to special education teacher attrition, Van Alstine (2010) found that 100% of special education teachers agreed that the salary level is a definite factor that contributes to staying in or leaving the job. Furthermore, McLeskey et al. (2004) and Rice and Goessling (2005) found that low social status and low financial support for special education teachers contribute to reducing the number of individuals who want to study special education and increasing the number of teachers looking for other jobs. Kavenuke (2013) found that, in developing countries, salary is important in influencing teachers’ decisions to stay in their jobs and added that most teachers wanted to stay because of their salaries most of all. Farrell (2016) reported that most special education teachers leave their careers within the first three years because of low salaries and other factors, such as lack of administrator support. Conversely, The Council for Exceptional Children (2012) reported
that one of the reasons that special education teachers persist in teaching is to increase their salaries—special education teachers who have high salaries are more likely to remain in their careers or transfer laterally to a similar position (Miller et al., 1999).

**Paperwork**

Many researchers have conducted studies to identify factors that make special education teachers stay in the field (Billingsley, 2004; Gersten et al., 2001), one of which is decreasing paperwork (Nance & Calabrese, 2009). Special education teacher responsibilities at school are considered heavy, and they spend even more time outside of the classroom managing Individualized Education Programs (IEPs) and writing somewhat separate lesson plans for each student. Special education teachers are required to document every step they take with students, adding up to a lot of paperwork every school day. In the United States, special education teachers must document IEPs for each student according to IDEA 2004 (Bettini et al., 2015; Billingsley, 2004; Gersten et al., 2001; Nance & Calabrese, 2009). Paperwork has been found to increase special education teachers’ stress, and administrative tasks have been found to reduce the time available for student support (Nance & Calabrese, 2009). Teachers may spend from four to 14 hours each week on paperwork alone (U.S. Office of Special Education Programs [OSEP], 2002). Conley and You (2016) found that paperwork is one of the factors that leads to decreased job satisfaction among special education teachers, increasing the likelihood of leaving the profession or transferring. Vannest et al. (2010) found that special education teachers sometimes did not have time to write lesson plans because they were busy completing other paperwork.

In semi-structured telephone interviews regarding methodology with 18 special education teachers, Mehrenberg (2013) identified paperwork as a predicting factor as to
whether teachers of students with special needs will remain in their careers. The researcher noted that participants spend more than five hours per week on paperwork at the expense of more important tasks, such as attending IEP meetings, cooperating with other teachers, contacting parents, or preparing lessons. A similar study was conducted by Carlson et al. (2002) to investigate special educators’ needs. The researchers reported that 53% of special education teachers identified paperwork as a factor that influences their ability to teach students. Emhich (2001) found that paperwork is a predicting factor of stress among teachers as a result of his survey of 300 secondary teachers of students with learning disabilities.

**Class Size**

The number of students in the classroom is an important factor influencing the teacher’s effectiveness and satisfaction. Many studies have indicated that an increase in the number of students in the classroom affects the teacher’s decision to stay or transfer elsewhere (Theobald, 1989). Piatt and Olson (1990, as cited in Billingsley, 1993) pointed out that most of the special education teachers who responded to the survey stated that an increase in the number of students in their class was a critical factor in deciding whether to stay or leave the teaching profession. Furthermore, Billingsley and Cross (1991) also found that one of the reasons that affects a teacher’s decision to stay or leave is the number of students. It is worth noting that a number of studies indicate that the appropriate special education teacher-to-student ratio in the classroom ranges from 1:12 to 1:15. Hocutt (1996) indicated that the average number of students with disabilities assigned in the classroom is about 15 students to one teacher. This result is identical to that of McCrea’s (1996) report, which also found after reviewing two federally funded studies that the maximum number of
students with disabilities to instructors is about 15:1. These studies, however, do not account for the exact nature of the disability in question.

**Self-efficacy of Teachers Working with Students with ASD: A Systematic Review**

Educators with high self-efficacy are more likely to achieve positive outcomes with student performance and to demonstrate the ability to overcome negative influences in their environments (Coladarci & Breton, 1997). Ashton et al. (1983) state that teachers with a high sense of self-efficacy tend to be more organized and activated than other teachers. Therefore, a teacher with high self-efficacy may be more flexible, may theorize new approaches, and may demonstrate a strong inclination to apply such new methods to improve instruction (Gibson & Dembo, 1984). In general, teachers with strong self-efficacy are likely to be more engaging than teachers without it (Gibson & Dembo, 1984). This systematic review focuses on identifying several significant factors that affect the self-efficacy of special education teachers.

**Eligibility Criteria**

Studies from the initial screening were selected if they: (a) focused on the relationship between self-efficacy—the key term—and one of the following terms: commitment, job satisfaction, burnout, demographics (age, experience, and gender), curriculum, classroom management, and social support, (b) clearly identified the scales or questionnaire used, (c) selected in-service special education teachers, including teachers of students with autism, or in-service special education students as participants in the study, (d) were published in peer-reviewed journals in English or Arabic, and (e) were published between 2000 and 2019 (in the current century).
Studies from the initial screening were excluded if they: (a) did not focus on the relationship between self-efficacy and one of the terms listed above, (b) did not identify a scale or questionnaire to measure self-efficacy with other variables, (c) selected only pre-service special education teachers or all participants were general educators, (d) were not published in peer-reviewed journals in English or Arabic, and (e) were published prior to 2000 (in the past century). Seventeen articles met the inclusion criteria.

Results

Of the 17 reviewed articles, below in Table 3, that met the inclusion criteria, five articles were associated with self-efficacy and burnout, three articles were associated with self-efficacy and inclusion, two articles were associated with self-efficacy and job satisfaction, one article was associated with teachers of students with ASD, one article was associated with self-efficacy and commitment, one article was associated with self-efficacy and work conditions, one article was associated with self-efficacy and curriculum, one reviewed article was associated with the relationship between self-efficacy and instructional strategies, classroom management, and student involvement; one article was associated with levels of self-efficacy; and finally one article was associated with self-efficacy and attitudes toward teaching students with autism. The articles were synthesized according to which ones included methodology, participants, and findings.
Table 3

Studies Included Special Education Teachers’ Self-efficacy

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Purpose of study</th>
<th>Participant(s) age/gender/ experiences</th>
<th>Methodology</th>
<th>Instrument(s)</th>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>Finding(s)</th>
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</table>
| Antoniou et al. (2017) | To examine the relationship between the level of self-efficacy of special education teachers and teaching strategies, class management, and student engagement. | N= 200 teachers Age= NA Gender= males/female Experiences= NA | Quantitative research approach | For self-efficacy (the Teachers Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Hoy (1998). | Self-efficacy | Teaching strategies, Class management, Student engagement | -A high level of self-efficacy among special education teachers in strategies, class management, and student engagement. -No significant difference regarding demographics (e.g., ages, gender, and experience) emerged in the study. -Special education teachers with a high sense of self-efficacy provided an enriched learning environment for
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<th>Author(s)</th>
<th>Purpose of study</th>
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<th>Methodology</th>
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<th>Dependent variable</th>
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<th>Finding(s)</th>
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<tbody>
<tr>
<td>Boujut et al. (2017)</td>
<td>To exam the techniques that teachers of students with ASD may use while experiencing burnout and linked them with the degree of teachers’ self-efficacy</td>
<td>N= 203 teachers of students with ASD. Age= 1-42 Gender= males/female Experiences= 1-33 years</td>
<td>Quantitative research approach</td>
<td>For self-efficacy (the Teachers Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Hoy (1998) For burnout (The Maslach Burnout Inventory (MBI,</td>
<td>Self-efficacy</td>
<td>Burnout</td>
<td>When teachers had low self-efficacy, they used emotion-focused coping strategies (e.g., wishing for a miracle) as an indicator of higher burnout. -when teachers of students with ASD have low self-efficacy, they experience more stress in a situation</td>
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<td>Author(s)</td>
<td>Purpose of study</td>
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<td>Capri &amp; Guler (2018)</td>
<td>To identify the level of job burnout based on socio-demographic variables, job satisfaction, and teachers’ self-efficacy.</td>
<td>N= 452 teachers Age= 20-50 Gender= males/female Experiences= NA</td>
<td>Quantitative research approach</td>
<td>Maslach &amp; Jackson, 1981) For self-efficacy (General Competence Belief Scale (GCBS) developed by Jerusalem and Schwarzer (1981) For burnout (The Burnout Scale-Short Form was created by Pines (2005)</td>
<td>Burnout job satisfaction teachers’ self-efficacy</td>
<td>-Teachers with high self-efficacy experienced less burnout. -The degree of burnout decreased when the length of experience and the age of teachers increased. -There was no relationship between burnout and marital status.</td>
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<tr>
<td>Jennett et al. (2003)</td>
<td>To exam the relationship of the commitment that teachers of students with</td>
<td>N= 64 teachers Age= NA Gender= males/female</td>
<td>Quantitative research approach</td>
<td>The Autism Treatment Philosophy Questionnaire developed by the authors</td>
<td>Self-efficacy</td>
<td>Commitment</td>
<td>-A positive commitment to both approaches, teachers with a high commitment to the theoretical</td>
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### Author(s) Purpose of study

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Purpose of study</th>
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<tbody>
<tr>
<td>Lamture &amp; Gathoo (2017)</td>
<td>To highlight the level of self-efficacy of general and resource teachers who work with students with special needs.</td>
</tr>
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</table>

### Participant(s) age/gender/experiences

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<tr>
<th>Participant(s) age/gender/experiences</th>
<th>Methodology</th>
<th>Instrument(s)</th>
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<th>Finding(s)</th>
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<tr>
<td>autism have to their job using the Applied Behavior Analysis (ABA) approach and the Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH) approach.</td>
<td>Experience= NA</td>
<td>For self-efficacy (Teacher Efficacy Scale developed by Gibson and Dembo (1984).</td>
<td>Mastery experiences vicarious experience social persuasion</td>
<td>orientation of their teaching approach showed less burnout and a higher sense of self-efficacy. -Both groups had greater self-efficacy in terms of general and personal self-efficacy and, moreover, that teachers of students with autism demonstrated low rates of burnout and tended to exhibit self-efficacy. -The self-efficacy of resource teachers was significantly higher than that of general teachers because the resource teachers had more experience and</td>
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<td>N= 120 teachers Age= 24-60 Gender= males/female Experiences= NA</td>
<td>Quantitative research approach</td>
<td>Bandura’s the Teachers Sense of Efficacy Scale</td>
<td>Self-efficacy</td>
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#### Notes
- Lamture & Gathoo (2017) conducted a study to investigate the level of self-efficacy of general and resource teachers who work with students with special needs.
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<th>Author(s)</th>
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<tbody>
<tr>
<td>Lu Minghui et al. (2018)</td>
<td>to examine the relationships between self-efficacy, socio-demographic, social support, and work engagement factors for special education teachers.</td>
<td>N= 1027 teachers Age= NA Gender= males/female Experiences= NA</td>
<td>Quantitative research approach</td>
<td>For self-efficacy (the Teachers Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Hoy (1998). the Multi-Dimensional Scale of Perceived Social Support (MSPSS) developed by Zimet et al. (1988). The Utrecht Work Engagement Scale (UWES) developed by</td>
<td>Self-efficacy socio-demographic. social support work engagement</td>
<td>professional training. -Socio-demographic variables have a predictor relationship with teacher self-efficacy. -The study made clear that salary, years of experience, and gender strongly impact teacher self-efficacy. -Work engagement plays an indirect role in mediating the relationship between self-efficacy and social support and thus that social support may increase teacher self-efficacy by reinforcing work engagement.</td>
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<td>Malinen et al. (2012)</td>
<td>To the relationship between the self-efficacy of in-service teachers and attitudes to inclusive education based on demographic variables.</td>
<td>N= 436 teachers Age= NA Gender= males/female Experiences= NA</td>
<td>Quantitative research approach</td>
<td>Schaufeli et al. (2002) For self-efficacy The Teacher Efficacy for Inclusive Practice Scale (TEIP) was developed by Sharma et al. (2011). For attitudes (the Sentiments Attitudes and Concerns about Inclusive Education (SACIE) scale developed by Loreman et al. (2007)</td>
<td>Self-efficacy</td>
<td>Attitudes to inclusive education</td>
<td>-Teachers with high self-efficacy demonstrated more positive attitudes to inclusive education. -Teachers with more experience in teaching students with disabilities demonstrate more self-efficacy and more positive attitudes to inclusive education.</td>
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<td>Author(s)</td>
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<td>Malinen et al. (2013)</td>
<td>To study teacher self-efficacy in inclusive practices from three different countries: China, Finland, and South Africa.</td>
<td>N= 1911 teachers Age= NA Gender= males/female Experiences= NA</td>
<td>Quantitative research approach</td>
<td>For self-efficacy The Teacher Efficacy for Inclusive Practice Scale (TEIP) was developed by Sharma et al. (2011). For attitudes (the Sentiments Attitudes and Concerns about Inclusive Education (SACIE) scale developed by Loreman et al. (2007)</td>
<td>Self-efficacy</td>
<td>Attitudes to inclusive education</td>
<td>-The best indicator for self-efficacy was experience in teaching. -Teachers with more experience teaching students with disabilities demonstrated more self-efficacy.</td>
</tr>
<tr>
<td>Nuri et al. (2017)</td>
<td>To investigate the self-efficacy and burnout based</td>
<td>N= 70 teachers Age= N/V</td>
<td>Quantitative research approach</td>
<td>For self-efficacy (the Teachers Sense of</td>
<td>Self-efficacy</td>
<td>Burnout</td>
<td>-Teachers who had lower work hours had lower self-efficacy than</td>
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<td>Othman (2013)</td>
<td>To identify the relationship between the self-efficacy of teachers of students with autism and their age/gender/experiences</td>
<td>Gender= males/female Experiences= NA</td>
<td>Quantitative research approach</td>
<td>The author developed the Self-Efficacy Scale and the Attitudes of Teachers of</td>
<td>Self-efficacy</td>
<td>Demographic variables</td>
<td>teachers with more working hours. Teachers who worked for more than 16 years with students with disabilities showed a higher degree of burnout than beginner. -Teachers who worked for less than five years. Teachers with more training and more experience had more self-efficacy. -Self-efficacy increases when teachers have more students. -Teachers of ASD students with more teaching experience demonstrated more self-efficacy. -Teachers with high levels of education</td>
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| Ozcan & Uzunboylu (2017) | To determine the educational needs of special education educators for curriculum | N= 84 teachers Age= NA Gender= males/female | Quantitative research approach | For self-efficacy (the Teachers Sense of Efficacy Scale (TSES)) | Self-efficacy | Curriculum | also showed more self-efficacy than those with low levels of education.  
- A relationship between professional training and self-efficacy: teachers who attended more training had higher rates of self-efficacy than those who did not attend any training.  
- A high level of self-efficacy in a teacher suggests that the teacher will demonstrate a positive attitude to ASD students.  
- Special education teachers stated that education objectives, teaching methods, and... |
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<tr>
<td>Özokcu (2018)</td>
<td>examined the relationship between teacher attitudes to inclusive education and teacher self-efficacy.</td>
<td>N= 1163 teachers Age= NA Gender= males/female Experiences= NA</td>
<td>Quantitative research approach</td>
<td>The Teacher Efficacy for Inclusive Practice Scale (TEIP)</td>
<td>Self-efficacy</td>
<td>Attitudes to inclusive education</td>
<td>Teacher attitude is positively associated with teacher self-efficacy. Self-efficacy is a strong indicator of teacher attitudes to inclusive education.</td>
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<td>development based on various demographic variables and, moreover, to determine their perceptions of self-efficacy.</td>
<td>Experiences= NA</td>
<td>developed by Tschannen-Moran and Hoy (1998). Ozcan and Uzunboylu also developed and employed a Needs Analysis Survey.</td>
<td>The Teacher Efficacy for Inclusive Practice Scale (TEIP) was developed by Sharma et al. (2011). For attitudes (The Sentiments, Attitudes, and</td>
<td>evaluations were crucial. -The self-efficacy of special education teachers for general teaching was at an intermediate level on the self-efficacy scale.</td>
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<td>Ruble et al. (2011)</td>
<td>To exam the relationship between the three sources of self-efficacy -- a sense of mastery, collective self-efficacy, and physiological responses – and their impacts on the self-efficacy of teachers of students with ASD.</td>
<td>N=35 teachers Age= NA Gender= males/female Experiences= NA</td>
<td>Quantitative research approach</td>
<td>For self-efficacy (the Teacher Interpersonal Self-Efficacy Scale developed by Brouwers and Tomic (2001). For attitudes (the Multifactor Leadership Questionnaire</td>
<td>Self-efficacy</td>
<td>Teachers attitudes Burnout</td>
<td>-No relationship between self-efficacy and years of experience among teachers of students with ASD. -No correlation between collective self-efficacy and teacher self-efficacy. -A negative relationship between the level of</td>
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<td>Sarıçam and Sakız (2014)</td>
<td>To investigate the relationship between self-efficacy and burnout based on demographic variables.</td>
<td>N= 118 teachers Age= 24-49 Gender= males/female Experiences= NA</td>
<td>Quantitative research approach</td>
<td>For self-efficacy (the Teachers Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Hoy (1998))</td>
<td>Self-efficacy</td>
<td>Burnout</td>
<td>self-efficacy and teacher burnout. -Teachers with experience managing their classroom successfully demonstrated lower levels of burnout and note that teachers found support from colleagues to be more effective than support from school principals. -Female teachers experienced higher burnout than male teachers. -No difference in self-efficacy among male and female teachers was apparent. -Special education teachers</td>
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<td>Shaukat et al., (2019)</td>
<td>To exam the relationship between job satisfaction and self-efficacy.</td>
<td>N= 118 Age= N/V Experiences= more than 5 years (n=64) less than 5 years (n=65)</td>
<td>Quantitative research approach</td>
<td>For self-efficacy (the teacher sense of efficacy (TES) scale developed by Tschannen-Moran and Hoy (2001). For job satisfaction (the job satisfaction scale established)</td>
<td>Self-efficacy</td>
<td>Job satisfaction</td>
<td>Female teachers had higher self-efficacy and job satisfaction than male special education teachers. Teachers with high self-efficacy also had high job satisfaction. a high level of education had high job satisfaction and self-efficacy. Teachers with ample experience tended to have job satisfaction.</td>
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For burnout (The Maslach Burnout Inventory (MBI, Maslach & Jackson, 1981)) demonstrated higher rates of self-efficacy than other teachers (e.g., music, art, and primary teachers) and, moreover, that special education teachers experienced lower burnout.
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<td>Viel-Ruma et al., (2010)</td>
<td>To exam the relationship between job satisfaction, collective efficacy, and self-efficacy</td>
<td>N= 100 Age= N/V Gender= N/V Experiences= NV</td>
<td>Quantitative research approach</td>
<td>For self-efficacy (Teacher Efficacy Scale developed by Gibson and Dembo (1984). For job satisfaction (the Brayfield-Rothe Index of Job Satisfaction (Brayfield &amp; Rothe, 1951)</td>
<td>Self-efficacy</td>
<td>Job satisfaction collective efficacy</td>
<td>-Teachers with high self-efficacy had high job satisfaction. -Collective efficacy directly impacted teachers’ self-efficacy. -Collective efficacy did not impact job satisfaction.</td>
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<td>Yassin and Ali (2014)</td>
<td>to reveal the relationship between self-efficacy and burnout among special education teachers and</td>
<td>N= 100 teachers Age= NV Gender= males Experiences= NA</td>
<td>Quantitative research approach</td>
<td>Authors bullied own self-efficacy and burnout used</td>
<td>Self-efficacy</td>
<td>Burnout</td>
<td>-There was a negative correlation between self-efficacy and burnout among special education teachers.</td>
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<td>Author(s)</td>
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<td>explored the differences in burnout based on demographic variables</td>
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<td></td>
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<td>-Females experienced more burnout than men, while teachers with more experience in teaching students with ASD experienced less burnout.</td>
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Job Satisfaction

Job satisfaction and special education teacher self-efficacy have a strong positive correlation (Shaukat et al., 2019; Viel-Ruma et al., 2010). A higher sense of self-efficacy increases a teacher’s sense of job satisfaction, while the opposite is also true (Shaukat et al., 2019). In a study that confirms the positive relationship between self-efficacy and job satisfaction in Pakistan, Shaukat et al. (2019) surveyed 118 special education teachers to study the impact of demographic factors such as gender, level of education, and experience on job satisfaction and self-efficacy. There is a statistically significant difference in the mean score between male and female teachers for self-efficacy and job satisfaction. The authors indicated that female teachers demonstrated higher rates of self-efficacy and job satisfaction than male special education teachers, so that female teachers had higher mean scores than males. Furthermore, the authors also stated that teachers with a high level of education demonstrated higher job satisfaction and self-efficacy. The researchers indicated that there is a significant difference related to the level of education. Based on their data tables, teachers with graduate-level education had higher self-efficacy than teachers with only undergraduate degrees. Finally, Shaukat et al. stated that teachers with ample experience tended to demonstrate job satisfaction and self-efficacy. The researchers indicted that there a statistically significant relationship between teachers’ self-efficiency and years of teaching. Educators with five years of experience had significantly higher self-efficacy than teachers with less than five years of experience.

In another important study examining the relationship between job satisfaction, collective efficacy—or group efficacy—and self-efficacy, Viel-Ruma et al. (2010) surveyed 100 special education teachers. Their results revealed that teachers with high self-efficacy
had high job satisfaction, and that collective efficacy directly impacts teacher self-efficacy. However, they found that collective efficacy did not impact job satisfaction. Their data showed that there are no significant differences in efficacy based on the teacher’s level of education or certification type.

**Burnout**

Another factor that affects self-efficacy in special education teachers is job burnout. Five studies found a statistically significant negative relationship between teacher self-efficacy and job burnout (Boujut et al., 2017; Capri & Guler, 2018; Nuri et al., 2017; Sarıçam & Sakız, 2014; Yassin & Ali, 2014). In France, Boujut et al. (2017) studied the techniques that teachers of students with ASD may use while experiencing burnout and linked them with the degree of teacher self-efficacy. They surveyed 203 teachers of students with ASD and found that teachers with low self-efficacy demonstrated emotion-focused coping strategies (e.g., wishing for a miracle) when experiencing burnout. The authors added that teachers of students with ASD with low self-efficacy experience more stress in situations associated with threat or loss.

Nuri et al. (2017) used another approach to study self-efficacy and link it to burnout based on demographic variables. They surveyed 70 special education teachers using demographic variables such as age, level of education, work hours, and the number of students in the classroom. The researchers found that teachers with fewer work hours demonstrated lower self-efficacy than teachers with more working hours. They indicated that there is a statistically significant difference in mean self-efficacy related to working hours, where educators who work daily for about one to four hours had lower self-efficacy than teachers who work five hours or more daily. In addition, there is a significant difference
between years of teaching and burnout levels, where teachers who worked for more than 16 years with students with disabilities showed a higher degree of burnout than beginner teachers who worked for less than five years. The authors also indicate that self-efficacy increases when teachers have more students. Yassin and Ali (2014) conducted a similar study in Saudi Arabia that aimed to reveal the relationship between self-efficacy and burnout among special education teachers and explored differences in burnout based on demographic variables (e.g., gender, age, and years of experience). They surveyed 100 special education teachers. Their results indicate that a negative correlation exists between self-efficacy and burnout among special education teachers. In addition, the authors reported that there is statistically significant difference in burnout between genders. More precisely, Yassin and Ali (2014) detailed that the women in their study experienced burnout more frequently than the men. Meanwhile, teachers in the study with more experience teaching students with ASD experienced burnout less frequently than those with less experience.

Working in a similar context, Capri and Guler (2018) conducted a study that aimed to identify levels of job burnout based on socio-demographic variables, job satisfaction, and teacher self-efficacy. They surveyed 452 special education teachers. Their findings indicated that teachers with high self-efficacy experienced less burnout. They found that the degree of burnout decreased when the teacher’s length of experience and age increased. Additionally, the authors noted that no relationship emerged between burnout and marital status.

Another important study on teacher self-efficacy and burnout was conducted by Sarıçam and Sakız (2014), who investigated the relationship between self-efficacy and burnout based on demographic variables in Turkey. They surveyed 118 special education
teachers. Their results indicated that female teachers experienced higher burnout than male teachers at a statistically significant rate. In addition, Sarıçam and Sakız reported that special education teachers demonstrated higher rates of self-efficacy than other teachers (e.g., music, art, and elementary school teachers) and, moreover, that special education teachers experienced lower burnout.

**Inclusion**

Special education teachers’ attitudes to integration were affected by several factors, including demographics (e.g., age, gender, experience), student factors (e.g., disability), environmental factors (e.g., educational materials), and internal factors (e.g., self-efficacy) (Avramidis & Norwich, 2002; Sharma et al., 2012). Several studies (Malinen et al., 2012; Malinen et al., 2013; and Özokcu, 2018) examined the relationship between self-efficacy and inclusion. More specifically, Özokcu (2018) examined the relationship between teacher attitudes to inclusive education and teacher self-efficacy. Özokcu surveyed 1,163 special education teachers. Özokcu’s findings indicated that teacher attitude is significantly positively associated with teacher self-efficacy. Furthermore, the authors confirmed that self-efficacy is a strong indicator of teacher attitudes to inclusive education.

In another study, Malinen et al. (2013) surveyed 1,911 in-service teachers, including special education teachers, to study self-efficacy in inclusive practices in three different countries: China, Finland, and South Africa. The authors found that the best indicator for self-efficacy was experience. They explained that teachers with more experience teaching students with disabilities demonstrated more self-efficacy. Researchers indicated that the special education teachers in Finland generally had more positive attitudes than teachers in South Africa. Meanwhile, Malinen et al. (2012) studied the relationship between the self-
efficacy of in-service teachers and attitudes to inclusive education based on demographic variables. They surveyed 436 teachers in their study. Their findings indicated that teachers with high self-efficacy demonstrated more positive attitudes to inclusive education. This study, therefore, confirmed that teachers with more experience in teaching students with disabilities demonstrate more self-efficacy and more positive attitudes to inclusive education.

**Teachers of Students with ASD**

One study examined the relationship between the sources of self-efficacy and their effects on teachers of students with autism. More specifically, Ruble et al. (2011) studied the relationship between the three sources of self-efficacy—a sense of mastery, collective self-efficacy, and physiological responses—and their impacts on the self-efficacy of teachers of students with autism. Ruble et al. (2011) proposed that a positive relationship exists between mastery experience, measured by the number of years in which a teacher has taught, and teacher self-efficacy. The authors further hypothesized that social persuasion has a direct link with the self-efficacy of teachers of students with ASD, which they examined based on perceived leadership by the principal. In addition, the authors hypothesized that physiological responses—interpreted based on the level of burnout—have a negative relationship with teacher self-efficacy. In this study, Ruble et al. selected 35 teachers of students with autism between three and nine years old. The authors used three types of scales to measure teacher self-efficacy and the three sources of self-efficacy. To be precise, they used the Teacher Interpersonal Self-Efficacy Scale developed by Brouwers and Tomic (2001) to examine teacher self-efficacy and applied the Multifactor Leadership Questionnaire developed by Avolio, Bass, and Jung (1999) to measure teacher attitudes to support from school administrators. The authors also used the Maslach Burnout Inventory developed by Maslach
et al. (1997) to assess physiological responses. Ruble et al. (2011) reported that their results show no relationship between self-efficacy and years of experience among teachers of students with ASD and, moreover, no correlation between collective efficacy and teacher self-efficacy. But the perceptions of administrator support and self-efficacy for classroom management were closely correlated. Additionally, the authors reported a negative relationship between the level of self-efficacy and teacher burnout. They indicated that teachers with experience managing their classroom successfully demonstrated lower levels of burnout and noted that teachers found support from colleagues to be more effective than support from school principals.

**Commitment**

One study that met the inclusion criteria for the current study described the relationship between job commitment and teacher efficacy. That study by Jennett et al. (2003) explored the relationship between the commitment that teachers of students with autism have to their jobs using the Applied Behavior Analysis (ABA) approach and the Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH) approach. The scholars also investigated the relationship between self-efficacy and burnout for teachers of students with autism. For our purposes, it is important to note that Jennett et al. (2003) divided 64 teachers of students with autism into two groups: 34 participants representing the ABA approach and 30 teachers representing the TEACCH approach. The authors used a correlation research design with an online survey. More specifically, they used the Autism Treatment Philosophy Questionnaire developed by the authors and the Teacher Efficacy Scale developed by Gibson and Dembo (1984).
Their results demonstrated that, while both groups of teachers showed a positive commitment to both approaches, educators who identified themselves as having a TEACCH orientation had significantly greater TEACCH than other teachers. At the same time, educators who identified themselves as having an ABA approach had significantly more ABA than other educators. Furthermore, teachers with a high commitment to the theoretical orientation of their teaching approach showed less burnout and a higher sense of self-efficacy. In addition, Jennett et al. findings revealed that both groups had greater self-efficacy in terms of general and personal self-efficacy and, moreover, that teachers of students with autism demonstrated low rates of burnout and tended to exhibit self-efficacy.

**Work Conditions**

Only one study was identified that examined the relationship between special education teacher self-efficacy and socio-demographic, social support, and work engagement factors. More specifically, Lu et al. (2018) surveyed 1,027 special education teachers in China to examine the relationships between self-efficacy, socio-demographic components (e.g., gender, years of experience, and monthly salary), social support, and work engagement factors for special education teachers. The researchers employed the Teachers’ Sense of Efficacy Scale developed by Tschannen-Moran and Hoy (2001) to measure teacher self-efficacy, the Multi-Dimensional Scale of Perceived Social Support (MSPSS) developed by Zimet et al. (1988) to examine social support variables, and the Utrecht Work Engagement Scale (UWES) developed by Schaufeli et al. (2002) to investigated work engagement. Their results strongly indicated that socio-demographic variables have a predictor relationship with teacher self-efficacy; the study made clear that there is a statistically significant impact of salary, years of experience, and gender on teacher self-efficacy. In addition, the results made
clear that work engagement plays an indirect role in mediating self-efficacy. The effect was significant at the 0.01 level, and social support may increase teacher self-efficacy by reinforcing work engagement.

**Curriculum**

One study examines the relationship between self-efficacy and curriculum for special education teachers. In the northern part of Cyprus et al. (2017) conducted a study that aimed to determine the educational needs of special education teachers for curriculum development based on various demographic variables and, moreover, to determine their perceptions of self-efficacy. In this study, Cyprus et al. used a quantitative research approach and surveyed 84 teachers of students with special needs using the Teachers’ Sense of Efficacy Scale (TSES) developed by Tschanne-Moran and Hoy (1998). Additionally, Ozcan and Uzunboylu also developed and employed a Needs Analysis Survey. The authors reported that special education teachers stated that education objectives, teaching methods, and evaluations were crucial. The researchers found that the self-efficacy of special education teachers was at an intermediate level on the self-efficacy scale, where their score as a mean of the sample and standard deviation was (\( S = 0.419 \)), while the teachers of students with special needs’ perceived efficacy was on an intermediate level.

**Instruction Strategies, Classroom Management, and Student Involvement**

Antoniou et al. (2017) conducted a study that aimed to examine the relationship between the level of self-efficacy of special education teachers and teaching strategies, classroom management, and student engagement. The authors selected 200 special education teachers and measured their self-efficacy using the TSES developed by Tschanne-Moran and Hoy (2001). Antoniou et al. reported a high level of self-efficacy among special
education teachers in strategies, class management, and student engagement and, moreover, made clear that the results evidence no significant difference regarding demographics (e.g., age, gender, and experience). The researchers argued that special education teachers with a high sense of self-efficacy provided an enriched learning environment for students with special needs and, in addition, that these teachers applied new strategies and methods of learning. Furthermore, Antoniou et al. reported that teachers with high self-efficacy had more successful classroom management techniques.

**Attitudes to Teaching Students with Autism**

Othman (2013) conducted a study that aimed to identify the relationship between the self-efficacy of teachers of students with autism and their attitudes to teaching students with autism based on demographic variables. The author’s sample consisted of 60 teachers of students with ASD. The author developed the Self-Efficacy Scale and the Attitudes of Teachers of Students with Autism Scale. Othman (2013) reported that teachers of students with autism with more teaching experience demonstrated more self-efficacy. Moreover, teachers with high levels of education also showed more self-efficacy than those with low levels of education. Furthermore, Othman (2013) reported a relationship between professional training and self-efficacy: teachers who attended more training sessions had higher rates of self-efficacy than those who did not attend any training. For our purposes, it is helpful to note that Othman (2013) argued that a high level of self-efficacy in a teacher suggests that the teacher will demonstrate a positive attitude to students with autism.

**Level of Self-efficacy**

Lamture and Gathoo (2017) conducted a study in India that aimed to highlight the level of self-efficacy of general and resource teachers who work with students with special
needs. Of the study’s 120 participants, 60 were general teachers and 60 were resource teachers. The researchers used a quantitative research approach for their study and employed Bandura’s TSES to compare the two groups. Lamture and his colleague (2017) argued that their results showed that the self-efficacy of resource teachers was significantly higher than that of general teachers because the resource teachers had more experience and professional training. This suggests that training for special education teachers can increase their self-efficacy as well as their degree of comfort. Moreover, this study also made visible the role of the school climate as a factor in increasing the self-efficacy of teachers.

**Conclusion**

In the special education field, retention and attrition of teachers have been considered critical issues in the United States for the past decade (Berry, 2012; Berry et al., 2011; Conley & You, 2017). In 2015, the Every Student Succeeds Act (ESSA) was signed by President Barack Obama. This law replaced the No Child Left Behind (NCLB) Act and offered more flexibility to the states to develop their own education standards. The most important of these changes was the end of teacher evaluation based on student outcomes and the removal of the requirement that teachers meet “highly qualified teacher” standards (Office of Postsecondary Education, 2016). This change was based on statistics that showed that teacher attrition is a more serious issue than insufficient qualification. In 2016, the Office of Postsecondary Education reported special education teacher shortages in 46 states, with 12.3% of special educators leaving the profession per years. The same report added that special education was one of most in demand fields between 1990 and 1991, and 2017 and 2018. I discussed models for classifying factors impacting teachers’ decisions to leave or stay (Billingsley’s model and Bronfenbrenner’s model). Based on the literature I reviewed, I
classified the factors into internal factors and external factors. Internal factors such as job satisfaction, burnout, and commitment were the most influential elements in special education teachers’ decisions, while external factors play a role in increasing or mitigating the severity of the internal factors.

The implications of this review concern the nature of the relationship between self-efficacy and other variables, including both internal and external factors, that could improve levels of self-efficacy among special education teachers. Because self-efficacy appears to be related to internal and external factors, educational leaders would do well to consider how to best encourage teacher self-efficacy. This study makes evident that school leadership might amplify teacher self-efficacy by improving administrative support and creating more opportunities for professional workshops and induction programs. The research surveyed in this study also suggests that in-service teachers may improve their self-efficacy by improving their collaboration skills—collaborative work helps teachers gain a sense of belonging in the school (Jones et al., 2013). Overall, institutional improvements in student curriculum, workload, discipline, and administrative support may enhance teacher self-efficacy. To be sure, such improvements stretch beyond the teacher, also enhancing student engagement and school environment. Finally, this study makes clear that professional development increases teacher self-efficacy. Therefore, to improve self-efficacy, teachers should be encouraged to improve their knowledge through continuing education or by attending more training workshops. In the next section, I present the methodology that I apply with participants.
Chapter 3

Methodology

Introduction

The purpose of this study was to determine factors that influence teachers to remain in their careers and factors affecting their self-efficacy to teach students with autism in Tabuk, Saudi Arabia. The main research questions were:

1. What factors do special educators in Tabuk, Saudi Arabia identify as influencing their desire to continue working with students with ASD?
2. What factors do teachers of students with ASD in Tabuk, Saudi Arabia identify as influencing their self-efficacy in teaching?

Research Design

Based on the research questions above, I implemented a descriptive qualitative study of teachers' experiences using interviews to gather perceptions of teachers of students with ASD in Tabuk, Saudi Arabia, regarding the factors that influence their desire to continue teaching their students and the factors that influence their ability to teach students with ASD. The most commonly used method of conducting studies investigating the self-efficacy of special education teachers is called a descriptive research design. This methodology is commonly used in social sciences, psychology, and educational research (Creswell, 2011). The purpose of descriptive research is to explain and describe the studied issue. Descriptive research includes both qualitative and quantitative research approaches (Koh & Owen, 2000). In this study, I used the descriptive qualitative approach. The qualitative descriptive to research has been interpreted in many ways: Shank (2002), for example, defined qualitative research as “a form of systematic empirical inquiry into meaning” (p. 5). In this definition,
“systematic” indicates that the research is designed, organized, and made public according to the agreement of the qualitative research participants (Ospina, 2004). “Empirical” indicates that the research is grounded in the experiences of the subjects (Ospina, 2004). According to this definition, attempts to understand others’ experiences are made through an “inquiry into meaning” (Ospina, 2004, p. 45). From another angle, Bogdan and Biklen (2007) argued that the qualitative approach is an umbrella term that includes “several research strategies that share certain characteristics” (p. 2) and defined qualitative research as “an approach to social science research that emphasizes collecting descriptive data in natural settings, uses inductive thinking, and emphasizes understanding the subject’s point of view” (p. 274). Furthermore, Glesne’s (2011) definition of qualitative research describes it as “a type of research that focuses on qualities such as words or observations that are difficult to quantify and lend themselves to interpretation or deconstruction” (p. 283). These definitions describe qualitative research as naturalistic, a term that refers to the qualitative researcher’s tendency to collect data from sites in which the research subjects encounter the research problem (Bogdan & Biklen, 2007; Creswell, 2007).

In qualitative descriptive studies, researchers focus on exploring the nature of the phenomenon under research (Lambert & Lambert, 2012). According to Lambert and Lambert (2012), the descriptive “data collection involves minimal to moderate, structured, open-ended, individual or focus group interviews” (p. 2). Using an interview as a data collection method provides several advantages to the researcher. First, the interview allows the researcher to clarify the ambiguity and confusion in some questions and answers (Ary et al., 2019). Written surveys without follow up do not allow for a discussion of ambiguity. Interviews ensure, or at least increase the likelihood, that all respondents understand the
correct context of the researcher’s question (Ary et al., 2019). Furthermore, the interview allows the interviewer to evoke information from the respondent that is difficult to obtain by other means—people generally prefer speaking to writing. Rather than testing hypotheses, the interview is the best way to understand people’s experiences and the meanings they imply (Ary et al., 2019; Creswell, 2011).

In the context of this study, a descriptive qualitative methodology may provide a process for gathering teachers’ perceptions of factors that influence their self-efficacy or factors that influence their decision to continue teaching students with ASD. Descriptive qualitative study in this study is the interview. There are several definitions of “interview.” One states that an interview is “a purposeful interaction in which one person obtains information from another” (Gay et al., 2009, p. 386). There are four different types of interview that researchers may employ in studies: one-to-one interviews, focus groups, telephone interviews, and email interviews (Ary et al., 2019; Creswell, 2011; Gay et al., 2009).

One-to-one interviews are the most commonly used data collection method in education research. Through this technique, an investigator meets with a single participant, asks questions, and records their responses. Multiple interviews may be conducted. This technique is frequently time-consuming and costly, but it is ideal for encouraging participants to speak without feeling uncomfortable (Creswell, 2011). In focus groups, the researcher meets with a group of participants, usually numbering between four and six, and conducts a discussion in support of the aim of the study. The researcher acts as a guide and recordkeeper (Creswell, 2011). This method is useful when the participants have common characteristics
and are cooperative with each other, as is the case with special education teachers (Creswell, 2011).

Researchers may also conduct telephone interviews with participants, especially when it is hard to reach them by other means. This method gives participants the freedom to choose where they want to be during the interview (Sweet, 2002). Another advantage of a telephone interview is the lower costs compared to face-to-face interviews as neither the researchers nor the participants have to incur costs related to travel and meeting place. McCoyd and Kerson (2006) also pointed out that telephone interviews decrease social pressure and increase rapport between researchers and their subjects. During the COVID-19 pandemic, distanced interviews via telephone or internet video call emerged as the only verbal interview option.

Email interviews allow researchers to obtain open-ended data by sending emails to participants who are comfortable using the internet. This also means that a large sample containing geographically dispersed participants can be assembled. However, the disadvantage of this method is that it is biased toward individuals who are comfortable using computers. Furthermore, ethical issues may arise with email interviews, such as permission to participate in the study or the protection of the privacy of participants’ responses (Ary et al., 2019; Creswell, 2011). Even the identity of respondents is in question when contact is only through email.

Selection of Participants

I selected six special education teachers from Tabuk, Saudi Arabia, as participants in the current study. Tabuk is one of the faster growing cities in Saudi Arabia. According to the Ministry of Education (2019), 235 teachers of students with special needs work in the Tabuk
region; that report, however, does not specify how many teachers of students with ASD there are in Tabuk. To address this deficit, I followed a non-probability purposive sampling method to select teachers for this study. According to Gay et al. (2012), a non-probability purposive sampling or judgment sampling method can be defined as “the process of selecting a sample that is believed to be representative of a given population” (p. 141). Using this method, researchers can select samples based on their experiences and provide clear criteria by which to conduct the selection process (Ary et al., 2019). According to Creswell (1998), the number of subjects in qualitative research studies should be between five and 25 participants, while Morse (1994) suggested at least six participants are required. In this study, I proposed to conduct interviews with approximately eight to twelve teachers, in part because each interview would be conducted twice with each participant.

I used the following eligibility criteria to select participants for interviews:

a) Participants should be in-service teachers of students with ASD;

b) Participants should have at least a bachelor’s degree in special education with a specialization in ASD;

c) Participants should have at least three years of experience teaching students with ASD;

d) Participants should work in special education in Tabuk, Saudi Arabia.

Participants who meet the following criteria were specifically excluded from the interviews:

a) Participants who are pre-service teachers of students with ASD;

b) Participants who have less than a bachelor’s degree in special education with a specialization in an area other than ASD;

c) Participants with less than three years of experience teaching students with ASD;
d) Participants who work in special education outside of Tabuk, Saudi Arabia.

Under these conditions, I was able to recruit four male and two female participants. I attempted to involve a similar number of male and female participants.

**Recruitment Procedures**

I completed the Institutional Review Board (IRB) process at the University of New Mexico (UNM) and received permission to begin recruitment. I asked the UNM Department of Special Education to provide me with an invitation letter to send both to the Ministry of Education in Tabuk and to the Graduate Tracking Department at the University of Tabuk. These institutions subsequently forwarded the invitation letter to all potential research participants. I wrote the invitation letter in Arabic; it included the researcher’s information, the purpose of the study, a statement indicating that their participation will be considered voluntary, a statement indicating that their personal information will be protected, and the researcher’s contact information—including email, cell phone number, and advisor email. See Appendix B for the invitation letter. I sent all documents to the Ministry of Education using its official WhatsApp social network. I received a confirmation letter back (see Appendix C), stating that the ministry sent the invitation letter to school leaders by either WhatsApp or fax.

As a result, six participants notified me through WhatsApp that they were interested in participating in the study. I determined their eligibility for participation after speaking to them. To ensure participants were available to be interviewed, I asked them to choose the best time to be interviewed. None of the participants were absent at the scheduled interview times. However, if one of the participants was unavailable, I offered to reschedule the interview at another convenient time.
Consent procedures

After receiving written approval from UNM’s IRB to conduct the study, and following an initial conversation with the participants, sent the consent form via WhatsApp so that it could be signed by the interviewees. Receiving the consent form through WhatsApp gave participants a good chance to read it carefully. The consent form was written in Arabic (see Appendix A).

Withdrawal

Before the participants signed the consent form to participate in the interview, I spoke with them via telephone and described the purpose of the study and discussed the letter of consent. This conversation included an explanation of their right to withdraw from the study at any time before, during, or after the interview, in accordance with the consent form. I explained that any participant who wished or requested to withdraw at any time from the study would be able to do so up until data anonymization began. I further explained that, during the study, I would conduct two interviews with each participant, and I would immediately destroy any personal information found in transcripts, translations, and research notes. As the participants had the right not to continue with the scheduled interviews, I informed them that if they chose to withdraw, I would destroy any data collected to that point.

Furthermore, I explained to the participants that they had the right not to answer any questions that they felt uncomfortable with or did not understand. They understood that the interview would be recorded from beginning to end and that they would have an opportunity to read the transcript to correct their responses. I confirmed that their personal information would not appear in the final study and that I would instead use a pseudonym in place of their
real name. Further, I assured them that no one would see their personal information other than the main researcher. Finally, I informed them that once I had received all signed consent forms, I would keep them in the data management section.

**Data Collection and Recording**

**Interviews**

I conducted interviews with six teachers of students with ASD in Tabuk to explore factors that influence their self-efficacy to teach and desire to continue to teach students with ASD. As discussed above, many different types of interviews can be used for research purposes. In this dissertation, I conducted semi- or partially structured interviews with potential subjects (see Appendix C). I conducted two interviews with each participant to gain in-depth information. The first interview focused on general questions—including demographic information—and encouraged participants to describe their perceptions of, beliefs about, and comfort level teaching students with ASD in Tabuk, Saudi Arabia.

One week after the first interview, depending on the participants’ schedules, I conducted a second interview with the same participant. The second interview focused on elaborating and discussing the responses provided in the first interview. With the participants, I discussed the factors that influence their willingness to continue working with students with ASD and the factors that influence their self-efficacy in teaching students with ASD.

I conducted interviews using Skype Voice-over-Internet-Protocol (VoIP) because I could not conduct video interviews for a number of reasons. In Islam, women cannot show their faces to strange men—men to whom they are not related. It is not appropriate to have face-to-face interviews with female participants. Furthermore, I could not travel to Saudi
Arabia to conduct face-to-face interviews for data collection. This approach, facilitated by the internet, offers researchers and participants the freedom to choose their own interview location rather than being required to meet in a specific location accessible to all parties (Ary et al., 2019; Creswell, 2011).

**Recording**

Through interviews, researchers have the opportunity to choose from various data collection methods, including taking notes during the meeting, writing notes after the meeting, or audio or video recording the participants during the interview (Ary et al., 2019; Creswell, 2011). Recording is the preferred method in education research because researchers can write notes and observe the participants during the interview and later create a detailed transcript of it. Taking notes during an interview may distract the researcher or the participant or disrupt the conversation, so writing notes after the meeting is preferred (Ary et al., 2019; Creswell, 2011).

In this study, I used digital audio recording to save participants’ responses to decrease the possibility of losing any information. More specifically, I used a voice recorder on my cell phone. I started recording at the beginning of each interview, and I stopped recording if the participant requested it at any point or at the end of the interview.

**Data Processing and Analysis**

**Transcription**

After the primary interviews were finished, I listened to the recorded interviews several times to make sure I understood the respondents’ beliefs and experiences about retention and self-efficacy. I took notes on any observations I made about each interview. Then, I transcribed the data directly in Arabic. I transcribed exactly what I heard, without
adding or deleting data, using Express Scribe Transcription Software. If any of the data was unclear, this was indicated with the word *unclear* in square brackets like so: [unclear].

The transcripts were anonymized by the following process. I created pseudonyms to indicate specific participants as I transcribed. Any information that could potentially reveal the identity of a participant, such as the name of their school, administrators, other teachers, or students, was deleted. If the participant provided such information, this would not be transcribed. Rather, a description of the deleted information was included within square brackets (e.g., [student name]). The participants’ personal information was secured in a cabinet in my home office. The link between participants’ pseudonyms and their actual names and personal data is only known to the primary researcher. This link exists in hard copy only and is stored separately from the consent forms and any printed copies of interview transcripts. This data will be destroyed once it is de-identified.

*Translation*

Once the interviews and their transcriptions were completed in Arabic, I translated excerpts of the participants’ interviews into English. I am a competent translator as I am fluent in both languages. However, I invited one of my Arabic-speaking colleagues who studies at the Linguistics Department at UNM to review the English-language translated excerpts to ensure that the translations were accurate and to verify the exact meaning of specific sentences.

*Data Analysis*

Qualitative researchers are interested in understanding the perspectives of their participants as well as reflecting on their roles in the study (Creswell, 2007). Additionally, qualitative researchers aim to create a complex picture of the studied problem by building
upon the relationships between many factors to develop a holistic picture of their results (Creswell, 2007). In this study, I adapted coding from grounded theory to analyze the received data after completing all interviews. Coding is a common approach in analyzing qualitative and interview data in grounded theory; it is a method of “segmenting and labeling text to form descriptions and broad themes in the data” (Creswell, 2011, p. 243).

There are three stages of coding data: open coding, axial coding, and selective coding (Ary et al., 2019). According to Flick (2014), the first step in developing initial coding—open coding—is to read and reread the transcriptions several times to develop a general understanding of the participants’ perceptions and experiences. Therefore, this was the first step I took after listening to the audio-recorded interviews and transcribing them. The second step was to upload the completed Arabic transcriptions into Dedoose, an online software analysis program. I used this program to identify salient excerpts in the data and develop codes. According to Creswell (2014), open coding is when “the researcher categorizes … information, drawing on evidence to support each category” (p. 246). In this stage, therefore, I read each word and each sentence to find codes, then grouped these codes into concepts known as inferential codes (Saldaña, 2009).

The next stage is axial coding. According to Strauss and Corbin (1990), axial coding involves putting the split data back together in new ways “by making connections between a category and its subcategory” (p. 97). This reveals the relationships among the ideas. In this stage, I included the most frequent similar patterns that occurred among all participants, and I excluded patterns that appeared only infrequently. This helped me to develop categories for the next step. I then grouped the subcategories to identify the categories and identified emerging themes. This is called selective coding, which consists of finding the link between
categories to represent the findings as themes (Ary et al., 2019; Creswell, 2014; Saldaña, 2009). Finally, I developed tables to summarize the coding processes described above.

**Member Checking**

After completion of data analysis, a brief summary of my initial analysis, together with relevant excerpts from the individual transcripts, was sent via WhatsApp to each participant to allow them to provide feedback on my interpretation of their interviews and offer any further insight into points of interest. This allowed the participants to review the findings and offer their reflections on the themes and/or the validity of my interpretations. None of the participants requested any changes in the themes and/or the validity of my interpretations.

**Validity Threats**

In a qualitative research approach, it is important to identify factors that may affect the validity of the results (Creswell & Miller, 2000). In general, validity concerns the strategies or methods that researchers use to provide valid results from their studies (Carcary, 2009). Validity is defined as a research component that researchers fulfill by explaining the relationship between their conclusions and reality (Maxwell, 2013). The preconceived notions of researchers may affect the potential results of the study (Mason, 2002). Maxwell (2013) also noted that there are no structured steps for identifying factors that affect validity, which means that researchers must develop their own methods for recognizing factors that may affect the results of their studies. However, Maxwell identified two types of validity threats: researcher bias and reactivity. Researcher bias means that identifying threats to validity will reduce the effects of these negative threats on validity. In other words, the research should have a great deal of integrity (Maxwell, 2013). The second threat to
validity—reactivity—occurs when the study setting or the researcher causes participants to change the way they act within the interaction (Maxwell, 2013).

In my dissertation, I expected both researcher bias and participant bias. Researcher bias that may appear when interpreting data is called “confirmation bias” (Metzgar, 2013, p. 175). This type of bias occurs when a researcher interprets data according to his/her predetermined goals and deletes data that do not fit with the anticipated results (Metzgar, 2013). I expected this type of bias to affect my study because I conducted the interviews and coded the results. Therefore, to address this potential threat, I reevaluated the respondents’ impressions at different times. In addition, when designing the interview questions, I faced another type of researcher bias, the “question-order bias.” This occurs when researchers ask questions in ways that influence the responses to subsequent questions (Jackson & Greene, 2017, p. 2). This bias could appear if I did not understand the limitations of the questions. To reduce the likelihood of this type of bias, I organized interview questions randomly.

Furthermore, I faced another type of researcher bias, “answer bias,” which occurs when questions prompt the participants in the direction of probable results (Metzgar, 2013, p. 175). I sought to reduce this type of bias by asking general questions that were not too specific and allowed respondents to answer in their own way.

**Ethical Considerations**

**Privacy**

One of the main concerns when interacting with participants is to respect them throughout the entire process of data collection, data analysis, and presentation of the results. After I had acquired approval from UNM’s IRB, I asked supervisors of teachers of students with ASD from Tabuk’s Ministry of Education to contact their advisees and send them an
invitation to participate in the research. They did not tell me the teacher’s name, address, or the schools in which they were employed. Furthermore, I assigned pseudonyms to the selected respondents when referring to them in transcripts or in the analysis and result derivation stages. Personal information such as consent letters, real names, and school names were recorded on paper and kept in my home office. During the interviews, I instructed the participants to refrain from disclosing their administrators’ names or those of their colleagues and students. Whatever the participants accidentally disclosed was deleted based on the right to confidentiality—especially data related to students with ASD or their families.

Confidentiality

As described earlier, a pseudonym was assigned to each of the six participants. Access to the link between the participants’ real names and their pseudonyms was mine only, and I refrained from disclosing to anyone where the documents were kept that revealed identifying information. I met with my advisor and my PhD colleagues every month to discuss the progress that I made throughout the study, ensuring that none of them knew any personal information related to the participants. The team enlisted to help me in the translation stage was prohibited from accessing such information, as the transcripts in Arabic were already anonymized. The same precautions were applied to the discussion of the results. I immediately removed any mention of administrators’ or colleagues’ names from the documentation. I destroyed the personal data I had accumulated in the analysis stage before using any online platforms. Only de-identified data was analyzed by Dedoose software. All of the stages of this dissertation were conducted online, including recruiting, collecting, analyzing, and presenting results, so all of the data was saved electronically—with the exception of identifying information. To store the data, I first saved all digital data such as
audio recordings, interview transcripts, and field notes, in separate folders on my home computer. I made a copy of these folders on an external hard drive that has strong password protection with a password known only to me. In addition, I sent the consent form through WhatsApp after receiving oral confirmation of the participants’ interest in my study. Next, the subjects signed consent forms and sent them to me as attachments. I then downloaded these consent forms to a secure folder on my computer. Subsequently, I deleted their messages from my WhatsApp account.

**Data Destruction**

As described above, all data was stored and saved electronically in highly secure, password-protected folders. The passwords were known only to me and were only typed into my home computer during and after the study’s completion. I kept all of the participants’ data on my home computer during the study. After completing my dissertation, I will copy the electronic data onto a USB drive, which I will store in my home office for five years—after which, I will delete the data from the USB drive and then destroy it.

**Data Security**

As I could not travel to Tabuk, Saudi Arabia, I did not conduct face-to-face interviews with the participants. Instead, I conversed via telephone from my home in Albuquerque, New Mexico. This meant that the sessions took place in a safe environment because I prohibited anyone from entering my home office when I was speaking with the respondents. During the transcription and analysis stages, I saved all electronic documents in a password-protected file stored on my own computer. A copy of these documents (transcriptions, recordings, and participant codes) was saved on a USB drive kept in a secure cabinet in my home office. The analyses were conducted using Dedoose, which requires a
password to login—to which no one has access, except for the individuals listed on the IRB approval sheet (i.e., my advisor and committee members). Should any documents pertaining to the respondents be lost or destroyed, or any unintentional change to the IRB-approved protocol occur that involves risks or breaches of privacy, confidentiality, or data security during the recruitment, data collection, and data analysis stages, I will write a report detailing the issue to my advisor. My advisor will then send it to the IRB within seven days.

**Potential Risks**

To prevent the participants from experiencing stress or anxiety during this study, I reminded them before starting each interview that they had the right to refuse to answer any questions. I also assured them that their personal information would be kept confidential, as the coding system (the use of pseudonyms, identity codes, and interview numbers) implemented in this work prevented a link to their real identities. This was intended to ensure that they were comfortable speaking about their relationships with their administrators, colleagues, students, and students’ parents. Finally, I let the participants know of their right to terminate the interviews or withdraw from the study at any time.

**Benefits**

Most researchers in Saudi Arabia who perform quantitative or survey research rarely adopt a qualitative approach in illuminating the self-efficacy of special education teachers. The main contribution offered by this dissertation is that it will clear the way for teachers of students with ASD to have their voices heard and improve the understanding of their experiences and perceptions as regards their self-efficacy as educators. The research also pointed out the factors that contribute to retention or those that motivate these educators to continue working with learners with ASD. This study allowed teachers to speak about their
jobs and their expectations regarding working in the field of special education, thereby engaging them in a dialogue on ways that the Ministry of Education or school leaders can enhance the quality of services provided to students with ASD.
Chapter 4

Findings

The purpose of this study was to determine factors that influence teachers to remain in their careers and factors affecting their self-efficacy to teach students with autism in Tabuk, Saudi Arabia. The main research questions were:

3. What factors do special educators in Tabuk, Saudi Arabia identify as influencing their desire to continue working with students with ASD?

4. What factors do teachers of students with ASD in Tabuk, Saudi Arabia identify as influencing their self-efficacy in teaching?

In this chapter, I present the results of two semi-structured interviews with each of six study participants. Immediately after receiving approval from the University of New Mexico’s Institutional Review Board, the recruitment process began. I sent an invitation letter to the Ministry of Education in Tabuk, Saudi Arabia, to forward to the supervisors of teachers of students with Autism Spectrum Disorder (ASD). Once the supervisors, both male and female, received the letter, they forwarded it to all schools in Tabuk. The letter asked interested potential participants to contact me via cell phone, WhatsApp, or email. Six individuals replied showing an interest in participating in the study. After conducting an initial conversation with each potential participant to determine that they were eligible to participate, I sent them a copy of the consent form to sign. Once the form was signed, I asked the participants to choose a good time to hold two voice-only interviews via Skype. Interviews were to be conducted at least one week apart.

Descriptions of Participants
Four men and two women participated in this study. All participants were employed in Tabuk at the time of the interviews, hold a bachelor’s degree in special education with a specialization in ASD, and had more than three years of experience teaching students with ASD. Table 4, below, provides basic information on each of the participants. Following the table are brief descriptions of each. These descriptions concern gender, level of education, years of experience, and the type of program in which they currently work—information they provided during their first interviews. The descriptions also indicate how the special educators became interested in teaching students with ASD and include a brief outline of their responsibilities in their schools. This information was obtained from both the first and second interviews with the participants.

**Table 4**

*Demographic of the Participant (N = 6)*

<table>
<thead>
<tr>
<th>Pseudonyms</th>
<th>Gender</th>
<th>Education level</th>
<th>Years of Experience</th>
<th>Type of program working in</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinda</td>
<td>Female</td>
<td>Bachelor’s degree</td>
<td>5</td>
<td>Partial Inclusion in Quranic school</td>
<td>Tabuk</td>
</tr>
<tr>
<td>Bedor</td>
<td>Female</td>
<td>Bachelor’s degree</td>
<td>6</td>
<td>Segregated School</td>
<td>Tabuk</td>
</tr>
<tr>
<td>Ziad</td>
<td>Male</td>
<td>Bachelor’s degree</td>
<td>4</td>
<td>Segregated School</td>
<td>Tabuk</td>
</tr>
<tr>
<td>Majed</td>
<td>Male</td>
<td>Bachelor’s degree</td>
<td>5</td>
<td>Segregated School</td>
<td>Tabuk</td>
</tr>
<tr>
<td>Fahd</td>
<td>Male</td>
<td>Bachelor’s degree</td>
<td>5</td>
<td>Partial Inclusion in Quranic school</td>
<td>Tabuk</td>
</tr>
<tr>
<td>Abed</td>
<td>Male</td>
<td>Bachelor’s degree</td>
<td>5</td>
<td>Segregated School</td>
<td>Tabuk</td>
</tr>
</tbody>
</table>

*Note.* Quranic schools focus on religious education.
Participants

Kinda. Kinda is a female special educator in Tabuk, Saudi Arabia. She has taught students with ASD for five years, since graduating from the university with a bachelor's degree in special education and a specialization in ASD. She was one of the top students in her program. Kinda did not wait long after graduation before starting her first job as a special educator in government schools. She reported being happy to have started her career more quickly than many other students. After beginning teaching, she spent two years at an early intervention program in Tabuk. Thereafter, she transferred to a Quranic school that has a partial inclusion program. She was employed there at the time of our interviews. Kinda is one of the Nation Team Trainers for teachers of students with ASD in Saudi Arabia. She provides many workshops to special educators in Tabuk in the area of early intervention and methods for teaching students with ASD. She is also a member of several associations for autism professionals, including the Saudi Education Association for Tabuk (Jester) and the Autism Society of Tabuk. At her current school, Kinda is responsible for seven students with ASD and other disabilities. She relayed that loves her students and loves acting and music. She reported using acting as a method for teaching her students and that she enjoys teaching them music.

Bedor. Bedor is a female special educator in Tabuk, Saudi Arabia. She has taught students with ASD for six years since graduating from university. Bedor began her career teaching students with ASD in a partial inclusion program for one year. Thereafter, she moved to a segregated school, where she was employed during my interviews with her. All of the students who attend this school have been identified as having complex support needs. Although Bedor stated that she loves working with students with ASD, she had no previous
experience with children with disabilities prior to her teaching career; she became a teacher simply to find a job. But after studying in the department of special education, she became interested in students with ASD. Bedor reported that she loves working as part of a team and using technology. Because of this, she has joined a program called “Ynmo” to work with other teachers. Bedor stated that she is responsible for about five students with ASD. She added that she likes using technology as a method for teaching her students. She also loves to teach the social sciences and she enjoys using roleplaying strategies as a teaching method.

Majed. Majed is a male special educator in Tabuk, Saudi Arabia. He has taught students with ASD for five years. After graduating from university, he taught at an inclusion school outside Tabuk for one year. Majed said that he then transferred to a segregated school in Tabuk, where he remains employed. He became interested in working with special education students while he was still a high school student himself. His high school also educated special education students, and this allowed him to form good relationships with some of them; this encouraged him to become a teacher of students with disabilities. Majed stated that he feels a lot of enthusiasm about teaching students with ASD. He enjoys using technology in his teaching. Majed added that he is also enthusiastic about cooperating with his peers at his school, especially developing teaching plans with his colleagues. He is responsible for six students with ASD. Majed added that he is considered an “itinerant” teacher at his school, where he teaches mathematics and reading, because he specialized in that area. To do this, he uses an iPad to teach his students. Finally, Majed also added that he is always looking for ways to develop his knowledge, so he attends many workshops and conferences.
**Fahad.** Fahad is a male special educator in Tabuk, Saudi Arabia. He has worked in special education in Tabuk for more than five years. Fahad pointed out that he has a bachelor’s degree in special education with a specialization in autism. He added that he graduated with high marks from Imam Abdulrahman Bin Faisal University, formerly known as the University of Dammam. Though he is originally from Tabuk, he worked in Dammam for three years before moving to a Quranic school in Tabuk. Fahad pointed out that he has been interested in teaching students with ASD since he was young, because his father taught ASD students. This inspired him to study special education at university. There, he became interested in developing the verbal communication skills of students with ASD. Later, Fahad mentioned that he specialized in teaching students the Arabic language and verbal communication. He loves to develop his language knowledge, so he has attended many workshops in this subfield. Fahad is responsible for seven students. He is also a volunteer, teaching language skills to students in the desert on weekends. Fahad puts great effort into his work; he also serves as a consulting teacher in verbal language for several schools across Tabuk.

**Ziad.** Ziad is a male special educator in Tabuk, Saudi Arabia. He has taught students with ASD for four years. He studied special education at the University of Tabuk and holds a bachelor’s degree in special education with a specialization in autism. According to Ziad, he began his career by teaching students with ASD at an inclusion school for one year before transferring to a segregated school in Tabuk, where he is currently employed. Ziad added that he is enthusiastic about teaching students the Quran and overseeing reading classes. Furthermore, Ziad added that he likes to include students’ parents in his teaching, so he contacts them via WhatsApp. Ziad reported that he is responsible for seven students and
enjoys developing plans for them. He likes to use technology tools, such as iPads, with his students. Ziad reported that he has attended many workshops in education because he believes that special educators should never stop learning about the field.

**Abed.** Abed is a male special educator in Tabuk, Saudi Arabia. He has taught students with ASD for five years. Abed studied special education at the University of Tabuk. He began his career teaching students with ASD for two years at a segregated school before transferring to an inclusion school, where he is currently employed. According to Abed, he had no initial plans to teach special education, but when he began studying it, he found himself interested in teaching students with ASD. He enjoys his job. Abed reported that he left his prior school because of problems with the school’s administrators. Since he started working in the inclusion program, he stated that he has felt more comfortable and enjoys teaching his students. Abed added that he is responsible for seven students. He particularly likes to teach them mathematics, reading skills, and social skills. According to Abed, he reported that students with ASD should learn social skills so they can interact more successfully with the people around them. Abed further added that he likes to develop his knowledge and to use technology tools like iPads with students. Also, Abed mentioned that he has attended many workshops in the last five years. Finally, he said that he wants to continue his education, so he began looking for a master’s program last year but missed the deadlines. He plans to register for classes during the next academic year.

**Themes, Child Codes and Grandchild Codes**

After completing each interview, I transcribed it into Arabic and removed identifying information. I uploaded these transcripts into Dedoose, an online qualitative data analysis program. I first identified salient excerpts in the Arabic transcripts, began initial coding, then
translated excerpts into English within Dedoose. Details of the data analysis process are included in Chapter 3. Table 5 summarizes the six themes that emerged from the data analysis that reflect factors the participants identified as influencing their self-efficacy and decision to continue teaching students with ASD. These themes are (a) educators’ stress, (b) educators’ positive relationships with others, (c) educators’ motivations, (d) personal qualities of effective special educators, (e) educators’ expertise, and (f) occupational decisions. Following the system described in Silver and Lewins (2014), I used the terms child and grandchild codes to describe the hierarchy of subcategories under each theme.

Table 5
Themes, Child Codes, and Grandchild Codes

<table>
<thead>
<tr>
<th>Themes</th>
<th>Child and Grandchild Codes</th>
<th>Research Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educators’ Stress</td>
<td>Lack of Collaboration: a) Lack of Collaboration with Other Teachers</td>
<td>Retention</td>
</tr>
<tr>
<td></td>
<td>b) Lack of Administrators’ knowledge about Special Education</td>
<td>Retention</td>
</tr>
<tr>
<td></td>
<td>c) Lack of Cooperation from Parents</td>
<td>Self-efficacy</td>
</tr>
<tr>
<td></td>
<td>Workload: a) Classroom Management Challenges</td>
<td>Self-efficacy</td>
</tr>
<tr>
<td></td>
<td>b) Curriculum Challenges</td>
<td>Self-efficacy</td>
</tr>
<tr>
<td></td>
<td>c) Excessive Paperwork</td>
<td>Retention</td>
</tr>
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<td>Lack of Classroom’s Resources</td>
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The six themes listed above in Table 5 that emerged from the analysis of teachers’ experiences represent the factors that they reported affect their performance desire to continue in their positions. As can be seen in the above table several of the themes pertained to both research questions, which I describe in the following.

I began with educators’ stress because the participants alluded to the stress of their jobs so frequently throughout their interviews. This theme includes subcategories (child and grandchild codes) that fall under both self-efficacy or retention and illustrate the relationship between self-efficacy and retention. For example, the lack of collaboration with other general educators and administrators influenced participants’ desire to remain in their school because they reported feeling isolated from them; consequently, some participants reported they had previously transferred schools. Furthermore, the lack of cooperation from parents appeared to be a factor impacting participants’ self-efficacy because they mentioned that this cooperation from parents is important to support their perceived success in teaching. Additionally, the participants indicated that their difficulties in classroom management, which most reported as resulting from the number of students in their classrooms or from students’ undesired behaviors, reportedly affects their self-efficacy because it limits their teaching abilities. In addition, participants noted difficulty in adapting the new curriculum for students with ASD.
This reportedly affected their sense of self-efficacy and increased their level of stress. Participants revealed that long hours due to excessive paperwork also negatively affects their desire to stay in their positions. Several repeatedly stated their desire to continue their studies because of this issue. The lack of educational and teaching tools was also noted to be a challenge for the participants, as they indicated that the lack of educational tools increases the difficulty of teaching their students and affects their self-efficacy. Among the factors that participants said caused them stress is the lack of related services, which may, in turn, affect their retention by the schools.

The second theme, educators’ positive relationships with others, captured the second most common type of comments from participants, perhaps because its positive effect on reducing the pressures that participants face in their schools. In addition, positive relationships within the school community reportedly enhance the participants desire to remain in the teaching profession. As I describe below, the participants’ relationships with their students encouraged them to stay in the school because, as most reported, building a positive relationship enhances their sense of comfort in a school. The participants’ relationships with other teachers also had a prominent role in relieving employment pressures and thus, increased their chances of staying in their schools. Among the factors that reportedly affect the participants’ self-efficacy is a positive relationship with their students’ parents, because most informants indicated that parents’ cooperation enhances the chances of their success in teaching.

The participants identified several factors that influence their motivation to continue teaching and their self-efficacy in teaching. One factor that participants’ identified as affecting their self-efficacy was their sense of success. Praise from administrators, positive
annual evaluations, and salary can all help individuals’ feel successful and were identified by the participants as influencing their decisions to remain in the teaching profession. Furthermore, personal characteristics, like patience, perseverance, and a desire to develop, reportedly increased the participants’ self-efficacy in teaching. Likewise, it appeared that attending specialized workshops and the presence of expert special educators were additional factors that improved the participants’ perceptions of the education of their students. Also, participants noted that teaching experience enhanced their self-efficacy because their sense of comfort in teaching increases with time. Finally, it appeared that the desire to continue teaching, transfer to another school, or obtain a higher position may also affect the participants’ desire to stay in their profession. This paragraph was a simple summary showing an overview of how each theme related to research questions. However, each theme will be discussed in more detail in the remainder of the chapter.

**Theme 1: Educators’ Stress**

The participants identified stress as a major and pervasive component of their jobs, which influences their self-efficacy and desire to remain in their positions. Lack of collaboration with other educators, administrators and parents, workload, and ineffective related services are all factors in increasing participants’ stress. This theme emerged from participant responses to interview questions about what they thought makes special educators consider changing their careers, makes teaching challenging, and makes them feel frustrated (see Appendix D). All the participants discussed multiple factors that made them feel stress within school environments or made teaching difficult; as this appeared to be important to all participants, I discuss this theme first. Within this theme, I identified four child codes reflecting the specific stressors they reported encountering when teaching students with
ASD: (a) lack of collaboration, (b) workload, (c) ineffective related services and (d) lack of classroom’s resources. The following sections detail the participants’ beliefs, perceptions, and views within the four child codes that make up this theme.

**Lack of Collaboration.** The participants’ face difficulties related to the lack of collaboration with other teachers, administrators, and parents, which is a source of stress for them and reportedly negatively affects their performance in teaching or their retention. All participants noted a lack of collaboration with other teachers, administrators, and parents. They reported that this produces stress when teaching that negatively affects their teaching performance. Based on conversations with the participants, three grandchild codes emerged that represent the lack of cooperation stressing teachers of students with ASD in Tabuk, Saudi Arabia: (a) lack of collaboration with other teachers, (b) lack of administrators’ knowledge of special education, and (c) lack of cooperation with parents. In the following sections, I present these three grandchild codes in detail.

**Lack of Collaboration with Other Teachers.** This grandchild code emerged from analysis of conversations with teachers of students with ASD regarding their previous experiences collaborating—or not—with either other special educators or general educators in schools. It captures the difficulties they face in their schools and their negative impact on their desire to remain in their schools. Some of the participants reported that their general education colleagues have insinuated that they themselves are unable to teach students with ASD, which is used as an excuse not to collaborate with the special educators. For example, Majed announced that being unable to cooperate with general education teachers may increase job stress. He observed that “failure to cooperate with colleagues [general educator] increases the pressure of work.” Fahad affirmed that when teachers do not collaborate with
each other, they may find teaching challenging. He argued that “the lack of cooperation makes teaching difficult.” He reported that special educators sometimes need help from general educators; specifically, they need other teachers to contribute to teaching students because students with ASD usually need to be followed up with by other teachers in the school. Fahad said that when general educators do not help, it is more difficult to teach students with ASD, and it increases stress on special educators.

In addition to pointing out that the lack of collaboration among teachers increases job stress and produces a negative school climate, some of the participants complained that they are exposed to a kind of discrimination from general educators in inclusive schools because they are “only” special educators. For instance, Bedor expressed discontent with the lack of collaboration with general education teachers in the inclusive programs in her prior position; she reported transferring from that school because general educators and administrators refused to cooperate with her. She recounted, sadly:

I worked in the inclusion program as I told you. Isolation from administrators or even from other teachers [general educators] is only one of the problems that made teaching difficult ... You do not feel that you are engaged with others … you feel that you work in an isolated class … I did not feel any kind of collaboration between me and the teachers of general education ... so I hoped that there would be communication with the administration ... I felt that I was in another world and did not cooperate with any administrators or teachers … The teachers from general education and administration were not cooperating with me and that is why I did not continue to teach female students in that school.
Ziad contended that he was the only special educator in an inclusion school; he felt that other general education teachers did not communicate with him, stating, “in the inclusion program, general education teachers do not contact us.” Just as Ziad and Bedor described that special educators feel isolated in inclusion schools, Abed added that not only are special educators exposed to some discriminatory practices but students with ASD also feel isolated by general educators, administrators, and typically developing students in the school. Abed complained that the general educators and other students in the inclusion schools would avoid or treat with caution the students with autism, especially when the students would go out to play or to the school cafeteria. Abed said, “in the inclusion program ... teachers [general educators] and [typical] students are dealing cautiously with students with autism ... even when you leave the class, typical students are surprised when they see students with ASD.”

Fahd reported with great sorrow that some general education teachers have tried to convince him that it is useless to teach students with ASD—that teaching them is a waste of time. He added that general education teachers do not collaborate with him in a serious way. Fahad said, “when we deal with them [general education teachers], they deal with us not in a practical way ... this causes stress for us.” He further recounted that:

There is a lack of cooperation from other teachers [general educators] ... I mean the teachers of general students. Sometimes when we [special educators] sit with them, they [general educators] talk about education in particular and say that they [students with ASD] do not have any educational rights and you [special educator] just waste time with them [students with ASD] … they do not want to cooperate positively ... just because we are teachers of students with special needs.
The participants not only reported that the lack of support from general education teachers causes them stress but explained that administrators also do not support them. The following section captures special educators’ difficulties dealing with administrators and how those difficulties impact their feelings of comfort in the school.

**Lack of Administrators’ Knowledge of Special Education.** This grandchild code represents the difficulties reportedly faced by special educators due to a lack of administrators’ knowledge of special education, which reportedly negatively impacts the participants’ desire to remain in their schools. All the participants except for Ziad suggested that the educational backgrounds of the principals and supervisors is an important factor that affects the performance of special educators in teaching because they do not understand the special educators’ needs, roles, and responsibilities in the schools. This lack of support causes special educators stress. For example, Majed emphasized that the administration in inclusion programs usually consists of principals in inclusion programs who do not have any educational background in special education; this makes special educators feel that they have little support and that their needs are not understood. He explained that the directors have little idea of the concept of special education and do not understand what teachers needed while he was working in an inclusion school. He said, “there are non-cooperative directors and also they do not provide any assistance to a teacher, especially the directors of inclusion schools, since they have no idea about special education.” Similarly, Kinda highlighted the issue of assumptions about special educators’ responsibilities within the school. She explained that teachers’ stress is increased when administrators do not agree that they are responsible for any type of work relating to special educators or their students. Kinda
suggested that, therefore, problem lies in their lack of understanding of the role of a special educator. She said:

I would like to add a point to the problems that I encountered in the inclusion schools ... The administration does not know anything about special education or how to deal with people with special needs ... and let me be clear with you, they do not understand the teachers’ needs in teaching students ... they do not have a background about it ... they do not have an idea about autism ... teachers are responsible for everything in the school ... I mean, the teacher is responsible for everything ... they [teachers of students with ASD] are the principal ... they are the agent and they are the student guide ... The teacher is doing everything.

Majed clearly stated that the lack of support by principals for special educators comes primarily from their lack of understanding of such teachers’ needs. Bedor asserted that the lack of support caused her to fail in her delivery of instruction and thus increased her feeling of stress. She said:

You sometimes have the ability to teach well ... and you want to give something special to your students... but if there is a bad poor administration that does not provide any kind of support to their teachers, I believe that the teacher’s ability in teaching will decrease ... or in another word, the teacher will feel some kind of stress that leads to failure in the work.

Abed complained that his administrator did not respect him. He contended that the director did not allow him to leave the classroom with his students because he indicated that students with ASD should stay in the classroom and should not go out without supervision. Abed, in a sad tone, said:
When the principal saw the students [with ASD] outside the classroom, he came to me and said aloud, Why is this student outside? I told him, ‘the student is inside the school, where is the problem? ... He told me, You are a special educator and not a general education teacher ... you must know your responsibilities as a teacher.

Bedor further described the school’s administration as “bad,” and she strongly affirmed that this administration was the reason for her transfer from an inclusive school to a segregated one. She expressed, in an angry tone, that the administration caused her high stress, which limited her ability to think and teaching normally. She said:

I started thinking about transferring from the school just immediately after the second week of being teaching in that school ... because I could not adapt to the corrupt administration that did not provide me with any kind of help ... I had very high stress ... this led to reducing my ability to think or even teach female students excellently ... administration, if it is bad, limits a person’s creativity in his work.

Four participants discussed how administrators’ lack of knowledge about special education affects their levels of stress; they also expressed that the same issue applies to supervisors from the Ministry of Education in Tabuk. The participants confirmed their dissatisfaction with some supervisors who are not specialists in autism, which affects their teaching effectiveness. For example, Ziad related that when he asked a supervisor for instructional advice, he did not receive any useful support; he felt that he was wasting his time because the supervisor’s advice was related to his own area of expertise, which was not autism. Ziad said:

The supervisor is not a specialist in autism ... and very often I go to him when I do not know how to formulate some goals ... he guides me in accordance with his specialization and I do not feel that he specializes in autism.
Like Ziad, Bedor clearly pointed out her dissatisfaction with supervisors who do not have expertise in autism. She explained that her supervisor was a specialist in intellectual disability and had no idea of the differences between students with ASD and students with intellectual disabilities, which caused a lack of understanding between them. She additionally relayed her concern that supervisors who are not knowledgeable in autism are not flexible in dealing with teachers who work with students with ASD. She said:

> The supervisor has not specialized in autism but he is a special educator ... and this is the cause of some confusion because the supervisor specializes in intellectual disability, for example ... he deals with you from an intellectual disability background, not from an autism background ... As you know, we teach students with autism ... and also when we discuss those supervisors ... we do not find flexibility in thinking.

Fahad and Abed agreed that supervisors with different areas of expertise are limited in their ability to support special educators working in different areas and that this causes the participants stress. Fahad said, “I would like to mention that the supervisors are not specialized in autism and this made a problem for us and affected our teaching needs.” The participants indicated that cooperation with the parents is also very important to the teacher’s sense of comfort in teaching; they emphasized that involving parents in teaching students is very important and that not involving them causes them pressure in school. The following grandchild code highlights the issue of special educators’ cooperation with parents and the negative effects that cause them stress.

*Lack of Cooperation from Parents.* This grandchild code reflects the problems faced by the participants when parents do not cooperate with them, which, in turn, negatively
impacts their self-efficacy. Four of the six participants emphasized that a lack of cooperation from parents leads to increased pressure on them. This grandchild code reflects the participants’ perceptions that parents do not cooperate with their suggestions to extend school instruction at home. Those participants stated that the lack of cooperation by parents in teaching their children at home causes them job stress. As a result, they argued that special educators have to make a double effort to teach students when parents do not assist in teaching their children at home. For example, Ziad said:

    I feel stress if there is no interaction from the family or from the administration ... For example, sometimes I find that the student does not do his homework at home, although I notified their parents twice ... they must help in teaching ... However, I do not find that the student did his homework the next day ... I feel fatigue ... your effort like this goes for nothing.

Kinda indicated that the lack of cooperation between teachers and parents is a problem because it results in students lacking necessary skills. Without parent contributions, special educators must exert more effort. She said:

    There is a lack of cooperation of parents in teaching students. Sometimes I ask parents to participate in teaching a certain skill, such as counting money, but I am surprised that parents are not cooperating in applying this skill at home, which leads me to make more effort in teaching them, but the result is not what I expected, because I did everything I wanted to do, but I did not get support from the family.

Likewise, Bedor complained that the lack of cooperation makes her feel that her work is useless. She made it clear that parents’ lack of cooperation made her feel stressed and frustrated. Bedor recounted that she feels her work has no meaning if the family does not
cooperate with her, and thus she exerts more effort because she loves her students. Fahad also commented on the importance of parents providing home instruction, stating that “the cooperation of parents is very, very, very important.” The need for parents to assist with instruction of students with ASD also impacted special educators’ perceived workload.

**Workload.** This child code captures factors that the participants identified as causing excessive workload related classroom management, curricular challenges, and excessive paperwork and present obstacles to effectively teaching their students. Informants in this study identified an increasing workload as another source of stress. Three grandchild codes within this child code capture the challenges the participants face when teaching students with ASD: (a) classroom management challenges, (b) curriculum challenges, and (c) excessive paperwork. In the following section, I describe these grandchildren in greater depth.

**Classroom Management Challenges.** This grandchild code represents the difficulties faced by the participants in classroom management, including class size, undesired student behaviors, and heterogeneous classrooms, which also reportedly lead to diminished self-efficacy. All participants indicated that great effort was needed to manage the behavior of their students with autism. For example, Majed reported that controlling student behavior is one of “the biggest problems” that teachers face in the field. He said with a sure voice, “one of the most common problems teachers [special educators] have is the process of controlling students’ behaviors in the classroom.” Fahad also confirmed that controlling student behavior is difficult when teaching students with ASD. He reported, “many of the things that make teaching difficult are not being able to manage the class or control the behaviors of students in the classroom.” Kinda contended that when students show undesired behaviors, it affects
other students and wastes class time, which forces the teacher to expend more energy. She said, “the problem is that when a student displays undesired behavior, it affects other female students, which distracts from the teaching process, and you have to calm all the students, which wastes class time.” Interviewees reported facing several challenges when teaching students with ASD: (a) heterogeneous classrooms, (b) too many students, and (c) undesired student behaviors.

All participants except Kinda relayed negative feelings stemming from their inability to manage the behavior of students with autism, especially those with more complex support needs. For example, Ziad candidly expressed that teaching students with ASD is not easy and linked the severity of the disability to the difficulty of teaching, stating, “the more severe the degree of disability, the more difficult it is to deal with the student. When a student with a severe disability comes to us, we send that student to the special education center.” Ziad added that, when a special educator has a student with complex support needs in their classroom, that teacher usually provides that student with care rather than instruction. Similarly, Majed also expressed personal fatigue from teaching students with complex support needs. In a sad tone, he noted, “I am tired of teaching students with autism [severe disability]. I think that students with autism, especially those with severe cases, should not be in school because they really just need home care.” Ziad further explained that “when you have a student with a severe disability who is also hyperactive, you can only work with that student by providing the student with care.” Bedor also noted that many teachers of students with ASD do not want to teach students with severe disabilities. She recounted:

Many teachers [special educators] do not want to teach students with severe disabilities. For example, when I was in an integrated school, there were students with
severe disabilities [nonverbal], and they were the most difficult students to teach because most of the class time was spent on teaching those students how to communicate.

Abed avowed that students with complex support needs limit the special educator’s ability to teach them and added that this inability to get through to students is stressful for that teacher. He said, “students with severe disabilities make teaching difficult.” He added, “I feel that there are students who are not able to learn in inclusion schools, and this makes teachers unable to teach them.” He expressed that most teachers in his school prefer not to teach students with severe disabilities, and Fahad expressed that teachers cannot teach students with ASD if they have different severe disability. He stated:

One of the things that makes teaching difficult is when there are differences in degree of disability among students. For example, I have seen many students classified as having a severe disability among students who are classified as having a slight disability, and this exhausts the teacher as they try to control the classroom.

The difficulties of teaching students with ASD, including students with complex support needs, is not only the challenges that special educators face; the participants identify the number of students that also affect their teaching.

Five of the participants discussed the effect that the number of students has on the actual performance of the teacher in the classroom. For example, Majed complained that he struggles as a result of an increased number of students with ASD in his classroom, because it is too many students to manage. He commented,

The number of students also helps in the process of controlling the classroom. If there are several students with ASD in the classroom, it affects teaching, especially if there
isn’t another teacher to help you. At the beginning of the semester, I had eight students with ASD, but there were two students I decided to exclude because I couldn’t do anything; I mean, I couldn’t provide effective instruction to them. Majed expressed feeling, in a soft voice, that he is a “personal guardian” of his students rather than a teacher because he feels that he cannot control them. He stated, “believe me, I am happy when the administration instructs me to teach a class consisting of a small number of three to four students with autism. I am happiest on those days.” Ziad announced that if special educators have a “large number of students” with ASD in their classrooms, such as six students or more, special teachers cannot focus on teaching and cannot control their students. He specifically stated, “by God, I have six students with ASD. I cannot control them, no matter how many strategies I use.” Bedor stated that some students with autism are hyperactive or have behavior problems; therefore, many general educators avoid working with them when there are many students in the classroom. She sadly stated, “I have five students with ASD. The process of controlling the behaviors of these female students in the classroom is difficult and makes the teaching process even more difficult.” Abed expressed the same opinion—that if there are more than five students with ASD in a classroom, teaching will be more difficult for the teacher. He stated:

It becomes a problem. It’s assumed that there will not be over four students with ASD in a classroom. Of course, the usual number is three, but sometimes there are four or even five. I cannot teach effectively when this is the case.

In addition to reductions in class size, several participants asserted the importance of having an assistant teacher to help control student behavior. For example, Bedor stated that “students’ behaviors make the teaching process very stressful” and that teachers should have
a co-teacher to help students with ASD because, without one, teachers may have a difficult
time controlling students. She hesitantly said that “female students with ASD usually display
undesired behaviors, so I need another teacher to sit with me in the classroom” Abed also
expressed the need for co-teachers to help control undesired behaviors and enhance the
teaching and learning environment: “Because I am in the inclusion program, I need an
assistant teacher to help me instruct students and control their behaviors.” Indeed, Bedor
further argued that said, “when the number of students is high, meaning five to seven
students, I need another teacher to help me control students’ behaviors. In fact, I always
request that the administration not send new students to me.” In contrast, several participants
discussed options for making changes within the classroom to accommodate students’ needs,
therefore decreasing the behaviors they find difficult to manage. For example, several
participants suggested that rearranging the classroom helps the teacher to easily see the
students. In addition, both Majed and Fahad explicitly suggested reorganizing the classroom
to help control students’ behaviors. Fahad pointed out that “there is a way to organize the
classroom that helps the teacher work effectively.” He added that:

The teacher must recognize that there are many students in the classroom, and
students must be organized in a way that keeps them busy doing useful things. When
the classroom tables and chairs are organized well, the teacher can work more
comfortably.

Majed stated:

One of the ways that I think helps the teacher control the classroom and reduce the
dispersion of students is organizing tables in a way in which the teacher can see all
the students; for example, arranging tables in the shape of the letter U.
The six participants not only discussed classroom management difficulties; they also shared the curricular challenges they face that impact their perceived workload.

Curriculum Challenges. This captures the challenges that confront the participants in their development of curricula for students with ASD due to the lack of differentiation for students with different types of disabilities and guidelines for creating plans for students with ASD. Four of the participants lamented that the new curriculum provided by the Ministry of Education is challenging to deal with because it is not differentiated for students with different types of disabilities and therefore demands extra effort to implement. They emphasized that this curriculum does not take into account individual differences among students because it is designed for learners with Intellectual Disability (ID). Fahad and Abed, in particular, emphasized this point, with the latter clarifying that “using the new curriculum is disadvantageous because the lesson topics are inappropriate for students.” All of the interviewees, except for Majed and Kinda, observed that curricular adaptation is difficult, noting that special educators need considerable experience to develop curricula for students with ASD. Fahad, Abed, Bedor, and Ziad commented that the new curriculum lacks guidelines to help special educators teach students with ASD and explained that basing teaching on this curriculum requires substantial experience working with populations with ASD. The participants indicated that it is extremely difficult to adapt learning lessons because the topics are illogical. For example, Abed stated that one of the topics contained in the new curriculum is a lesson on "space." Abed found this topic challenging and not illogical because it is challenging to teach intangible things to some students with autism. While Abed recognized this challenge, he also stated that special educators exert tremendous effort in adapting the curriculum to the needs of each student. Ziad also stated that curricular
adaptation for each student is difficult given that it was “designed” for students with IDs. He reported that he makes “great efforts in developing the curriculum for each student” in his class. Abed further explained that many curricular topics do not fit the requirements of students with ASD, thereby forcing many special educators to heavily edit the curriculum to fit students’ abilities. According to him:

This curriculum is designed for students with intellectual disabilities … I have been making an effort to adapt it to every student but there are things from which the students do not benefit … You know that there is a difference between students with ASD and students with intellectual disabilities.

Bedor stated that “preparing and implementing the curriculum is exhausting” and that these tasks require experience. She conveyed that the difficulty in using the new curriculum lies in special educators’ lack of experience in adaptation. In a sad voice, she stated:

I believe that the difficulty of planning a curriculum for students stems from the lack of experience among teachers … when I started teaching … I did not know how to create one lesson for students … but after five years … I do not feel that designing an individual educational plan is difficult because teachers usually develop a curriculum through direct observations and assessments that apply to a child.

Ziad likewise conveyed his concern that “there are no guidelines for creating plans for students in the standard curriculum” and suggested this is a source of stress for special educators. As described above, the six participants discussed how the curricular challenges they face impacted their perceived workload. In the upcoming section, I will discuss how excessive paperwork affects the participants’ stress levels.
Excessive Paperwork. This grandchild code presents the difficulties participants experience due to excessive paperwork, the numbers of hours teaching students with ASD, and administrative works at their schools, which affects their desire to maintain that current positions at their schools. All participants reported that teachers of students with ASD spend an excessive amount of time on various types of paperwork. According to Bedor, special educators may spend up to “six hours per day” documenting their work. This is because special educators must document everything related to students and teaching according to special education law. She said, “a special educator exerts a lot of effort in teaching and documenting information.” Bedor further expressed her opinion that paperwork limits teaching efficacy in the classroom:

Paperwork is an additional problem...The fact that we have to write any work or any activity on paper before implementing it inhibits the effectiveness of my teaching. I would like to do a lot but I cannot with these problems...

Ziad agreed with Bedor. He observed that special educators might spend up to “three hours” daily documenting their work, affecting teaching time. According to Ziad:

The length/size of paperwork is exhausting and makes teaching time short, and we cannot invest it. Imagine that you spend approximately three hours per day in paperwork, from writing preparation and teaching notes to the student to writing behavioral notes ...so all of this makes the learning process difficult.

Kinda complained that preparing a new curriculum occupies many working hours. She said. She said:
One of the things that makes teaching difficult is that every year I use new teaching aids, new preparation, and new curricula different from the ones I used in previous years. This is what drains my time and effort and makes teaching difficult.

Fahad agreed that paperwork limits special educators’ ability to impart knowledge to their students. He said, “the paperwork that the teacher does take a long time to accomplish, this causes stress to special educators and affects their teaching ability, and therefore special educators do not experience job satisfaction.” Abed reported that many special educators are tired of paperwork because every student has a file that special educators must update daily. In addition to noting that paperwork is stressful, the participants also discussed how long working hours impacted their stress levels.

Three participants reported working approximately 18 hours per week with students in their classrooms, which they found excessive. For example, Kinda expressed her “dissatisfaction” with the number of working hours at school, saying, “we work 18 hours a week or maybe more.” She added, “this causes us stress and discomfort.” Majed reported that special educators spend up to 18 hours of direct teaching students with ASD every week, which becomes stressful. He contended that 18 teaching hours per week is excessive, especially accounting for the effort required by the teacher of students with autism. He suggested that limiting contact hours with students to 12 hours per week would be more comfortable. Abed indicated his concern that “I am required to invest numerous working hours and teach a large number of students,” and added, “18 hours of work is considered tiring.” He argued that if the teacher is tired due to the long working hours, it will negatively affect the quality of students’ education, so, like Majed, he suggested that student contact hours be reduced to 12 hours per week. In addition to describing factors that increase their
workload and create job stress, the interviewees also identified a lack of classroom resources as problematic. I next discuss the challenges that the participants divulged related to this lack of resources.

**Lack of Classroom Resources.** This child code reflects all the challenges and difficulties stemming from a lack of classroom resources, such as educational tools or technology teaching tools in the participants' schools, which makes teaching students with autism extremely difficult for the participants. The informants’ observation that the lack of tools makes teaching students with autism extremely difficult. Abed, for example, asserted that using technology tools to teach students with ASD is “essential” because, without these tools, educators cannot impart knowledge to students in an effective manner. He lamented that his classroom has no computers to assist him in his work, compelling him to resort to using his cell phone to teach. With a sad tone, he said, “there is no computer in the classroom … I always use mobile phones to teach students … because of the lack of teaching tools.”

These sentiments were echoed by Majed, who punctuated Abed’s view that classrooms should be fully equipped: “We work in special education … and the classroom must be dedicated to students of special education.” Abed further explained that the lack of classroom resources in his institution prevents him from teaching the Quran to his students. He voiced a strong belief that the classroom must be prepared with complete educational equipment because this helps students with ASD learn fast. He said, “teaching tools [educational tools] are important in the process of facilitating teaching.” Abed did not stop at this, declaring that the preference of special educators for using educational technologies comes from the fact that technologies motivate students to learn. Bedor agreed that educational technology for education is important and that their absence affects the teaching of students with ASD.
averred that using these teaching tools is essential to enhancing their abilities to teach the aforementioned learners. She shared the following sentiments:

The teacher’s teaching tools are lacking … Imagine, we are in the era of technology, and we have no computer in the classroom, no screen, not even audio devices…

Many of the classrooms in the center do not have the tools necessary to help me use technology in the classroom, and this point is very important … we use technology to enhance our ability to teach students through various learning resources, such as visual, auditory, sensory, and kinetic learning … I told you that I use the iPad in teaching, and I found that I am making rapid progress in achieving most cognitive goals for reading, math, and writing … the lack of these tools makes the teaching process difficult.

Bedor acknowledged that there is a projector in her school, but there is a process required to gain approval to use it. Her own classroom lacks the simplest technological equipment, such as computers and other assistive devices. Kinda commented as well on the importance of computers in “helping the teacher to be an effective teacher … using the computer … will help special educators positively interact with his students.” Several participants emphasized that the lack of teaching tools in Tabuk schools has compelled some special educators to buy devices with their own money. According to Bedor, special educators bought very expensive devices to overcome the difficulty of teaching in her school. In a clear and slow voice, she said, “my colleagues and I decided to buy tablet devices for students … used inside the classroom … we bought iPads for them.” Bedor was wondering why principals demand that special educators provide a good education for students without giving necessary teaching
tools, thereby ‘forcing’ special educators to buy these devices themselves. Her specific comments are as follows:

- There are no teaching tools … They are not provided by the education department … forcing the teacher to pay out of his own pocket … And above that, they ask us to do a distinguished job with the students … How? If you do not support me financially, how can I be creative? … but there is no support for us in this aspect.

Abed also reported using his own money to buy what he needs to facilitate student learning. Calling attention to the fact that technology is expensive, Abed recounted his experience thus:

- One of the teaching aids cost me 200 riyals [$53.32 U.S. dollars] … and the administration did not compensate me for it … which discouraged me from buying any other tools for teaching … Beginning today, I will no longer buy anything for students … If the administration wants me to provide distinguished education, then they must equip us with these tools.

Bedor argued that teachers of students with ASD are not “obligated” to buy educational technology, as the responsibility of equipping all special education schools lies with the Ministry of Education. Furthermore, Fahad and Abed argued that it is very stressful not to have any technology in their classrooms, limiting their effectiveness. As Abed stated, “it stresses me out; this lack of teaching tools can help a teacher educate students highly efficiently.” The participants did not only report that the lack of classroom resources causes them stress; they also discussed, within the next subtheme, the impact of ineffective related services.
**Ineffective Related Services.** This child code captures the challenges and difficulties resulting from the lack of related services, lack a multidisciplinary team, psychological, speech-language pathology, or audiology services, in the schools, which the interviewees noted required a doubling of efforts by special educators. Most of the participants explained that their schools essentially lack a multidisciplinary team and that this means there is a dearth in related services, such as psychological, speech-language pathology, or audiology services, as well as other offerings that they consider important. This lack of related services required the participants to assume these responsibilities themselves. Bedor, for instance, indicated that without multidisciplinary professionals, such as psychologists, she is forced to formulate plans to modify student behavior on her own. Abed reiterated the significance of a multidisciplinary team in “facilitating” the process by which students are effectively taught. Abed contended that cooperation with proper specialists are critical in alleviating the responsibilities that special educators take on in relation to students, such as the formulation of “behavioral modification plans.” He argued that “the problem that we have here is that the psychological specialist is not really cooperating in modifying the behaviors of students.” Bedor clearly conveyed that she is missing certain school services, such as speech-language pathology, which burdens her with an additional workload. With a strong voice, she explained that “one of the support services that are not provided to students is speaking sessions … We do not have specialists in this field, which causes special educators stress because this means they will have to provide this service themselves.” Kinda added that she experiences “discomfort” owing to the “lack of support services for students in our schools . . . such as specialist language and speech therapists or psychologists.” She added that this shortcoming presents difficulties in teaching students with ASD: “It is assumed that there is a
meeting of specialists . . . but we do not have which makes teaching difficult.” However, Bedor indicated that measurement and diagnostic services assist special educators in determining the strengths and weaknesses of students; the current level of these services in her school is ineffective, so special educators are required to tender these services themselves. She declared that “there is a lack of resources, such as measurement and diagnostic tools that help us determine the current level of performance of students … many special educators suffer from the deficiency in diagnostic resources.” It is clear from these comments that the participants take on more responsibilities in teaching their students, which caused them more stress.

All of the participants in this inquiry openly highlighted the factors that negatively affect their effectiveness in teaching students with ASD, along with their continued desire or ability to do so throughout their working lives. They highlighted that negative relationships with their environment, including those with other teachers, administrators, and parents, adversely affect their performance as teachers. They also described how a lack of educational technology and equipment, an undifferentiated curriculum, excessive paperwork, and a lack of related services affect their stability in their profession. These factors cause tremendous stress. In the next theme, I will elaborate on the results that emerged from the teachers’ interviews describing the importance of positive relationships at school. The participants identified that positive relationships between teachers of students with ASD and with the people around them help alleviate stress and enhance their sense of comfort at school.

**Theme 2: Educators' Positive Relationships with Others**

Above I discussed the role of a lack of collaboration as a noted factor in causing the participants’ stress. They also discussed the relationship in a more positive light, which is
captured in their theme. This theme summarizes the issues raised by the participants during the interviews about the importance of building positive relationships with members of the school community, including teachers, students, and parents, which reportedly impacts their desire to remain in the school. The majority of participants commented that favorable relationships with the people around them positively affect their teaching performance and help them to feel comfortable in their positions. Three child codes that emerged within this theme: (a) positive relationship with students, (b) positive relationship with parents, and (c) positive relationship with teachers. These aspects of teachers’ relationships were commonly apparent in the data from all interviews. I explain these child codes in detail in the following section.

Positive Relationships with Students. This child code presents the importance of building positive relationships with students, which reportedly enhance the likelihood of participants remaining at their schools for longer lengths of service. Three of the participants indicated the importance of building positive relationships with students in enhancing the likelihood that they would remain at their school for longer lengths of service. For example, Abed spoke frankly about the fact that the positive relationships he has with his students motivates him to stay at his school and not transfer to another school; he reported that his relationship with students has helped him to adapt to his school’s environment. He clearly articulated that “relationships with the students makes me continue their education. … There are some students whom I refuse to allow to be reassigned from my classroom because I like working with them.” Fahad shared his belief that special educators must build positive relationships with their students that are founded on love, which encourages special educators to apply their full efforts with their students. Fahad spoke enthusiastically, noting:
One of the things I love about teaching is establishing relationships with students and making them love me … I love to ask students every day what they like to learn. … I love to put my students’ achievements on the school honor board. … I cherish my students.

Majed explained that positive relationships with students promote a feeling of enjoyment of teaching. He stated that “to deal with students, you try to establish relationships with them that bring you closer to them so that you enjoy the work, … and it also helps you to continue teaching.” Abed pointed out that building positive relationships with students increases a teacher’s ability to adapt at school. He said:

At the beginning of my teaching career, I was unable to build a relationship with students … but through the including program … I was able to build relationships with students … and this I feel helped me to adapt.

Fahad suggested that building positive relationships with students helps special educators to gain a better understanding of their students’ personalities. He said, “one of the most important things that helps special educators to work effectively is building a positive relationship with the students … and knowing the student and what he likes or dislikes. This enhances the teacher’s work.” In addition to recognition of the importance of building positive relationships with students, the participants also discussed the importance of good relationships with other general education teachers. The following section highlights the importance of building a positive relationship with colleagues.

**Positive Relationships with Teachers.** This child code captures teachers’ beliefs about the importance of building positive relationships based on collaboration among teachers within the school setting and impact of these relationships on the participants’
decisions to remain in their schools. Four of the participants noted that favorable connections with other general education teachers helps special educators to feel comfortable the general atmosphere of the school. For example, Ziad recognized that communicating with other general educators helps special educators feel engaged in teaching.

Kinda similarly confirmed that she enjoys cultivating positive relationships with other general education teachers. She emphasized that a healthy relationship with special educators creates an attractive school atmosphere that encourages the teacher to feel “comfortable” and “stable.” Bedor also stated that consulting with general education teachers helps her to reduce her workload. She said, “my female colleagues at work relieve the teaching or administrative pressures that I face in school. … For example, when I do not know how to behave in a situation, I consult with my colleagues.” Clearly, collaborating with colleagues is positive for these participants. Ziad emphasized that establishing constructive interactions with general education teachers helps to reduce the stress from work. He said:

Thank God they are all there; God bless them [his colleagues in the school]. We deal more often with teachers of students with autism. … The teachers provide us with a warm school climate when communicating in the interest of the student. … I take pride in my knowledge of my fellow teachers; they reduce the pressures of work, which makes me practice teaching in complete comfort and within a positive school climate.

Bedor, Kinda and Majed also indicated that constructive cooperation increases the teacher’s enjoyment of teaching. They emphasized that feeling supported by general education teachers increases a teacher’s sense of satisfaction in school. For example, Bedor also stated that working with colleagues helps to increase the effectiveness of teachers’ work, reflecting
on her working relationship with other teachers, noting that “the cooperation of other teachers [general education teachers] … will help me to be an effective teacher.” Majed clearly expressed that he enjoys teaching when he has good relationships with general education teachers. He mentioned that he enjoys cooperating with general education teachers and exchanging teaching experiences. Majed expressed this opinion by saying, “I enjoyed … the cooperation between the teachers, which made me enjoy teaching, and I helped them with plans and ideas for teaching.” Kinda stated that her colleagues helped her teach and “made” her love her job because, as she said, “I love cooperative work.” She added that “when the work environment is comfortable and positive, this enhances the chances of staying in the same profession, so the positive climate very strongly makes me excited to teach female students.” The participants indicate the positive relationships with colleagues is a factor that increases their comfort; the participants noted the importance of positive relationships with parents, too. The following section describes in detail teachers’ positive relationships with parents.

**Positive Relationship with Parents.** This child code emerged across most of the six teachers’ interviews. Most participants confirmed the importance of support from and collaboration with the parents of students with ASD as beneficial to teaching these students. Four participants confirmed the importance of support and collaboration with parents of children with ASD. They identified parent support as an important factor that allows them to work more effectively with students. Fahad stated:

There is also the support of the parents. … For example, they help the teacher at home … because the teacher teaches the student in school. … For example, [it is helpful] when I ask the mother or father to make the student follow a certain behavior
at home, … and then I find that they actually trained the student at home for this behavior. … Here I feel that parents’ cooperation was so positive that it encouraged me to teach effectively.

Majed expressed a strong opinion of the importance of parents collaborating with special educators to help in the educational process. He noted that, without parents’ help, teaching would be “impossible.” Majed further noted, “I asked to communicate with the parents because they will help me in teaching the student.” Ziad stated that collaboration with parents supports special educators and encourages them to work hard to develop their students’ knowledge and skills. He said:

Parents are very cooperative with me when I deal with them, … and in fact this is a motivation for continuing to exert effort in educating their children. … Interacting with parents makes me feel more responsible and want to work more.

Kinda also commented that when special educators communicate with parents, they are better able to understand students’ needs. She said that “when the teacher communicates with parents, he gets to know his student more, and this enhances his ability to choose the appropriate way for him to work with the student.” It is also clear that building a positive relationship with special and general education teachers, students, and parents increase their sense of comfort in their schools.

Most of the participants indicated that positive relations in the special educators’ school environment help them work effectively to teach their students. Among the results of this study, the participants indicated that positive relationships with parents and school community members, including students, fellow teachers, and administrators, reduces job stress and increases the teacher’s sense of comfort and general satisfaction. These results are
directly related to increasing teachers’ motivation to teach students with ASD effectively. The next theme highlights the common points that the participants mentioned across all interviews, which intersect in the pyramid of motivational factors that promote special educators’ self-efficacy.

**Theme 3: Educators’ Motivations**

The third theme in this study is educators' motivation. This theme captures the participants' perceptions of factors that motivate them to stay in their chosen career, including a sense of teaching success, administrator support, salary, and annual evaluations. The participants’ interviews revealed several different child codes: (a) sense of teaching success, (b) administrator support, (c) salary, and (d) annual evaluations. In the following sections, I will present in detail all the points that emerged across all interviews.

**A Sense of Success.** All of the participants, except for Bedor, discussed the importance of feeling achievement in their work, as this strengthens teachers to continue doing their work even when it is difficult. Most participants linked their feelings of success in teaching to the successes of their students, with some participants insisting that their strongest motivation was when their students successfully mastered the skills required of them in school. For example, Majed reported that he feels success when his students master skills that they did not have before: “I feel success when students know how to read something … they did not know before … This motivates me.” Majed argued with Kinda that success is not related to a certificate or award; rather, the real successes that drive teachers to continue to teach is students’ successful mastery of the skills required of them. Kinda agreed with Majed that she also feels motivated when her students exhibit
improvement in their skills. She said that that feeling of success pushes her to continue teaching students with ASD. Kinda shared:

   Success is linked to what you can accomplish with female students. When you see a behavioral goal, the student has mastered that success for me. When I insist on achieving the steps that I have prepared for the student through the teaching methods and teaching techniques that I have invested for the student’s benefit, then I see that these plans have achieved the desired goals and made the student master the skills that she needs, and that too is one of the meanings of success.

Similar to Majed and Kinda, Abed expressed that he feels motivated when he successfully addresses student behaviors, he finds problematic: “I feel the achievement when I see that a student has improved his skills... For example, ... I was able to reduce the aggressive behavior of a student... It was the biggest achievement for me.” Ziad pointed out that students’ success in achieving educational goals motivates special educators to continue teaching. He expressed that “when I succeed with the student in achieving a behavioral goal ... it makes me feel proud... Achieving results with students is motivation to continue teaching.” Fahd linked comfort and job satisfaction to a sense of accomplishment regarding students’ attainment of skills:

   I think that what I accomplish as a teacher with students helps me feel satisfied or comfortable... When I see my students succeed in gaining the required skills, I feel a kind of stability... I see students and their parents happy with that... This enhances the capabilities of the teacher in continuing to teach.
The participants also indicated that support from the administration enhances the work of teachers of students with autism. In the next child code, I discuss other sources of motivation for special educators: Administrator support.

**Praise from Administrators.** Another motivation that the participants identified as encouraging them to work effectively with their students was the praise from their administrators. This child code reflects the participants’ perception of the importance of providing incentives and rewards to motivate special educators. For example, Ziad spoke about an experiment he did while students were away from school due to the COVID-19 pandemic. He communicated with students’ parents through an online program and provided some lessons that parents could use to teach their children at home. Both parents and principals appreciated this effort. Ziad spoke with pride about receiving a certificate of thanks from the Ministry of Education for this work:

> Praise be to God. Praise be to God. Through God, I showed my work with the parents to the director during Coronavirus time... The director sent it to [Name], Director of Special Education ... and I received a letter of thanks from the Special Education Department... I was happy with that... Through God, thanks from the Ministry of Education and parents means I work hard and it is enough for me.

Fahad also mentioned that awards motivate him to work hard: “I have won many awards in teaching Arabic to students with ASD at the Kingdom level. ... This helps me to teach my students in a good way.” Kinda pointed out that when special educators receive praise from their directors, it reduces their stress and increases their level of comfort: “When the principal or supervisor sees your work and thanks you for your effort in teaching ... this reduces the psychological pressure and the educational responsibility of the teacher in
Bedor communicated that she finds comfort in forming good relations with both special educators and administrators. She said, “the important thing is that I love my work and feel comfortable with the special educators and administrators in the center …” She added that special educators’ sense of comfort and value helps them not to give up. Abed agreed with Bedor. He feels comfortable in his current position because he has a good relationship with the principal and his fellow teachers. Ziad pointed out that “when I see a smile on the faces of the parents because of their children’s learning, I feel proud that I have worked very well with my students.” It was clear from the comments that the support of principals and parents for special educators enhances their teaching performance and increases their positive perceptions of their chosen career. This study shows that there is another important factor pushing special educators to work hard: the love of teaching students with autism.

**Salary.** During the interviews, most of the participants discussed their monthly salary as a factor to motivate them to remain in the teaching profession in Tabuk, Saudi-Arabia. In the Kingdom of Saudi Arabia, special educators receive several employee benefits. Special educators receive the same base salary as general educators do, but they also receive an additional 30% supplement, designed to enhance the retention of special educators. The participants reported that this additional income does influence their decision to continue teaching and their choice of where to work. For example, Bedor said that most special educators prefer not to work in private schools because of the low salary, which leads to special educators staying in government schools. She further said:

One of the advantages that the teacher has is the high salary. The special educator gets additional support on his basic salary, and this is self-limiting, reinforced by the
teacher’s [decision to] stay in education... Many of the teachers have left their jobs in the private sector because of the lower salary... So, the salary is something important in the process of belonging to the profession.

Ziad also spoke about his salary enhancing his desire to keep teaching at his current job and that he does not want to move to any other job. He said, “the salary is very important to us … because at the end of every month, I remember that I must do my best to teach the students.” Ziad also added, “I am very comfortable in my job … I do not want to change my profession primarily because of the salary.” Abed also agreed that his salary enhances his desire to be an effective special educator and stressed that his salary is his main reason for remaining in the teaching profession. Bedor explained that her income motivates her to work hard with her students in the following:

The best thing about special education is that the teacher gets an increase of up to 30% of the basic salary... and this is what encourages us to work highly effectively... which is one of the reasons that made me interested in education.

Majed confirmed that “a large number of teachers prefer to continue teaching students to keep their [extra] salary” and suggested that most special teachers only stay for that additional basic salary: “if the teacher [special educators] does not take it [30%]... I don’t think that the teacher will continue to teach ... they will say ... we [will] go to administrative work [which] is better.” Bedor also mentioned that when the government suspended the additional 30% of the salary supplement for special educators, they expressed their dissatisfaction with that issue: “You remember that when the government decided to cut the increase in the salary, many special educators expressed their dissatisfaction on this issue.” Although salary is a key source of motivation for six special educators in Tabuk, the
participants indicated that getting a good review in their annual job performance evaluation is also motivation for them to continue teaching. In the next section, I present in detail the importance of annual evaluations as a motivation for special educators.

**Annual Evaluations.** This child code captures the participants’ comments about the positive impact of receiving a positive yearly evaluation, which reportedly encourages them to remain in their schools. Three participants said that the annual evaluation influences—either positively or negatively—their decision to remain at a school. They pointed out that when special educators obtain good marks on their job performance evaluations, this encourages them to employ best practices and to continue as special educators. For example, Ziad explained that a good annual evaluation encourages special educators to work harder: “To be honest … I feel that the annual evaluation is fair … and I got an excellent rating … believe me, I feel that I am motivated in teaching.” Conversely, Majed similarity pointed out that a low score on the annual evaluation may increase job stress:

The annual evaluation is similar to success in the exam: if you received an excellent rating is taken... This promotes teachers’ performance positively in teaching... As for the opposite, it increases the teacher’s stress and thus does not provide a quality education ...

Abed also agreed that the annual evaluation impacts on teachers’ performance in the school: “I am sure that the annual evaluation ... enhances your performance in teaching and your motivation to work effectively ... or does not.” The participants stated that the yearly evaluation is important factors influence their comfort in their school. They discussed the importance of personal characteristics to help them to teach students with ASD.
In summary, the participants indicated that one of the most important factors to affect teachers’ abilities to teach students with ASD is motivation. They talked extensively about sources of motivation in school and that increases their chances of staying in the teaching profession. This study shows that these special educators in Tabuk indicated that they motivated as soon as seeing their students have successfully mastered the skills required of them. The participants also talked about the importance of feedback from administrators and parents in order to meet students’ needs effectively. They expressed that the support of colleagues to solve problems at school enhances special educators’ perceptions foreword teaching students’ with ASD. According to the participants, salaries and positive annual evaluations also encourage teachers of students with ASD to remain in the teaching profession. The next topic is directly related to the teacher’s personality and characteristics identified as the most critical factors of special educators by the six special educators in Tabuk who feel that they are effective at teaching students with autism.

**Theme 4: Personal Qualities of Effective’s Special Educators**

This theme captures the participants’ perceptions of the important traits exhibited by effective teachers of students with ASD that affect their self-efficacy in teaching. This theme emerged from the participant responses to interview questions about what the participants thought makes them an effective teacher of students with ASD (see Appendix D). It captures the participants’ perceptions of the important traits they possess in order to be effective teachers of students with ASD. The participants identified the most critical traits of an effective teacher as (a) patience, (b) persistence, and (c) desire for self-improvement.

**Patience.** This child code represents most of the participants’ beliefs about patience as the most critical characteristic of effective teachers in special education. Five of the
participants indicated that patience is one of the most critical characteristics of effective teachers in special education. For example, Abed stated: “Patience is a must.” He added that “the teacher must be patient in teaching students.” Kinda stated that “special educators must be patient and patient in dealing with students with autism.” She further explained that most students exhibit unexpected behaviors while being taught, so “they [teachers of students with ASD] must be patient.” Fahad stated that “not every teacher is a special educator … a special educator must be patient [because] teaching students with autism is not easy.” Majed and Bedor agreed that special educators must be patient while teaching students with ASD. In addition to patience as a critical personal trait, the participants also discussed that persistence as one of special educators’ personal traits.

**Persistence.** During the interviews, the majority of the participants discussed the importance of persistence for the special educators as a characteristic of effective special educators who teach students with ASD. Four of the I interviewed commented that special educators should have the persistence to repeat their work until reaching their goals with their students. Fahad explained that:

> When I feel that the student has not achieved the desired results ... I feel that the defect is with me ... then I feel that I failed ... but I do not lose hope every time I fail. ... So, [I] go back and try again ... until the students achieve the required skill. ... That means the meaning of success I have. ... That the teacher gets tired in his work in order to feel successful.

Fahad also explained that he does not leave anything to “chance” because he indicated that an effective teacher is “one who can do everything in his power to teach the student.” Bedor also mentioned that “working with persistence leads to engaging and interacting.” Kinda and
Abed reported that persistence is a critical trait that most good teachers of students with ASD have.

**The Desire for Self-Improvement.** This child code captures the importance of teachers’ desire to improve the skills for teaching students with ASD. Fahad, Majed, and Abed stated that the desire for self-improvement helps special educators to develop their teaching skills. For example, Fahad commented:

> I feel that I still want to learn a lot of educational techniques in order to develop my teaching skills. ... I don’t leave anything to chance ... I develop my abilities ... I read a lot about linguistic communication and how to implement teaching strategies.

Abed described similar thoughts about self-improvement: “When you fail with a student, you hope to develop more.” He also explained that special educators must be aware that knowledge regarding teaching students with ASD is constantly developing, so they must keep pace with it. Majed agreed that self-improvement is an important trait of effective special educators: “You have a love for development … because a special educator deals with students individually … and therefore must have a sense of the importance of developing capabilities.” Fahad agreed with Majed, stating that “a teacher in special education loves to continuously develop their capabilities and skills.” The desire for improvement is a critical factor that helps special educators to develop their knowledge; in the next theme, I will discuss the professional development source that supports special educators to improve their skills in teaching.

In this theme, the participants highlighted the most important personal characteristics associated with an effective teacher. They stated that patience is one of these. In addition, they indicated that the teacher should not stop trying if they fail but persistently repeat
material once, twice, or even three times until they reach their goal. They added that their
desire for self-development in terms of knowledge and experience is the primary factor that
propels teachers of students with autism to enhance their teaching abilities. This final
personal characteristic is closely related to the following theme, educators’ expertise, in
which the participants discussed three mechanisms they feel assist them in proving their
practice.

**Theme 5: Educators’ Expertise**

The theme of educators’ expertise captures the source and the importance of gaining
knowledge that enables teachers to work effectively and enhance their perceptions in
teaching students with ASD. They described a variety of ways in which they sought
additional knowledge and experiences. Three child codes emerged during interviews
showing how in-service special educators can obtain knowledge and skills. The three child
code—(a) training workshops, (b) learning from expert special educators, and (c) years of
teaching—are explained in detail in the next section.

**Training Workshops.** This child code reflects discussion by most of the participants' about the importance of attending training workshops to increase their knowledge of how to
teach students with ASD. The participants explained that training workshops are necessary
because they help them to develop their experience and teach their students more effectively.
For example, Kinda confirmed that specialized workshops made teaching students easier.
She said, “I took training courses on methods for teaching students with autism, which
facilitated the education of female students.” Ziad also explained that workshops are
important stating, “I assure you that the workshops are important in increasing the teacher’s
knowledge about methods for teaching students.” He added, “you know, every day we learn
new things about autism and ways to communicate with students with ASD.” Fahad expressed his belief by saying, “I think that professional development helps the teacher to work effectively.” He continued:

I actually attended many workshops that helped me to teach my students, … for example, … the impact of modifying behavior, … the role of the self-efficacy of the teacher … and the logical training of students … and the teacher’s role in communication … and in building a positive relationship with the student. … I feel that I need to continue to develop my teaching skills, … because the more I learn something new, … the greater my awareness of how to deal with students.

Fahad stated:

When the teacher goes to the training courses provided by the Ministry of Education, … he will learn things that benefit him professionally and psychologically … He may learn how to implement teaching strategies … from the lessons that teachers study to be more effective … [such as] mastering the application of educational strategies … I now master most of the strategies that I study … so I feel comfortable.

Bedor explained that special educators need “continuous development” to avoid making mistakes when teaching their students. She said:

I attended many training courses specializing in autism… I think that any teacher needs to increase her teaching experience through courses and conferences… I feel that I need continuous development in order to reduce errors in applying educational methods.

Several participants relayed their concern that few training workshops are available in general and that those that are offered are typically non-specialized. They suggested this
causes a delay in learning about teaching practices that might improve their teaching skill
development. For example, Bedor said, “training workshops … are few, and I do not benefit
from them because they are not specialized, … [so] I took a training course using my own
money.” Abed similarly stated that “there are not many workshops in my field of
specialization.” In addition to the importance of attending workshops as a source of
developing knowledge, the participants referred to another source to gain knowledge,
learning from special education experts.

**Learn from Expert Special Educators.** This child code captures participants’
beliefs about the benefit of watching expert teachers of students with ASD in order to learn
more effective instructional practices. The participants highlighted the benefits of watching
expert teachers of students with ASD in practice. For example, Fahad pointed out that he
learned new methods of teaching by visiting other schools and watching expert special
educators. He said, “I am currently gaining experience in teaching students with ASD
through frequent visits to various centers. I have actually learned a lot of teaching methods
through these visits and have met many teachers specializing in the education of students
ASD.” Abed also noted that more senior special education colleagues often helped him
improve his instructional methods. He said, “you should pay attention to other [expert]
teachers because they help you … in the process of achieving goals, they help you a lot.”
Ziad similarly explained that watching expert special educators helps him learn to teach
students more effectively. Ziad expressed that sentiment in the following, “there was an
expert teacher in teaching students … I attended his class to watch how he teaches his
students, and I will apply what I learned from the teacher.” Ziad explained that he had
learned some specific teaching skills from sitting in on an expert teacher’s class several times.

Majed raised another point, the importance of exchanging experiences between teachers. He said:

I hope the ministry will implement the program for exchanging experiences between countries … For example, there are many specialists who are in Jordan: why are they not brought in so our teachers can benefit from their experience? I think this helps teachers.

Fahad agreed with Majed’s point. He stated:

You have expert teachers in other schools or even in other neighboring countries … I see that teachers need to sit with their expert peers to exchange teaching experiences and share situations they have encountered … This very step results in teachers’ acquisition of new teaching methods.

He continued, saying:

A lot of teachers who were experts in teaching advised me to work in one way or stop working in another way … I benefited from them a lot … I feel that it helps to be allowed to sit and talk about the problems, experiences, and solutions that we use to teach students.

The participants observed that watching experienced experts helps teachers of students with ASD to discover new methods of teaching. Also, the participants pointed out their knowledge increased through the experiences in teaching over the years.

**Years of Teaching.** This child code presents the impact that teaching students with ASD for a significant number of years has on enhancing teachers’ methods and skills. Five of
the participants recognized that their ability to teaching students with ASD has improved over time. For example, Bedor described the impact of her experience with the following:

I have six years of teaching experience, and I have had many teaching experiences, which has made the teaching process easier. … For example, even if I am in a very difficult situation, I will deal with it in a professional and skilled manner because I have built experience over the years.

Kinda stated that, every year, she enjoys teaching more and feels more competent. She agreed with Bedor. Kinda said, “I feel, after five years of teaching, I became an expert in teaching, and this helps me to stay and enjoy my time teaching female students.” Kinda asserted that special educators should learn from their mistakes. Fahad also discussed the importance of experience, “as my experience teaching my students increases … the degree of my awareness about the tasks that I want to apply with students increases.” Ziad added that continuous teaching combined with knowledge of what is new in special education makes the job easier and more comfortable. He said, “If you do not develop your skills specifically, you can make teaching more difficult for yourself.” Within the current theme, several results emerged regarding the importance of enriching teachers’ professional skills and knowledge.

All of the informants recognized the importance of teaching student students well. They identified several mechanisms through which their practice can improve. They identified specialized workshops as one way to increase their knowledge and confidence in their teaching abilities. The participants also emphasized that watching other expert special educators helps them better understand and apply educational strategies. They pointed out that by exchanging teaching experiences, special educators learn new methods and effective solutions to some of the challenges they face in teaching students with autism. Finally, the
participants pointed out that the special educators’ acquisition of experience over the years makes them more professional teachers. While the preceding themes have identified factors that motivate the participants to improve their teaching and want to continue in their field and ways in which they have sought to improve their practice, the following section highlights some factors that cause teachers to consider leaving their teaching careers, either partly or completely.

**Theme 6. Occupational Decisions**

This theme highlights the explanations provided for why the informants might consider leaving the teaching profession either partially or completely. The three reasons that emerged across all the participants’ conversations were: (a) to take a sabbatical to continue their education, (b) to obtain a higher position, or (c) to transfer to another school. I describe each of the reasons that factor into their decision making below.

**Continuing Education.** Within this child code, the participants discussed leaving their current teaching positions to continue their education to increasing their knowledge or because of concerns about excessive workload. According to three of the participants, their decision to leave the profession temporarily leave teaching is based on a desire to increase their knowledge and expertise so that they can later provide students with a better educational experience. For example, Bedor explained that while she wanted to continue teaching her students, she indicated that through studying a master’s degree, she will learn new things that will help her to teach her students better:

I applied for a master’s degree at the University of Tabuk ... I would like to complete my studies to learn a lot about the ways of dealing with my students ... and also more knowledge and experience about specialization.
Abed similarly said that he wants to continue his education in order to sharpen his teaching skills: “I want to take a master’s degree in special education in order to improve in the teaching of students.” Bedor expressed her desire to educate the community about autism through training courses or meetings and argued only happens through obtaining a graduate degree—either a master’s or doctorate. She said:

I would like the community to be conscious and aware that children with ASD are able to give as well as other individuals in the community … and if I raise my educational level, I will be able to participate in society through conducting educational sessions for families and the community … I realize that I cannot provide anything now, but after obtaining a higher qualification, I will be able to.

Majed stated that his teaching load causes him stress and, as a result, he wants to continue his education instead. He explained, “many special educators leave teaching and head off to continue their education because of work stress.” Majed added, “dealing with students is tiring and affects your life.” The need to continue their education is one reason that the participants identified for temporarily leaving their teaching practice. In addition to seeking to improve their classroom teaching skills, some informants sought a non-teaching position.

**Obtaining a Higher Position.** During the interviews, half of the participants discussed their desire to get a higher position, such as at a university or providing support for special educators through an administrative position. Three of the participants expressed their desire to leave teaching students with ASD to obtain a higher position. These participants would like to refocus their careers, either through working in a university or by providing support for special educators administratively. For example, Majed said: “I would love to complete university, and then I will not be a teacher. I can finish studying there and then
become a lecturer to develop my abilities.” Kinda stated that she wanted to work on the administrative side of education: “to be honest, and without any hesitation, I will not complete more than nine or ten years in the education process because I have nominations, I mean job positions in education.” She added, “as for leaving teaching and working in administrative positions, I am looking for that, as I love working on the administrative side.” Kinda also stated, “I see myself as better in management than teaching, so I would like to change, I do not know.” Bedor also expressed her desire to obtain an administrative role, saying: “I have thought a lot about switching to the administrative side because I want to support and guide other teachers, and I feel that the administrative side provides distinguished services for students if the school environment is a stimulus for us.” In addition to contemplating temporarily leaving their positions to go back to school or take a different position, while still staying in education, some either had or contemplated a lateral move, seeking a new position in a different school.

Transferring to Other Schools. This child code captures the reasons given by the participants for transferring to another school. The participants explained that this decision is related to either the school administration not understanding them or them being from another city. Three of the participants discussed either having already moved schools or considering doing so in the future. The reasons for this were related either to difficulties the school administration, as discussed in the theme of educator's stress, or difficulties due to the location of the school. Like Abed, Bedor explained that she transferred from an inclusive school to a segregated one because of difficulties collaborating with her general education colleagues and administrators. She said, “oh, I was working in an including the school in
Tabuk where there was an autism class ... but in the second year, I was transferred to the Intellectual Education Center in Tabuk.” She added:

Because you feel that you are isolated from the world … the environment is only students and the teacher … we cannot interact with the outside world because we are only special educators… and many times we think about transferring to another school because of this.

Fahad is also considering transferring to another school, but this is reason because he wants to return to his family in another area:

I told you I am from another region in Saudi Arabia and I must return to my region … but believe me … I liked education in Tabuk … all the administrators and teachers are now my friends … so I feel comfortable in education.

In general, the participants described satisfaction with their current positions and their chosen careers. However, like many professionals, they expressed a desire to learn and grow. The avenues they identified for such prior or anticipated change included seeking out new opportunities through additional formal education, moving into a different position within education, and transferring to a new school.

**Conclusion**

The results of this dissertation revealed the participants experienced a variety of interrelated factors that influence their perception of their teaching efficacy and desire to continue working as a special educator with students with ASD. As described above, participants identified multiple aspects of their work condition, including educator’s relationships, educators’ motivations, educators’ expertise and personal qualities, that reportedly had a positive influence on their desire to teach well, improve their practice, and
feel like a productive member of their school community. The participants also described various motivations to continue teaching special needs students, such as their sense of success and desire to teach students with ASD.

Despite the positive factors that participants reported as supporting their decisions to stay in their schools, some factors were identified as negatively affecting them. For example, stress was noted throughout the interviews with all respondents as a particularly challenging aspect of their work. They identified a lack of cooperation from parents, collaboration with colleagues, and support from administrators, as a source of increased stress. Consequently, they perceived this stress as negatively affecting their ability to effectively teach their students. They also identified several concerns related to their workload that causes them stress, including class size, challenging student behavior, mandated curriculum that is not appropriate for students with ASD, paperwork, and the excessive number of contact hours with students. The cumulative effect of these stressors was reported to cause the participants to consider alterations in their positions, either by continuing to higher education, moving to a higher position, or transferring to another school. The implications of these results are numerous and varied, which I will detail in the following chapter.
Chapter 5
Discussion

Research Purpose and Questions

The purpose of this study was to determine factors that influence teachers to remain in their careers and factors affecting their self-efficacy to teach students with autism in Tabuk, Saudi Arabia. The main research questions were:

1. What factors do special educators in Tabuk, Saudi Arabia, identify as influencing their desire to continue working with students with ASD?
2. What factors do special educators of students with ASD in Tabuk, Saudi Arabia, identify as influencing their self-efficacy in teaching?

Summary of Findings

After analyzing the six participants’ interviews, I identified six themes representing their insights regarding the factors they believe affect their retention as special educators and their self-efficacy to teach students with ASD. The six main themes are (a) job stress, (b) educators’ positive relationships with others, (c) educators’ motivations, (d) personal qualities of effective teachers, (e) educators’ expertise, and (f) occupational decisions. Each of these themes has various child and grandchild codes, which I briefly describe below.

Educators’ Stress

The results of this analysis revealed several components to the participants’ perceived stress, including lack of collaboration, workload, ineffective related services, and poor classroom resources. All of these aspects of the informants’ working conditions were reported as problematic and challenging, causing either difficulty in their ability to teach or reducing their desire to continue teaching. These findings suggest that job stress is a
problematic aspect of the work of special educators that requires attention, as it may impact special educators’ sense of self-efficacy and their desire to remain in the profession. Most of the participants indicated that the lack of collaboration between special and general educators when teaching students causes them to feel uncomfortable in their schools, resulting in a sense of isolation. The results suggest that special educators feel more isolated in inclusive schools than in segregated ones; most of the participants reported that they are discriminated against by their fellow general educators in inclusive schools because they are “only” special education teachers. Furthermore, the participants noted that some general educators tell them that they (the general educators) are unable to teach students with ASD, expecting the entire burden to fall on the special educators in a classroom in which the lead teacher completely ignores students with ASD.

The participants reported that the educational background of principals and supervisors can greatly affect their relationship with administrators, impact their teaching performance, and cause stress. Most of the participants contended that some principals do not fully understand the responsibilities of special educators and that their lack of collaboration and support leads to ineffective teaching. They asserted that principals often do not provide them with the necessary tools and that non-specialist supervisors do not provide appropriate and well-informed assistance. In addition, some of the six participants stated that a lack of parental follow-through in teaching their children at home is another cause of job stress; they reported needing more effort to teach students when parents did not follow up with their children’s homework.

The participants reported feeling stress because of their workload, which has several components, including challenges with classroom management, inappropriate curriculum and
excessive paperwork. One of the findings of this study is that the interviewees find it challenging to manage classes of students with ASD due to the class size, and that recent increases in the number of students with autism served in schools have affected teachers’ ability to provide effective education. Several participants in this study suggested the need for teaching assistants in classes with five to seven—or more—students and agreed that the ideal number of students with ASD in one classroom at one time is three. Furthermore, the participants emphasized that having a student with complex support needs leads special educators to provide “care” instead of teaching, which makes teaching other students more difficult.

Some participants shared that they found that teaching heterogeneous classroom stressful. They also identified the undesirable behavior of some students with ASD as one of their main sources of stress and pressure. They reported this contributes to the paperwork obligation of their position, which the participants also found to be a major source of stress and discomfort. They reported spending between three and six hours a day documenting their efforts, processing students’ work, and taking care of administrative demands. Furthermore, participants reported that they spend up to 18 hours per week teaching, which they found excessive and, therefore, stressful. These findings related to job stress imply that teaching, for educators working with students with ASD, is difficult due to heterogeneous classrooms, undesirable behavior of students with ASD, excessive paperwork, and weekly teaching students hours.

In addition to identifying their workload as a factor in their stressor, the informants suggested that curriculum challenges and lack of classroom resources also contributed to their feelings of stress. Most participants expressed that the new special education curriculum
designed by the Ministry of Education in Saudi Arabia does not meet the unique needs of students with ASD, because it is designed for use with students with Intellectual Disabilities. The participants also indicated that they find it challenging to adapt lessons for students because the topics are “illogical,” and because the new curriculum lacks general guidelines to help them to teach and the amount of adaptation needed requires significant advanced experience in teaching students with autism. The participants reported that the lack of resources (e.g., technology tools) for teaching students with ASD increases the difficulty of their job. Furthermore, they pointed out that they must buy teaching tools with their own money, which increases their feelings of dissatisfaction. The participants also identified the absence of supportive specialists, such as speech-language pathologists, as a source of stress, noting that they are not fully qualified to handle certain situations without such assistance and related services. This, in turn, places more responsibility on individual special educators and causes additional stress.

*Educators’ Positive Relationships with Others*

Although the previous theme captured information from the informants about factors that caused them stress, they also referred to factors that push them to perform their work more effectively. The findings related to educators’ relationships indicated several factors that support the participants to overcome stress and to stay in their careers. This represents the special educator’s relationships with the school community, including positive relationships with students with ASD, parents of students with ASD, and general educators. The informants stressed that building a positive relationship with students helps them to quickly adapt to the school climate and motivates them to work hard. They noted that building positive relationships with their students strengthens their faith in their abilities and
enables them to empathize with their pupils. According to most of the participants, positive relationships with their peers also help educators feel comfortable and stable. They confirmed that strong relationships relieve stress and help in overcoming the problems that special educators typically encounter at school. The participants also identified parental support and cooperation as important factors that encourage effective teaching and enhance their abilities to better understand their students and apply appropriate methods for teaching them. These results suggest that a positive relationship between special educators and students, general educators, and students’ parents increase the feeling of satisfaction and reduce feelings of stress at school for special educators.

**Educators’ Motivations**

Another finding of this inquiry was to highlight the factors that motivate the participants to work with their students with ASD effectively. There were several aspects to educators’ motivations: (a) a sense of success, (b) praise from administrators, (c) salary, and (d) annual evaluations. The results suggest that a sense of success affects interviewees’ sense of motivation and their desire to continue teaching. The participants pointed out that their students’ success in mastering the skills required of them encourages them to continue working hard and is their greatest motivation. Furthermore, they reported that praise from their administrators motivates them to teach students with ASD more effectively. The participants also mentioned that a good salary is motivation to develop the best teaching practices for students. They reported that positive job performance evaluations inspired them to work hard educating their students with autism. These results suggest that there may be multiple avenues for encouraging special educators to continue working hard to educator
students with ASD and stay in the profession, including a sense of success, the support of administrators, salary and annual evaluations.

**Personal Qualities of Effective Special Educators**

The result of this study suggests several personal qualities may be important for the participants. According to the participants, patience, persistence, and the desire for self-improvement are all important aspects of teacher dispositions. In addition to patience and persistence, the participants identified the desire for self-development as critical qualities for effective teachers of students with ASD.

**Educators’ Expertise**

Having and gaining expertise in their profession was also important to the informants. They suggested that specialized training workshops help them to increase their knowledge of effective teaching methods and enhance their sense of comfort and confidence. Furthermore, the participants reported that attending such workshops helps them avoid feelings of failure. The interviewees found that attending classes for expert special educators helps them to learn new skills and techniques. Most of the participants also reported that having more years of experience increases their comfort level and satisfaction with their teaching performance. They observed that they feel comfortable after five to six years on the job. These findings suggest that learning to teach is a complex process that requires quite a bit of experience for special educators to gain a sense of competency and comfort with their teaching performance.

**Occupational Decisions**

The participants described three types of occupational decisions related to their plans for the future. These included continuing their education, obtaining to a higher position or
transferring to other schools. Some of the participants reported considering temporarily leaving the profession to increase their knowledge and expertise, with the ultimate goal of returning to teaching and providing students with an even better education. Others noted that they need more administrative support because some special educators leave their positions when their school administration does not understand them. Yet they stated that they believe the heavy workload is especially to blame. Most of the participants said that they want to seek a higher position at the university level; thus, they plan to leave the profession of teaching children and teenagers behind permanently. Several interviewees also said they might leave their current schools because their families live in another city. In general, the respondents expressed a desire to remain in the field of special education, although with some possible changes, such as by temporarily leaving to gain further education, taking a different position within special education, or by moving to a different school. Even with the amount of stress they described throughout their interviews, the informants did not generally express a desire to leave the field of education entirely.

**Discussion of Findings**

The participants in this descriptive qualitative study of teachers’ experiences identified several factors influencing their decision to remain in the profession and affecting their perception of their ability to teach students with ASD, which I explored in the above analysis. Those findings are consistent with previous studies discussed in Chapters 1 and 2, self-efficacy theory (Bandura, 1994; Maddux, 2002; Ramachandran, 1994), and conceptual models of teacher retention (Billingsley, 1993; Brownell & Smith, 1993; Chapman, 1983). However, some factors suggested by this analysis adds to our current understanding of these topics. In the following section, I identify and describe those areas in which the results of this
study are consistent with, contradict, or extend the current research and theories in the areas of self-efficacy and teacher retention.

**Educator’s Stress**

One finding of this study was that most of the participants reported considerable increasing stress related to their teaching, stemming from lack of collaboration, excessive workload, ineffective related services, and lack of classroom resources. These were evident in their descriptions of the negative impact of the lack of collaboration between themselves and their general educator colleagues. The informants felt that they were isolated in their positions and did not feel comfortable in the school setting. Furthermore, most of the six participants reported that they felt constant pressure due to the lack of collaboration. This finding may be attributable to the fact that most of the participants said they were more exposed to isolation when working, ironically, in *inclusion* schools. Schools with an inclusion program usually have principals and teachers from different educational backgrounds unrelated to special education. Consequently, they may have negative attitudes toward teachers of special education. Some of the participants noted that general educators and their typically developing students dealt cautiously with them. However, these negative attitudes indirectly affect their perceptions of teaching in the field of special education. As a result, they reported that they felt a lack of acceptance in inclusive schools, this induced great stress.

These findings are consistent with some of the studies reviewed earlier, which concurs that the lack of collaboration among special educators may appear to be one reason for increased stress (Kilgore et al., 2003; Kniveton, 2004; White & Mason, 2006; Lindsay et al., 2013). For example, a study conducted in Jordan (Al-Zayoudi, 2007) identified the lack
of collaboration from general educators is stressful for special educators. Also, Kniveton (2004) reported that special educators identified academic isolation from general educators as a source of stress. White and Mason (2006) found that 54% of special education teachers identified a lack of collaboration with general educators as a stress factor, consistent with Al-Zayoudi (2007), who identified the lack of collaboration with general educators as one of the factors that increased stress among special educators in Jordan. Kokkinos et al. (2009) similarly found the same result, that one of the challenges of in-service special educators is the lack of collaboration between special educators and general educators.

Most of the participants in this study reported that general educators frequently remind them of the futility of teaching students with autism and that this contributed to their levels of stress. This suggests that negative perceptions of the worth of their profession by the general educators contributes to their job satisfaction and sense of teaching effectiveness. This finding is consistent with the theory of self-efficacy, in which Bandura (1997) identified verbal persuasion as an element of self-efficacy as influencing a teacher’s perceptions of themselves. Bandura (1997) and Redmond (2010) believe that verbal persuasion or social persuasion may increase a teacher’s self-efficacy if the verbal input is positive support and lower it if the verbal input is discouragement. According to Redmond (2010), discouragement from others can lead to self-doubt, followed by reduced chances of success. Consequently, negative input may affect the teacher’s perceptions of their students with ASD. Ruble et al. (2011) emphasized also a relationship between the level of self-efficacy in teachers of students with autism and the level of support from colleagues. They further confirmed that perceptions of administrator support and the level of special education teachers’ self-efficacy were correlated similarly to the results of this study.
In light of the findings from this study, in interaction with previous studies’ findings, it is evident that administrators have a role to play in promoting retention and reducing attrition. This study suggests a widespread lack of support from principals and supervisors may cause teachers of students with ASD much stress in their schools. The participants suggested that administrators do not support them because they do not understand the nature of special educators’ roles in the school. More specifically, they contended that principals do not have enough information to work with educators of students with ASD effectively. They neither adequately understand special education as a whole, nor autism in particular. Thus, the inevitable consequence of principals’ lack of sufficient knowledge of special education is that they hinder the educational process by refusing to provide special educators’ basic needs, such as teaching tools. Consequently, the comfort of special educators in their schools may be at stake, when the relationship between the educators and their leader are not characterized by cooperation. This may negatively affect the level of satisfaction of the special educators, which in turn might reinforce their sense of stress. These results are consistent with Frost and Kersten (2011), who found that administrators’ educational background adversely affects their ability to support special educators. Conversely, they found that administrators with a degree in special education understood how to support special educators in their schools better than administrators who did not have that educational background. Similarly, Fix et al. (2015) found that a lack of administrator knowledge about special educators’ roles increased the likelihood of those special educators leaving the field. Another finding of this current study was that support by supervisors without a special education background was a source of stress for the research’s participants. Most of the participants indicate that supervisors do not provide proper or useful advice when they
encounter problems in teaching, which was also a source of stress for the interviewees. Kilgore et al. (2003) similarly found that teachers of students with disability reported a lack of support from supervisors as a reason for increased stress in their schools.

Just as the lack of collaboration with general education colleagues and a lack of support from administrators and supervisors was reported to cause stress for the participants, the lack of parent cooperation with requests for follow-through of school activities at home may also be a stress for special educators. The studies reviewed in Chapter 2 revealed the importance of parents cooperating with and supporting special educators in achieving positive results for their children. Parental assistance has been found to enhance special educators’ chances of success and, consequently, increase their self-efficacy (Bandura, 1997; Redmond, 2010). Conversely, several studies have highlighted the adverse effects of parents not cooperating with special educators. For example, Miller et al. (1995) found that parents’ lack of cooperation is one of the most significant challenges facing special educators.

Similarly, many researchers (Galinsky, 1990; Williams & Gersch, 2004; Kokkinos et al., 2009; Lindsay et al., 2013) observed that a lack of cooperation between special educators and parents might be a considerable source of stress. Galinsky (1990) noted that special educators reported feeling stress when parents do not respond to their written notes. Those observations concur with the current study’s findings. The participants reported that parents’ lack of involvement and a dearth of communication between special educators and parents causes disappointment and stress. They tend to feel that parental involvement is vital to achieving positive results with their students. These results concur with those of Gallagher et al. (2004), which the researchers found that special educators benefited noticeably from relationships with parents, allowing them to better know and understand their students’ social and
academic needs. They additionally reported that students with disabilities showed improvement in their abilities when their parents participated constructively with their teachers. This suggests that relationships between educators and administrators, supervisors, and parents, *all* play a role in special educators’ sense of stress, self-efficacy, and desire to remain in the profession.

The interviewees also noted several aspects of their workload contributing to their stress. As described earlier, most of the participants ascribed difficulty in classroom management to what they identified as too many students in their classrooms, leading to increased stress. This finding is consistent with Lindsay (2013), who found that too many students with ASD created a tremendous increased workload for special educators. Williams and Gersch (2004), Lindsay (2013), and Zayoudi (2007) similarly concluded that increasing the number of students per classroom increases the teacher workload and stress. In Jordan, Zayoudi (2007) also found that special educators cited the increased number of students with disabilities as a reason for their stress. Related to this, Billingsley and Cross (1991) and Piatt and Olson (1990) reported that one of the factors affecting a teacher’s decision to stay or leave is the number of students in the class. Of note is that several participants in this study concluded that they should be responsible for no more than three students with ASD. This, in turn, raises questions about the educational and social implications for segregating students with disabilities in such small classrooms.

The participants also expressed the need for assistant teachers in the classroom to reduce their workload and stress. This reflects a gap in the kingdom of Saudi Arabia’s educational system: there are currently no formal positions for special education assistants in the Saudi employment system (Ministry of Education, 2019). This does not mean, however,
that the Ministry of Education does not recognize the importance of having a teaching assistant in the classroom. The participants indicated that having from five to seven students—as they have sometimes had—is excessive and have argued and agreed that the appropriate number should be three students with ASD per class. This suggestion conflicts with those of the studies reviewed in Chapter 2. For example, Hocutt (1996) and McCrea (1996) observed that the average number of students with disabilities in a classroom should be about 12–15 per teacher. However, these studies did not identify the types or severity of disability of the students in the classes they examined, nor did they explore the number of additional educational staff, such as educational assistants, present. It is possible that adding educational assistants could address the participants’ concerns related to class size and balance their needs with the rights of their students to be educated in the least restrictive setting possible. In addition, the participants' concern about class size might be attributable to some having less experience teaching students with autism. Although most of the participants had teaching experience ranging from 4 to 6 years, this may not be enough for those who registered these concerns to be considered experts in teaching students with ASD, especially if we take into account other factors, such as the lack of professional development mentioned by participants. It is also important to note that Kinda, the interviewee who could be considered the most expert, in terms of the number of years of experience, involvement in professional activities, and recognition with the profession, did not raise concerns about class size and did not suggest that students with ASD should be educated with only two other peers. Berliner (2004). Berliner (2004) suggested that special educators may be considered experts after five to seven years. Still, the participants in the present study may have felt that six or seven students was too many due to their limited number of years of teaching
experience. This interpretation is also supported by a study conducted by Conley and You (2016), which found that a lack of experience negatively affects special educators’ job satisfaction. As a result of a lack of knowledge and experience, these participants may report experiencing more stress due to the number of students in their class and inability to effectively address their behavioral and academic needs.

The interviewees indicated other challenges they face in teaching their students, including the lack of classroom resources, such as teaching technology and essential classroom equipment. The participants reported these deficits cause them to feel they are unable to provide effective education to their students. Consequently, the participants described feeling stress as a result of this issue. Prior research has documented the impact of inadequate technological and educational tools on the teachers of students with autism, like that reported by these participants. For example, Yeunjoo Lee et al. (2011) found that among the factors that affect special educators’ self-efficacy is the lack of sufficient resources such as curriculum, technology, supplies, and budget. Williams and Gersch (2004) and Kilgore et al. (2003) also found that the lack of sufficient classroom resources was a factor causing stress in special educators.

Although classroom resources are considered one of the key factors impacting special educators’ effectiveness, increased availability of specialists in speech and language disorders, psychological and counseling support, and related services are vital to reducing workload and stress. The presence of specialists in a school confirms to teachers of students with autism that their schools care about educating all students. When these specialists and the services they provide are missing from the educational environment, special educators have to devote more time to tasks for which they have not been trained, and students may
likely to progress slower. The participants indicated that they must do a lot of work by themselves due to a lack of support services and specialists. Consequently, these educators may be vulnerable to stress and discomfort in school. This result is consistent with the findings of Zayoudi (2007). Kokkinos et al. (2009) also conducted a study on the sources of stress among special educators and found that teachers reported inadequate services as a source of stress.

In Saudi Arabia, the educational system provides a unified curriculum for all students, including students with disabilities (Al-Mousa, 2010). Under the special education umbrella, the curriculum designed for students with intellectual disability is the same as that taught for students with autism (Al-Mousa, 2010); therefore, teachers of students with autism are actually obligated to teach that curriculum to their students. Numerous adaptations are obviously necessary to make this curriculum relevant, useful, and accessible to students with autism. The participants indicated that the curriculum is challenging because it does not meet the educational needs of students with autism, without adaptation. Clearly, having experience and know-how with such adaptations can facilitate this process. The teachers of students with ASD in this study cited experience as an important factor in adapting the curriculum for their students. These results support those of Williams and Gersch (2004), who found that constant changes to students’ curriculum are stressful for special educators. Similarly, Kokkinos et al. (2009) found that the most significant factor contributing to stress among special educators is implementing a special education curriculum in the absence of a customized curriculum for students with ASD.

This study revealed that excessive paperwork commonly might increases the workload among teachers of students with ASD, thereby contributing to their overall stress.
The participants indicated that they spent between three and six hours per day documenting students’ work and completing the administrative work assigned to them. In the Saudi education system, teachers of students with autism are obligated to document all of their administrative and teaching work on paper (Al Mosa, 2010). This means that special educators tend to focus on their administrative work at the expense of their teaching. The paperwork must get done, which the participants felt reduced the quality of their teaching. As a result, paperwork may become a constant source of stress for the participants. This finding is consistent with most of the research on this topic. For example, Emhich (2001) found that paperwork is a predictive factor of stress among teachers of students with disabilities. Similarly, Carlson et al. (2002) found that 53% of the special educators in their survey identified paperwork as a factor that adversely affected their ability to teach. Vannest et al. (2010) reported that special educators do not have time to write lesson plans because they have to complete other paperwork. Researchers have also identified paperwork as a factor influencing the retention of special educators (Conley & You, 2016; Mehrenberg, 2013). While much of the research has been conducted in the U.S., the similarity of the results of this dissertation with the extant literature suggests that this problem is endemic to the profession, even outside of the United States.

The educational system in Saudi Arabia requires special educators to spend 24 hours at school per week in total, which comprises 18 hours of direct student contact in the classroom and 6 hours doing administrative work (Al-Mousa, 2010). Most of the participants in this current study stated that teaching for 18 hours per week was stressful and negatively affected their overall teaching performance. Some of the participants indicated that it was a demanding workload considering all of the effort required to teach students with ASD. This
study’s findings are consistent with those of Al-Zayoudi (2007), who found that the number of working hours causes stress among special educators. Some of this study’s participants suggested that the preferred maximum number of hours for special educators in Tabuk should be 12 hours per week. The participants who cited this concern also described the number of students in their class and the amount of administrative work as reasons for wanting to teach fewer hours. Interestingly, when considering this result within the lens of self-efficacy, given that the participants who raised these concerns were those who indicated that many students in the classroom limit their ability to provide effective education to students, increasing their feelings of stress. If the number of students is large, and with a lack of experience in teaching and controlling students in the classroom, the teacher may become exhausted. It supported the findings of Nuri et al. (2017), who found that educators with fewer working hours had higher self-efficacy than educators with more working hours. This suggests that special educators’ perceptions may change because of the number of teaching and administrative work hours. The participants indicated that the lack of collaboration causes them more stress; they also indicated that the positive relationship with the school community might increase their feelings of comfort. In the next section, I discuss the findings of educators’ relationships theme.

**Educators’ Relationships**

The results of this study suggest teachers' relationships factor into their decision to stay in their schools. It stems from three main axes: positive relationships with students, students’ parents, and general educators. The participants reported that a feeling of love for their students increased their job satisfaction and encouraged them to work hard. These results are consistent with Hargreaves (2000), who found that the quality of the relationship
between students and their special educators is an essential factor that helps special educators enjoy their jobs and motivates them to continue in their profession. Veldman et al. (2013) also found a relationship between job satisfaction and teacher-student relationships. Taken together, these studies suggest that special educators who can build a positive relationship with students will have a greater sense of job satisfaction, thus increasing their likelihood remaining in the profession.

Among other findings of this study also suggest that the participants who build a positive relationship with general educators may have more satisfied with their job and feel more comfortable, stable, and confident in overcoming the problems they face during teaching. Furthermore, a positive relationship between special educators and general educators may help them to overcome difficulties in their schools. These results are consistent with current research. For example, Berry (2012) found that positive relationships with colleagues and administrators increased teacher satisfaction. Similarly, Harrison-Collier (2013) found that special educators feel comfortable in their schools and positions when they can work collaboratively with their colleagues. Furthermore, Jones et al., (2013) reported positive relationships with their peers enhanced the likelihood that special educators would remain in their schools.

Although a teacher’s relationship with his/her colleagues appears to be a factor in teacher job retention, building bridges of constructive communication between special educators and parents may also enhance the teacher’s effectiveness. The participants indicated that building a positive relationship between the teachers of students with ASD and parents may encourage special educators to work more effectively and allows them to get to know their students better and help them as much as possible. These findings are consistent
with existing research. For example, Gallagher et al. (2004) found that special educators showed more engagement in teaching students with ASD when parents cooperated and were involved. In particular, they found that special educators were able to manage their students’ educational progress inside or outside the classroom and became more knowledgeable about their student’s abilities when they have a relationship with the students’ parents. Gargiulo (2003) observed that students with disabilities demonstrated academic improvement when their parents collaborated with their special educators. Current and previous research (e.g., Gallagher et al., 2004; Gargiulo, 2003) highlights the positive effects of cooperation between special educators and parents, a framework of effective services, psychological counseling, and academic support to students with ASD. Effective collaboration between teachers and parents is mandatory in the special education system of the Kingdom of Saudi Arabia (Al-Mousa, 2010). However, cooperation between special educators and parents depends largely on the special educator’s initiative to build that relationship (Stronge, 2007). Hence, special educators who have greater self-efficacy can construct and maintain that positive relationship (Bandura, 1997; Walker & Hoover-Dempsey, 2000). Beyond the import of positive relationships with the school community, I discuss the general sources of motivation for the participants in this study.

Educators’ Motivations

Special educators’ relationships within the school community may not the only factor affecting teacher retention. In addition, motivating factors likely stem, at least in part, from educators’ sense of success, support from administrators, sufficiently high pay, and positive annual evaluations. Most of the participants indicated that a sense of success motivates them to teach their students; when students show mastery of skills they have been taught, their
teachers are spurred on to keep working hard. This suggests that the teacher’s sense of achievement may increases their positive attitudes towards education in general. Additionally, it implies that teachers’ sense of achievement may be an important factor in teachers’ decisions to remain in the teaching profession and seek to improve their teaching effectiveness. This finding is consistent with those of Perrett (2001), who found that the teachers’ sense of achievement motivates them to work more effectively. Likewise, Mani (1989) found one of the factors encouraging special educators to remain in their careers was the high achievement of their students with disabilities. Based on the theory of self-efficacy, Bandura (1997) and Ross (2007) posited that success in teaching creates an incentive for educators to repeat that experience, arguing that this success, which is a pleasant experience, increases their chances of continuing at work. All told, this research supports what Bandura called “mastery experiences” (1995, p. 50), the feeling of success that enhances teachers’ belief that repeating the experience of obtaining favorable results with their students increases their motivations.

Furthermore, this study concluded that a school administration that communicates with special educators and provides positive support may increase educators’ motivation to provide an adequate education. These findings are consistent with those of a number of researchers discussed in Chapters 1 and 2. McLaurin et al. (2009) and Nichols (2008) found that special educators reported feeling supported and comfortable when receiving help from school management. Mani (1989) found that recognition from special education directors motivates special educators to stay in their schools. According to the theory of self-efficacy (Bandura, 1997; Redmond, 2010), verbal support, or even a symbolic reward, is one way to motivate teachers and help them feel effective in working with their students. Further,
encouraging teachers by providing positive feedback after an achievement enhances a teacher’s sense of self-efficacy and increases their successful experiences. Thus, increasing the chances of repeating a positive experience leads to enhanced performance.

In addition to enhancing performance, the results of this study suggest that positive evaluations improve teacher retention. This finding is consistent with other research, such as that by Taylor and Tyler (2012), who found that job performance evaluations positively impacted developing teacher effectiveness. Consistent with the self-efficacy theory, this means that teachers may view the evaluation as a motivating factor in continuing to teach. The positive feedback that teachers receive about their performance helps develop positive perceptions about their work and motivates them to sustain or improve their performance (Bandura 1997). Therefore, when special educators feel that they have received an assessment that takes into account their achievements and their teaching activity, they may feel strengthened and look forward to working hard to preserve what they have achieved.

The participants pointed to another motivation for continuing in the teaching profession: the monthly salary supplement provided to special educators in the Kingdom of Saudi Arabia. Most participants spoke about the importance of this supplement in encouraging them to stay in teaching and special education. This is consistent with research, such as Miller et al. (1999) and Singer (1992), both of which observed that special educators in school districts that pay higher salaries are less likely to leave their profession. Van Alstine (2010) found that 100% of special educators surveyed agreed that a low salary was a factor that contributes to leaving teaching. These results support the importance of salary in retaining teachers of students with ASD.

*Personal Qualities of Effective Special Educators*
Personal qualities likely also play a prominent role in the ability of teachers to face work challenges. The informants identified three personal characteristics of special educators that help them face the workload in the field of special education: patience, persistence, and the desire for self-improvement. The findings suggest that possessing such teacher dispositions are likely important for special educators because they work with a heterogeneous segment of individuals with disabilities. Woolf (2019) found that some of the essential qualities of a special education teacher are patience, empathy, and love of children. Another study conducted by Soulis (2009) agreed with these results and added that commitment and a desire to improve their knowledge are characteristics of effective special educators. Wheatley (2002) found that persistence is a quality of special educators who have a mastery orientation. Relating to the theory of self-efficacy, several researchers (e.g., Moeller & Ishii-Jordan, 1996; Bednour, 1997; Coladarci & Breton, 1997; Ross, 1998; Romi & Leyser, 2006) concluded that teachers with high self-efficacy could manage their classes more effectively, possessed the ability to confront and solve problems that afflict the school, bear the burdens of teaching, organize their work, and devote more time to their teaching.

**Educator’s Expertise**

The personal competencies of special educators are not alone in making teachers more adaptable in the learning environment. Gaining experience likely also help teachers feel more comfortable and are able to teach effectively, especially if it stems from attending specialized training courses and observing expert teachers or through the experience gained after many years of teaching. This study suggested that specialized training workshops help special educators increase their knowledge of effective methods for teaching students with autism and, thus, increase confidence in their abilities. This indicates that special educators
found a benefit in attending specialized training workshops, which resulted in increasing their teaching capacity. Consequently, special educators often benefit from gathering the best current educational practices at specialized workshops and applying them to their teaching. This finding was consistent with the results of many studies. Leblanc et al. (2009) found that special educators who received specialized training believed in and effectively used techniques to help students with ASD reduce stress and anxiety. Higginson and Chatfield (2012) found that, following specialized training, teachers of students with ASD increased their skills in evidence-based teaching and applying learning strategies. Horan and Merrigan (2019) found that special educators who were “highly-trained” showed higher levels of self-efficacy than those with “little or no training.”

Training sometimes includes observing other expert teachers in the same field. This study found that the participants who observed their colleagues in action enhanced their own teaching abilities and they felt encouraged to practice the new teaching methods with students with autism. Consequently, expert special educators may consider an essential source for improving the experiences of teachers of students with ASD with less experience. Based on the self-efficacy theory, gaining experience by watching expert special educators teach increased observers’ effectiveness in applying what they learned from that expert. Observing an experienced teacher increases the chance of teaching success and, consequently, increases their positive perceptions of teaching in general (Bandura, 1997).

In addition, the results support that experience can increase teachers’ comfort and confidence in their teaching skills. More specifically, most participants indicated that they experienced a sense of relief and confidence after five to six years of teaching. This reflects the impact of the accumulation of teaching experiences on the perceptions of special
educators toward the teaching profession. As a result of their experience, special educators become more committed to their careers (Cross & Billingsley, 1994; Gersten et al., 2001; Littrell et al., 1994). Additionally, increased experience may enhance the self-efficacy of teachers of students with ASD. These results are consistent with studies conducted in the area of self-efficacy, such as Shaukat et al. (2019), which found that special educators with five years of experience had significantly higher self-efficacy than teachers with less than five years. In a related study, Yassin and Ali (2014) found that special educators with more experience teaching students with ASD experienced burnout less frequently than those with less experience; thus, increasing job satisfaction. Although there are resources to increase teachers' knowledge that may support special educators to stay in their jobs, the next topic discusses most educational decisions that the participants identified as the most critical decisions that they may decide.

**Occupational Decisions**

Many participants interviewed in this study expressed their desire to leave the classroom teaching either temporarily or permanently. Some participants expressed a desire to continue their education in order to develop their teaching abilities further or to avoid workloads in special education. This finding was consistent with Miller et al. (1999), who observed that perceived workload manageability affects special education teachers’ decisions to leave their teaching careers. Miller et al. listed the perceived workload factor under the Mesosystem adapted by Brownell and Smith (1993). Brownell and Smith suggested that, under Bronfenbrenner’s model, the teacher’s school and interaction with the environment surrounding them affect special education teachers’ decisions to stay or leave. Therefore, when the special teachers do not receive the support, they need to face a heavy workload, it
may give similar negative results as the participants described in this study. Some of the participants expressed a desire to attain a higher administrative position. Their responses indicated that this decision is based on several factors that push them in that direction, including the desire to provide administrative support to special education teachers, especially those having difficulties dealing with some school administrators. Based on Billingsley’s (1993) teacher retention model, special educators’ commitment to the special education field is a factor that affects teachers' decisions. Therefore, when special education teachers decide to pursue a higher position within the school to support teachers of ASD, it is a form of commitment to the field. However, it is a decision that requires special education teachers to leave the classroom in order to take on these new responsibilities.

The participants indicated that they may decide to move from school to school based on the strength of their relationship with the administration and the level of support they receive from administrators. This finding is supported by Calabrese (2009) and Cancio et al. (2014), who found that a lack of administrative support routinely contributes to the departure of special education teachers. Furthermore, Billingsley (2004) observed that one of the primary external factors influencing a special education teacher’s decision to stay or leave is the school’s administration.

In addition, the participants identified poor collaboration between special and general education teachers motivate interschool transfers. This finding is supported by White and Mason (2006), who found that 54% of teachers of students with ASD identified lack of collaboration with general educators as a point of stress. This study also found that the participants identified another factor affecting their decision to move on: a school’s geographic location, such as proximity to home and family. This finding is consistent with
the results of a study by Mani (1989), who found that a school’s location is one factor influencing teacher retention.

The above discussion of the results of this dissertation research demonstrates close consistency with findings of previous research and prevailing theories. What is notable, however, is that these results are consistent even when examined under a novel context, that of special educators working in segregated schools in Saudi Arabia. This agreement suggests that these findings may be applicable across additional contexts and support the strength of claims drawn from the theoretical underpinnings of this research, namely, self-efficacy theory (Bandura & Pajares, 1996; Bandura, 1987; 1994; 1995; 1997; Gibson and Dembo, 1984; Maddux, 2002; Ramachandran, 1994; Romi & Leyser, 2006 Wood & Bandura, 1989), and conceptual models of special education teacher’ retention (Billingsley, 1993; Bronfenbrenner, 1978; Brownell and Smith, 1993; Chepmen, 1983; Mani, 1989).

Limitations

Like all research, there were limitations to this study. Several related to the design of the study, others to difficulties in carrying out the study as designed. This was a qualitative, interview-based study, with a limited number of participants located in Tabuk, Saudi Arabia, conducted from the U.S. One of the most critical limitations to this study as conducted was the small number of participants. While I tried to recruit a greater number of participants, due to the geographical distance and the COVID-19 epidemic that shut down schools in Saudi Arabia just after the first month of participant recruitment, I managed to recruit only six participants for the study. I attempted to recruit additional participants early in the recruitment process, such as by resending the invitation one month after the initial letter. However, because I was not physically present in Tabuk, Saudi Arabia, I could not contact
the supervisors directly and ask them to encourage local special educators to consider participating in the study. Additionally, with the onset of the shutdown of schools in Saudi Arabia on Mar 8, 2020, with the agreement of my committee, I reluctantly had to suspend further participant recruitment.

A related limitation was the limited number of female participants. Despite sending the invitation twice to the target population, I received only two responses from female teachers, both of whom did participate in the study. While the participation of two female teachers in study of special educators in Saudi Arabia is novel and goal of this study, I encountered difficulty in recruiting more female teachers due to religious and cultural factors in Saudi Arabia. Nevertheless, it is worth mentioning that two of the participants were women, which, while fewer than I would have desired, is still a novel and important aspect of this study. Because of my desire to recruit female participants, I chose to conduct the interviews by voice only. This necessarily limited the nonverbal communication that can occur during face-to-face or video-based interviews. This was a deliberate trade-off, but one that likely had consequences in terms of my ability to non-verbally prompt the respondents for more elaborated responses, accurately visualize the participants’ movements, and fully gauge their emotions during interviews. However, during the study design phase, I decided that the trade-off between video-based interviews with a male-only participant pool and audio-only interviews with both male and female participants was worthwhile. To address this limitation, I tried to ask clarifying questions and requested that participants repeat some points as needed to clarify my understanding.

Finally, all participants currently work in one region of Saudi Arabia in general schools that had special classes for students with autism or a special day center for special
education. Tabuk is one of Tabuk regions and has a unique character and cultural environment. This limits the transferability of the study’s results both within the Kingdom of Saudi Arabia and to countries outside of Saudi Arabia and to other educational settings where students with ASD may be educated.

**Researcher Reflection**

There were many findings that surprised me during the data collection and analysis phase of this study. One was the participation of female teachers. Two of the participants were women, and they were very valuable in conveying the voice of female teachers to the ears of researchers and educational specialists. Furthermore, when I spoke with officials from the General Directorate of Special Education in Tabuk, they were very cooperative, especially in the women’s section. They sent invitations directly to all the schools that offer special education programs in autism spectrum disorder (ASD) for females. As a result, three women contacted me, two of whom completed all the interviews. One apologized for not being able to participate. However, the participation of the two female teachers from famous Saudi tribes in the study was a step in the right direction in terms of studying the reality of education in the women’s section and determining their teaching needs.

Another of the surprising features of the interviews was that although the participants started out by speaking about the positive aspects of their schools, they suddenly changed the focus of the interview and began describing the negative aspects of their careers. Although positive and negative aspects have the same effect on a teacher’s self-efficacy and the job retention, the participants frequently referred to negative aspects, which indicates that they felt their teaching needs were not being met. They clearly indicated that there was a lack of teaching tools in their classrooms. This in itself surprised me because I believed that the
classrooms in public schools were equipped with the latest teaching tools intended for people with special needs. However, the opposite appeared to be the case as the teachers indicated that there was a lack of classroom resources. This led the participants to feel helpless at times when teaching their students, and some of the participants used their own resources during the teaching process.

Among the unexpected findings was that, with the exception of Kinda, the participants indicated that the number of students in a class caused difficulties when teaching. Although the participants specialized in teaching students with ASD, most of them indicated that the class size affected their ability to teach. Kinda likely did not address this topic because she has extensive experience in teaching students and trains other teachers on how to apply educational interventions. It was clear that the other teachers would benefit from additional professional development. Therefore, it was not surprising that they indicated their need for specialized training courses in teaching students with ASD. On the other hand, I did not anticipate that they would ignore the rights of special education students: they indicated that if the number of students were less, this would provide them with comfort. They therefore forgot that students also have the right to learn.

I was further surprised by the negative attitudes of the general educators and the schools’ administrators. Most of the participants told me that the general educators always talked about the futility of working with students with ASD. This compelled me to highlight an important matter, the issue of preparing schools for inclusion programs. I think the Ministry of Education should prepare members of the school community to accept students with special needs as well as teachers of special education. I was surprised by the negative feedback from the general educators and administrators that was described by the participants.
in this study. Most of the participants indicated that these negative attitudes stemmed from schools that organize more inclusion programs.

The participants also indicated that their supervisors did not specialize in the field of ASD. This in itself is a problem that I did not expect as when I looked at the current number of teachers of students with ASD in Tabuk, I found that there are more than 35 teachers specializing in ASD (Ministry of Education, 2019). I therefore asked myself some questions: Why are there no supervisors specializing in ASD in Tabuk? Is there a relationship between the lack of supervisors and the 30% increase in teachers’ basic salaries? Is the burden of supervision alienating teachers from that job? These are the questions I had in mind when I finished analyzing the data.

All the participants further talked about the importance of career development and their dire need for specific training that focuses on refining their teaching skills, especially in the application of behavioral and educational interventions. This was also not expected, particularly since most of the participants reported difficulties in adapting the curriculum for their students. However, they unanimously agreed that there are no specialized courses in ASD; rather, there are general courses in teaching that do not meet their career needs. This surprised me. It was also ironic that in this study, the female participants did not talk about the importance of building a positive relationship with their students; however, the male participants emphasized the importance of building positive relationships with their students to enhance their place in the teaching profession. Furthermore, four of the participants noted that the lack of cooperation from parents caused them stress, while two of the teachers, Fahd and Abed, did not address this issue, perhaps because they felt that that their work should be with their students only. Nevertheless, the four teachers emphasized that one of the tools for
success for students is that parents follow their children at home. It may be the case that these four participants lacked experience and wanted to enhance their performance by supplementing it with support from their students’ parents at home.

**Implications**

This research concluded with several practical recommendations drawn from the study’s main findings. This study has recommendation for undergraduate preparation programs at Saudi Arabia. This study also has implications for the General Administration of Special Education (GASE) in Tabuk, particularly regarding the programs and activities provided to support teachers of students with autism in the Kingdom of Saudi Arabia. The study also has implications for school administrators who have special education programs (inclusion) or segregated schools for students with disabilities. Furthermore, the study has implications for educators of students with ASD in Tabuk, Saudi Arabia.

**Recommendations to Undergraduate Special Education Preparation Programs**

The results of the current study suggest the importance of increasing teachers’ knowledge of how to use various teaching strategies to help special educators work more effectively with students with ASD. The participants indicated a need to develop their capabilities of teaching students with ASD, which suggests that, in one way or another, they lack knowledge about teaching such students. Meister and Melnick (2003) examined new educators’ perceptions of classroom management and the time it entails, communication with parents, and their academic preparation. Thirty-three percent of the 273 educators surveyed in that study reported that their biggest concern was their inability to manage the classroom behavior of students with disabilities. This highlights the need for teacher education programs to prepare teachers in a more appropriate way for the specific circumstances they
will face in the future. Accordingly, I would like to offer a number of practical recommendations for education teacher preparation programs in general—and for the teacher preparation program at the University of Tabuk in particular—to avoid most of the problems that affect teachers’ self-efficacy in teaching and their choice to remain in their schools.

I am one of the faculty members in the Department of Special Education, and I am familiar with the bachelor’s program in special education at Tabuk University. I recommend that laws and regulations pertaining to special education be included as part of the field training program for undergraduate students. I suggest that students submit a detailed report on the most important special education laws that are already applied in schools as well as on those that have not been applied and how to activate them in the field. This would increase the students’ awareness of the importance of complying with these laws in the school, which in turn would enhance their understanding of the application of best learning practices in their future work. Further, the preparation programs for all undergraduate special education students who specialize in autism should require them to conduct a historical study of the development of students with autism in a narrative manner, not just through collecting data, to improve their ability to reconcile what they have learned with the natural states of autism. This would reinforce the importance of education for students with ASD and the important responsibility that special educators will assume in the future.

Most of the participants indicated that they had difficulty controlling the undesired behaviors of students with autism. Thus, I recommend that special education preparation programs include a course that focuses on applied behavior analysis of students with ASD in order to enhance teachers’ ability to manage and teach students with ASD. Further, this course should be a requirement for the field training program to make students apply the
techniques “on the ground,” which would increase their chances of successfully teaching students with ASD as well as support their positive perceptions and reducing the pressure they encounter related to this issue.

Further, I suggest providing a course on effective communication skills in special education for undergraduate special education students. This course should include the most important factors that contribute to building positive relationships within the school community as well as factors that affect these relationships to make the students aware of the most common problems they will likely face in their schools. Most of the participants indicated the importance of building positive relationships between special educators and the school community to improve their likelihood of success when teaching students and to support their retention in the teaching profession. At the same time, they indicated that the lack of cooperation from other teachers contributes to increasing stress. I recommend making this course a requirement to enter the field of training to increase the students’ ability to develop a good relationship with the school community.

Finally, given the importance of field training for special education students to develop their teaching abilities and help them adapt to the nature of the work that awaits them in schools, I suggest that students serve as a teacher’s assistant for a full academic year and experience what a special education teacher does every day. Faculty members could also meet with the students at the end of every month to discuss their most important achievements, the problems they faced, and appropriate solutions for them. This would improve the students’ teaching abilities and shed light on the most important problems they face as well as ways to solve them.

**Recommendations to the General Administration of Special Education**
The results of this study imply that additional workshops for in-service special education would be of use. One avenue for this could be for the General Administration of Special Education to provide specialized training workshops in various areas of teaching such as applied behavior analysis, using educational technology, or different interventions in teaching students with ASD (e.g., video modeling, pivotal response training, functional communication training) for teachers of students with autism. Such workshops may give special educators a chance to choose what they need to develop their teaching skills. The study’s results indicate that special educators would benefit from specialized training workshops in educational interventions autism to foster the continued development of their teaching abilities and skills. Recent studies suggested special educators, particularly teachers of students with autism, need continuous career development to increase their teaching effectiveness. Corkum (2014) found that special educators reported their need for professional development training at different levels and aspects of knowledge about teaching students with ASD, as training serves as a means of support when confronted with challenges in teaching students with ASD. Furthermore, Finlay et al. (2019) surveyed 125 special educators of students with ASD and found that special educators reported they needed specialized professional development training to overcome teaching challenges that cause them stress. These results demonstrate the extent to which teachers need specialized training workshops in autism. The General Administration of Special Education in Tabuk is well-positioned to provide these needed ongoing educational opportunities.

Furthermore, school principals, especially those without backgrounds in special education, would benefit from knowing and understanding more about the roles of special educators. Recent studies have clarified special educators’ need for support from
knowledgeable administrators and the effect of this on their decision to stay in their current placement or transfer to another school. Mahal and McKeown (2015) revealed that the administration’s lack of knowledge concerning special educators’ roles in a school increased the likelihood of those teachers leaving the field. Berry (2012) surveyed 203 educators of students with disabilities in rural settings and found that the administrators’ understanding of special educators’ roles was a factor that influenced special educators’ satisfaction. This study found that the participants perceived that their administrative staff did not understand the role of teachers of students with autism in the school. Accordingly, these results provide encouragement for the General Administration of Special Education to provide training workshops for school principals about the roles and needs of special educators in schools, particularly in inclusive schools.

A related finding was of a lack of understanding between special educators and their supervisors who were not specialized in autism, causing these educators stress. Kokkinos et al. (2009) supported this finding, determining that special educators reported the lack of special education supervisors was a stressor. Consequently, special educators may have less self-efficacy due to that stress (Bandura, 1977; Betoret, 2006). Therefore, the General Administration of Special Education may consider redistributing academic supervisors based on their specializations in special education and thus potentially increase the chances of positive interactions between teachers and supervisors.

**Recommendations to School Leaders**

This study’s results provide recommendations for school leaders in Tabuk. One recommendation would be to provide an induction and orientation program for new or transferred teachers of students with ASD to enhance the framework for vigorous
collaboration between special and general educators, principals, and other professionals in the school community. Studies conducted in this regard indicate the importance of such collaboration for retaining special educators because it may help address the most important obstacles and problems that teachers may face and also help them realize some proposed solutions (Billingsley, 2004; Billingsley & Tomchin, 1992). Whitaker (2000) found that in-service special educators who attended school induction programs were better prepared for the school’s demands than those who did not. Thus, these programs may also increase the perceived effectiveness of special educators because when special educators have more positive experiences as a result of their increased knowledge about the obstacles and problems they may face and the ways to avoid them, they may feel more confident and comfortable in school.

School principals may consider increased use of electronic documentation to ease the workload for teachers of students with autism. This study’s results indicated that paperwork causes stress for special educators and affects their ability to provide effective instruction for students with special needs. The studies reviewed in the second chapter confirm that teachers of students with autism indicated this factor as a stressor in their schools (e.g., Conley & You, 2016; Mehrenberg, 2013; Vannest et al., 2010). Hence, reducing the paperwork burden may reduce teachers’ stressed.

Another recommendation that stems from this research is to encourage special educators to become more active members of their school communities. Kilgore et al. (2003) conducted interviews with 36 special education educators to identify the most influential factors on teachers after three years of teaching and found that the special educators described feeling isolated from the school community, including general educators, peers,
and administrators. The current study also indicated that special educators might feel a kind of academic isolation in their schools, which could result in feelings of satisfaction. Therefore, principals may consider involving teachers in educational decision-making at the school level. Indeed, such involvement may help teachers feel they are an integral part of their educational institutions.

The special educators in this study pointed to the importance of cooperation between themselves and general educators in raising the self-efficacy of special educators. Bandura (1997) argued that social persuasion is an important source of nurturing self-efficacy and that teachers who receive support from other teachers are more effective than those who do not. Mani (1989) found that one retention factor was cooperation from general educators, while Mehrenberg (2013) found that a lack of collaboration between special and general educators influenced their retention. Therefore, I believe that cooperation between these educators is essential, and this factor must be invested in strengthening the contributions of special educators in schools. The principals may consider increasing extracurricular activities, such as competitions and artwork, and holding collective school parties that include general and special educators side by side, thus providing an opportunity for greater interaction between them that can break the isolation barrier.

School principals might also consider increasing the number of classes for students with autism. This study’s results indicate that the participants complained about an increasing number of students, which negatively affects their level of stress. The studies reviewed in the second chapter (Al-Zayoudi, 2007; Lindsay et al., 2013; Williams & Gersch, 2004) indicated that most special educators cited this factor as increasing their job stress. Consequently, increased stress leads to a decrease in teachers’ self-efficacy (Bandura, 1977; Betoret, 2006).
Therefore, I believe that increasing the number of classes will reduce the number of students and thus reduce the burden on teachers, making teachers feel more comfortable teaching their students.

**Recommendations for Teachers of Students with ASD**

This study has implications for special educators, especially those who work with students with ASD. One recommendation is that teachers of students with ASD should seek out specialized workshops on teaching students with ASD as one aspect of a needed stance as a life-long learner. Researchers indicated that a good understanding of teaching methods and how to use educational interventions help to increase teachers’ job satisfaction (Billingsley, 2004; Cancio et al., 2014; Gersten et al., 2001). The participants suggested that training workshops enable them to learn new teaching strategies that achieve tangible results in students’ performance, which, in turns, helped improve their perceptions about teaching students with autism. Similarly, Leblanc et al. (2009) found that attending training workshops contributed positively to special educators’ beliefs and perceptions about their students. Furthermore, intensive attendance of training workshops specialized in autism may enhance teachers’ self-efficacy regarding their work and students. Studies have shown that teachers who received extensive training in their field of specialization had increased positive perceptions (Horan & Merrigan, 2019). To bridge the gap between knowledge and skills, teachers of students with autism may consider attending specialized training workshops related to various areas of teaching because of their importance in enhancing their teaching performance. The participants in this study indicated that they had experienced difficulties in class management due to the undesired behaviors of some students with ASD. White and Mason (2006) found that 60% of special educators were concerned about students’ undesired
behaviors. Accordingly, I recommend that special educators attend training in applied behavioral analysis to increase their capabilities in controlling students’ behaviors in the classroom. Furthermore, the results of this study indicate that the participants faced difficulties in managing their classrooms due to the class size or severity of the disability. Zayoudi (2007) also found that special educators cited the increased number of students with disabilities as a reason for their stress. Therefore, I recommend that special education teachers attend workshops in educational interventions, such as video modeling, pivotal response training, or functional communication training, to improve their skills in teaching students with ASD.

The participants also indicated that they encountered some difficulties in adapting curricula for students with ASD. This indicates that they may not have enough experience to adapt lessons to their students. Kokkinos et al. (2009) found that more than half of the educators surveyed reported that teaching students with ASD was their main source of stress, with curriculum implementation also considered difficult. In order to bridge the gap between their knowledge and skills, special educators should consider attending workshops specialized in adapting curricula for students with ASD. Although the informants indicated that there was a clear lack in the number of workshops specialized in teaching students with ASD, this should not prevent them from increasing their knowledge through courses offered on the internet.

This study’s results indicated that some of the participants noted a lack of parental communication or cooperation in reinforcing skills and behaviors learned at school, which negatively affects their self-efficacy. Yeunjoo Lee et al. (2011) concurred, finding that one factor that affects self-efficacy is parental support. Thus, identifying means to increase
parental support appears important. Teachers of students with ASD may consider taking advantage of the school’s extracurricular activities to communicate with parents. Furthermore, social media, such as WhatsApp, might play an important role in promoting communication between parents and special educators, as long as student and family privacy can be assured. When special educators initiate communication with parents, it may strengthen parents’ communication with the school. Teachers of students with ASD might also consider sending their students’ achievements to the school to highlight their progress and increase communication with parents. It is important to emphasize that these findings do not place the blame for insufficient communication and collaboration with parents on students’ families—this should be a two-way process, and it is up to schools to ensure that families feel comfortable and respected in all interactions with school personnel.

The studies emphasized the need to build relationships between special and general educators to promote a positive school climate. Hagaman and Casey (2018) found that a positive relationship between special and general education teachers encouraged them both to engage with the school climate. Furthermore, Jones et al. (2013) found that a positive relationship between special and general educators enhanced their desire to stay in their careers. Teachers of students with ASD may consider building positive relationships with other teachers through curricular and extracurricular activities at the school. Furthermore, teachers of students with ASD should take a key role in school meetings on important educational decisions. Special educators may consider consulting general educators on teaching and administrative work, which strengthens teachers’ relationships with each other.

**Future Research**
This study was designed to discover factors that affect the self-efficacy of teachers of students with autism and to determine factors that affect teacher retention in schools in Tabuk. After reviewing previous relevant studies, I found that there was a lack of Arabic literature on this topic, specifically studies related to the field of teachers of students with autism in Saudi Arabia—perhaps due to the limit of availability of electronic resources online. However, the lack of Arabic literature on this topic allows researchers to conduct many types of research, whether quantitative or qualitative, on this field. Accordingly, I propose a set of research fields for future studies that may illuminate the path forward for researchers. I suggest that future research should study the topics that emerged from this current research quantitatively with a larger sample that includes males and females from different regions of the Kingdom of Saudi Arabia. This would allow the results to be more generalizable and would help researchers understand more factors related to the retention of special education teachers from different cultures in Saudi Arabia.

The current study’s results showed that participants indicated a lack of cooperation with parents of students with autism. It would be useful to identify the aspects behind these obstacles, as future studies may consider how the lack of collaboration between parents and special educators affects the self-efficacy of special educators and, accordingly, the extent of its influence on students. It might also be useful to investigate effective strategies for facilitating such collaboration. This raises some questions, such as whether there is a difference between public schools with inclusion programs and segregated schools in terms of parental cooperation. This question may inspire future research.

This study’s results suggest that there is a lack of understanding between special educators and public-school principals that results in stress and dissatisfaction for teachers
and, consequently, deprives them of a sense of comfort. The current study stops at identifying some of determining the factors that might influence teachers’ self-efficacy or retention. Accordingly, future studies may determine the factors affecting the relationship between teachers of students with ASD and public school principals and explore ways to address these factors in the Saudi educational environment. Such research helps to understand the factors affecting the overall school climate.

One of this study’s results is that participants indicated the positive role played by the support of general educators in helping them settle into their schools. However, I point out that general educators and some administrators in public schools that have inclusion programs may be less welcoming. Future studies may focus on the causes and effects of academic isolation and the ways to avoid such problems that affect job stability. Furthermore, I raise the following questions: Why do general educators in inclusion schools isolate special educators? How do teachers of students with ASD experience academic isolation in the inclusion schools? What is isolation’s effect on special educators’ teaching abilities and skills? These questions may direct researchers to find solutions to help special educators who work in inclusion schools.

**Conclusion**

In the first chapter, I briefly explained the foundations of the educational system in the Kingdom of Saudi Arabia. I highlighted the education system in general and the special education system that has emerged from it in particular. I described the educational responsibilities of special educators in different institutions and their responsibilities toward students with ASD. More specifically, I explained how the special education teacher works inside the school and what type of support the teacher is supposed to receive from their
schools. I proposed the self-efficacy theory and conceptual framework of the special education retention model to be the theoretical framework of this study. I posited that this theoretical framework is useful for understanding factors that can affect the abilities of teachers of students with ASD and can help identify those factors that might influence teachers to stay in their schools.

In Chapter 2, I focused on the literature directly related to the two research questions addressed in this study. I provided a brief history of autism. Using Billingsley’s (1993) model, I described factors previously identified as influencing a teacher’s decision to stay or leave the profession. I used this model to classify the factors associated with the special education teacher and the elements associated with the external conditions surrounding the teacher. Then, I discussed those factors and their relationship to the teacher's effectiveness in the form of an organized review of previous studies that have focused on teachers of students with ASD.

In Chapter 3, I presented the methodology that I used in this study. I used semi-structured interviews to obtain a plethora of information to find answers to those questions. I interviewed six special educators, including two women, all working in Tabuk with students with ASD. After conducting the interviews, I used Dedoose, an online qualitative software program, to analyze the data, which resulted in six themes that represent the factors influencing the continuing education of students with ASD and those impacting the teacher's self-efficacy. The themes are educators' stress, educators' positive relationships, educators' motivations, personal characteristics, educators’ expertise, and professional decisions.

Within the theme of educators’ stress, the findings indicated that factors such as lack of collaboration between teachers of students with autism and other teachers, administrators,
and parents negatively affect special educators’ performance and perceptions. This is because of the relationship of these two aspects with the participants’ perceptions of stress. Moreover, the study found that the workload resulting from classroom management challenges, excessive paperwork, and too many hours directly teaching students lead to increased stress among teachers and, consequently, affect their perceptions toward work. The results also indicated that a shortage of specialists, lack of classroom resources, and the physical environment of the school also affect the teachers in terms of increasing their stress.

The relationships between special educators, parents, students, and general educators were also identified as factors that may affect special educators’ decisions to stay or leave. This study has identified the most important sources of motivation for teachers, which boosts their devotion to their career, namely, a sense of success, administrative support, and a passion for working with students, all of which may help educators perform effectively and face difficulties in school. Personal characteristics were also identified among the factors that may affect special educators’ job satisfaction. The participants pointed out the importance of patience, persistence, perseverance, self-development, salary, and annual evaluation as additional factors that affect them. They indicated the urgency for enhancing their teaching experience through career development, expert observation, and teaching experience to help them feel comfortable in their schools and happy with their career choices. Finally, the current study indicated three professional decisions that teachers may make: pursuing additional formal education, seeking higher positions, or transferring to another school. This study provided suggestions for teachers, parents, and administrators that might enhance special educators’ ability to provide high-quality education for students with ASD. This is
important because special educators are the main pillar in the education of students with ASD, who are a particularly vulnerable part of our society and educational system.
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Appendices

Appendix A
Factors Related to Retention and Self-Efficacy of Special Education Teachers Working with Students with Autism Spectrum Disorders in Tabuk- Saudi Arabia

Informed Consent for Interviews
12-17-2019

Mr. Abdullah Alatawi and Dr. Julia Scherba de Valenzuela, from the Department of Special Education are conducting a research project. The purpose of the research is to explore the beliefs and perceptions of teachers of students with autism spectrum disorders (ASD) in Tabuk about their teaching abilities and their desire to continue working with students with ASD. You are being asked to participate because you: teach students with ASD, have a bachelor’s degree in special education with a specialization in ASD, have at least three years of experience in teaching students with ASD, and work in a special education school in Tabuk, Saudi Arabia.

Your participation will involve participating in two audio-recorded interviews with Mr. Alatawi, over the phone or via skype (voice only). The interviews should take about 60-90 minutes to complete. The interviews include questions such as “What does it mean to you to be successful teaching students with ASD?” and “What do you think would help you be a better teacher of students with ASD?” Your involvement in the research is voluntary, and you may choose not to participate. You can refuse to answer any of the questions at any time. There are no names or identifying information associated with your responses. There are no known risks in this research, but some individuals may experience discomfort or loss of privacy when answering questions. Data will be saved on a password protected computer and the recordings of the interviews will be erased after five years. Only data that has identifying information removed will be saved after that time. All identifiable information (e.g., your name, date of birth) will be removed from the information collected in this project. After we remove all identifiers, the information may be used for future research or shared with other researchers without your additional informed consent.

The findings from this project will provide information on what might (a) help special educators feel more confident in their abilities to teach students with ASD and (b) encourage them to continue teaching. If published, results will be presented in summary form and when quotes from interviews are presented, we will not use your real name.

If you have any questions, concerns, or complaints about the research, please feel free to contact Mr. Abdullah Alatawi at his Saudi phone number (966563153321), his US phone number (001-505-205-2294), or his WhatsApp number (1-505-205-2294) or contact Prof. Julia Scherba de Valenzuela by phone at 001-505-228-3450 or by email at devalenz@unm.edu. If you have questions regarding your rights as a research participant, or about what you should do in case of any harm to you, or if you want to obtain information or offer input, please contact the UNM Office of the IRB (OIRB) at (505) 277-2644 or irb.unm.edu.

By signing below and participating in the interview you will be agreeing to participate in the above described research.

________________________________________
Name of Adult Participant

________________________________________
Signature of Adult Participant

Date
<table>
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<th>Name of Research Team Member</th>
<th>Signature of Research Team Member</th>
<th>Date</th>
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</thead>
</table>
Appendix B

Invitation letter for participate

January 15, 2019

Dear Special Educator,

We are conducting research on factors that special educators think influence their ability to teach students with autism spectrum disorder (ASD) and their desire to continue working with students with ASD in Tabuk. I am writing to invite you to participate in this important research project.

I am a doctoral student in the Department of Special Education at the University of New Mexico. I am conducting this research, under the supervision of my doctoral advisor, Prof. Julia Scherba de Valenzuela, for my dissertation. I am also a faculty member at the University of Tabuk and have worked with undergraduates in the Special Education program. This research will help inform my work with future educators when I complete my Ph.D. and return to my faculty position at the University of Tabuk.

For this study, I am seeking to interview special educators in Tabuk, Saudi Arabia, who have at least two years of experience teaching students with ASD. If you meet these criteria, I would like to interview you twice by phone or skype (voice only). Each interview will take between 60-90 minutes and I will ask you questions such as:

- What does it mean to you to be successful teaching students with ASD? and
- What do you think would help you be a better teacher of students with ASD?

Your participation would make this a better study and help university faculty and other researchers learn more about what might assist special educators to feel more confident in their abilities to teach students with ASD and encourage them to continue teaching.

Participation in the research is voluntary and there are no consequences of any kind of you do not want to participate. However, if you would like to learn more about this study and/or share your opinions on this topic, please contact me at:

- 966-56-315-3321 (my Saudi phone number),
- 001-505-205-2294 (US phone number),
- 1-505-2052-294 (WhatsApp), or
- aalatwi@unm.edu (my US university email)

Best wishes,

Abdullah Alatawi
Appendix C

Invitation letter for participate (Translated)

بسم الله الرحمن الرحيم

عزيمي المعلم/ة التربية الخاصة ...

السلام عليكم ورحمة الله وبركاته

نحن نجري نشاطًا عن العمالي الذين يتعاونون على تطور مهارات الطلاب الذين يعانون من التوحد.

والعمالي الذين يتعاونون على رغبتهم في مساعدة الأطفال في التوحد.

عزيزي معلم، أكتب إليه لدعوتكم للمشاركة في هذا الادعاء البنية المهنية.

أنا أشجع مطلقًا على يوغا في قسم التربية الخاصة بجامعة نيو مكسيكو، الولايات المتحدة الأمريكية. حالياً وأقيم بإجراء هذا البحث تحت إشراف مساعدته الدكتوراه، الدكتور جود. 

هيئة كريس، جامعة كارولينا، رادستون، م acciones في برنامج التعليم الخاص.

هذا البحث يساعد في إعادة صناعة النقل وتحصينهم في الالزامات أو مهامهم في صماعات إن تباهه الله.

عزيزي المعلم، في هذه الدراسة، نسعى إلى إجراء مقابلات مع معلمي التربية الخاصة الذي يتعاملون في برامج التوحد في مدارس ثانوية، الذين لديهم خبرة لا تقل عن ستين عامًا في تدريس الطلاب التوحد.

إذا كنت تستخدم هذه المعايير، أود إجراء مقابلة معك مرتين عبر الهاتف أو عبر Skype (مستندية للمقابلات)

ما سيستغرق أكثر من 30 دقيقة وسأتخذ عليه أسئلة مثل:

- ما مدى الاحترام في تدريس الطلاب التوحد؟
- كيف يكون المعلم في تدريس الطلاب التوحد؟

المعلم/ة التربية الخاصة، مشارككم ستتحمل هذه الدراسة ذات قيمة أفضل، وسأساعدكم في الاحترام والتفاعل مع المعلمين الآخرين.

عزيزي المعلم/ة، المشاركة في البحث طويلة ولا توجد حوارك في علم التوحد في المقابل.

إذا كنت ترغب في معرفة المزيد حول هذه الدراسة أو مشاركتكم آرائكم حول هذا الموضوع، يرجى الاتصال بـ:

9666613533321
0015050252294
WhatsApp
aalatwi@unm.edu

أمحوك/ عفيدة المسلي
Appendix D

First interview

1. Tell me about your educational background.
2. What kind of school/classroom do you teach in right now? (Probe: Segregated or inclusive classroom/program/school?)
3. What are your current teaching responsibilities? (Probe: Do you teach in a segregated classroom all day or do you provide support to several teachers in different classrooms?)
4. Depending on the prior response ask:
   a. How many students with ASD are in your classroom? Or
   b. How many students are you responsible for supporting?
5. Tell me about your experience teaching students with ASD.
6. Tell me about how you decided to teach students with ASD? (Probe: How did you come to work with students with disabilities?)
7. What does it mean to you to be successful teaching students with ASD?
8. How do you know you are doing a good job?
9. What do you think helps you be an effective teacher of students with ASD?
10. What do you think would help you be a better teacher of students with ASD?
11. Are there any things that you are not doing with your students that you think should be doing?

Possible prompts for all questions:
Please give me an example of ___
Tell me more about ___
You said XXXX. Can you tell me a bit more about that?

Second interview

1. Last time you told me you decided to teach students with ASD because of .... For example, you said “...”. How many more years do you think you will teach? Probe: Is this something that you see yourself doing for the next five to ten years?)
2. What would make you want to continue teaching?
3. What are some things that would make you consider changing careers?
4. What are some of the things that make teaching challenging?
5. What things frustrate you about being a teacher?
6. What things do you enjoy about being a teacher?
7. Imagine that someone you know is interested in teaching students with ASD. What would you tell this person? (Probe: What would you recommend he/she does?)

Possible prompts for all questions:
Please give me an example of ___
Tell me more about ___
You said XXXX. Can you tell me a bit more about that?
Please describe more about ___
I am not sure what you meant when you said _______. Could you give me an example?
I did not understand when said, “_____.” Can you explain that to me more?
Appendix E

The Institutional Review Board (IRB) Approval

**DATE:** February 5, 2020

**IRB #:** 00820

**IRBNet ID & TITLE:** [1541045-2] Factors Related to Retention and Self-Efficacy of Special Education Teachers Working with Students with Autism Spectrum Disorders in Tabuk, Saudi Arabia: Teachers Interviews

**PI OF RECORD:** Julia Scherba de Valenzuela, PhD

**SUBMISSION TYPE:** Response/Follow-Up

**BOARD DECISION:** APPROV

**ED EFFECTIVE DATE:** February 5, 2020

**EXPIRATION DATE:** N/A

**RISK LEVEL:** MINIM

**PROJECT STATUS:** ACTIV

**DOCUMENTS:**
- Consent Form - Consent Focus Group English 12182019 (UPDATED: 02/4/2020)
- Consent Form - Consent Focus Group Arabic 02042020 (UPDATED: 02/4/2020)

Thank you for your Response/Follow-Up submission. The UNM IRB has APPROVED your submission. This approval is based on an acceptable risk/benefit ratio and a project design wherein the risks to participants have been minimized. This project is not covered by UNM’s Federal wide Assurance (FWA) and will not receive federal funding.

The IRB has determined the following:
• Informed consent must be obtained and documentation is required for this project. To obtain and document consent, use only approved consent document(s).

This determination applies only to the activities described in the submission and does not apply should any changes be made to this research. If changes are being considered, it is the responsibility of the Principal Investigator to submit an amendment to this project and receive IRB approval prior to implementing the changes. A change in the research may disqualify this research from the current review category. If federal funding will be sought for this project, an amendment must be submitted so that the project can be reviewed under relevant federal regulations.

All reportable events must be promptly reported to the UNM IRB, including: UNANTICIPATED PROBLEMS involving risks to participants or others, SERIOUS or UNEXPECTED adverse events, NONCOMPLIANCE issues, and participant COMPLAINTS.

If an expiration date is noted above, a continuing review or closure submission is due no later than 30 days before the expiration date. It is the responsibility of the Principal Investigator to apply for continuing review or closure and receive approval for the duration of this project. If the IRB approval for this project expires, all research related activities must stop and further action will be required by the IRB. Please use the appropriate reporting forms and procedures to request amendments, continuing review, closure, and reporting of events for this project. Refer to the OIRB website for forms and guidance on submissions.

Please note that all IRB records must be retained for a minimum of three years after the closure of this project.

The Office of the IRB can be contacted through: mail at MSC02 1665, 1 University of New Mexico, Albuquerque, NM 87131-0001; phone at 505.277.2644; email at irbmaincampus@unm.edu; or in-person at 1805 Sigma Chi Rd. NE, Albuquerque, NM 87106. You can also visit the OIRB website at irb.unm.edu