Perceptions of Preservice Teachers of Students with Autism and Intellectual Disabilities in their

Teacher Preparation Programs in Saudi Arabia

by

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Dedications

This dissertation is dedicated to my father, Mousa, and my mother, Al-johara. To my wife, Lama. To my brothers, Hossam, Osama, Abdullah, and my sister, Amira, Shahad, and Reham. Thank you all for your support, patience, encouragement. I will always love you.

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Abstract

This study explored the male preservice special education teachers' perceptions in regard to the preservice special education teacher preparation courses, practicum, and evidence-based practices that they have recently completed. The participants of the study included five preservice special education teachers from two universities, Shaqra University and King Saud University, in Riyadh (the capital city of Saudi Arabia). Qualitative interview designs were employed to gather the data, which included conducting fifteen interviews. Each participant was interviewed three times with 45-90 minutes of length for each interview. Thematic analysis was used to analyze the data. Thematic analysis is a method for identifying, analyzing, and reporting themes within data (Guest, MacQueen, & Namey, 2011). This included translating and transcribing the recorded interviews from Arabic to English, coding, and identifying themes before further in-depth analysis. Additionally, peer debriefing was employed and member checks to increase the credibility of the study and help prevent personal bias. The findings revealed that five preservice special education teachers identified the issues they faced during their four years in teachers preparation programs as: (a) limited content of educational strategies and Evidence-Based Practices (b) classroom communication was one-sided (c) redundant content in textbooks (d) course content is focused on theory instead of practical knowledge (e) lack of supervision by their faculty adviser and school members during the practicum. Preservice special education teachers were influenced by (a) community and family (b) culture and common values (c) religion, and (e) college environment. Preservice special education teachers believed that special education programs helped them in many ways which included: (a) providing a knowledge-base

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related to disabilities, definitions, inclusion and special education (b) become professional (c) gaining skills in communication, problem-solving and proactiveness (d) shifting their perceptions (e) acquisition of educational skills during the practicum. Most preservice special education teachers believed they had a good relationship with their instructors, school teachers, school administration and the local government during the practicum. Findings of the study were discussed, as well as implications of the findings and recommendations for future studies.

Chapter One

Introduction

Teacher preparation is an important priority for many countries (Walsh, 2016; Ministry of Education, 2019). Improving teacher preparation was an important concern for the European Union (EU) for more than 10 years (Council of European Union, 2007). The need to improve teacher preparation occurred in European Union because students' international academic performance had negatively changed in many countries in the EU . For example, Ireland's ranking was 5th place in reading tests in 2000, but in 2009 Ireland's ranking fell down to 17th (Hyland, 2012). Therefore, the EU committed to improving teacher competencies, retention of teacher candidates, and the quality of initial education teachers (Hyland, 2018).

In Saudi Arabia, the government made providing high-quality education an important priority, which can be seen in Prince Mohammed bin Salman's Vision 2030 (Ministry of Education, 2019). In this policy, the government committed to reform the country's educational system. The policy created new plans and courses for all teacher preparation programs, including special education, childhood, and elementary education. The reason for the teacher preparation reform is that the government believed that it will help to enable the schools, with parent's collaborations, to strengthen community interconnectedness and lead to independent personality (Saudi_Vision 2030, 2020). Due to concerns on teacher preparation programs, the government assigned a committee that involved international education experts and representatives from the Ministry of Education with the mission of improving teacher preparation programs in Saudi Arabia. The committee explains the government of Saudi Arabia's view which is that"despite the government spending on education, students still perform less than expected in the international

scale in all subjects." (Ministry of Education, 2019, p. 2). For example, the government spent over $2 billion on education in 2015, but did not see an adequate return on this investment (Aboughabal, 2015). One reason for low student achievement is the"weakness"of teacher preparation programs. This weakness can be seen in one indicator, which is the low percentage of preservice teachers that pass the Teacher Competency Test. The average in Teacher Competency Test for overall preservice teachers was 43% in the educational section and 37% in the subject area section (Ministry of Education, 2019). The first goal of the mission is to improve teacher preparation programs. This means the design of teacher preparation programs needs to be developed in a way that combines theory and practice with in-depth courses designed to employ clinical experiences in training sites that support effective practices. (Darling-Hammond, 2014). The second goal is to accept the best applicants with high GPAs in high school in teacher preparation programs.

Cochran-Smith et al. (2015) stated that many studies discuss how teacher preparation influences preservice teacher's beliefs, attitudes, and understanding (Lambe & Bones, 2007; Enterline et al., 2008; Mahlios et al., 2008; Willemse et al., 2017). However, only a few studies discuss how teacher preparation influences preservice teacher's practices and have concentrated on best practices for programs to prepare their participants. The reason for conducting this study was to understand preservice special education teacher's perceptions of preservice programs, courses, evidence-based practices, and practicum. Furthermore, the study helped to gain data about what and how preservice teachers learned through their experience. One important goal was to highlight the need for more studies in Saudi Arabia's teacher preparation.

Research Question

How do male preservice special education teachers perceive their preservice special education teacher programs in their special education teacher program and their environmental systems?

> A. How do male preservice special education teachers in Saudi Arabia perceive the quality of the coursework?
>
> B. What are the perceptions of male preservice special education teachers in Saudi Arabia about evidence-based practices and the extent to which their special education teacher preparation program incorporated them into the curriculum?
>
> C. How do male preservice special education teachers in Saudi Arabia perceive the quality of their practicum with respect to preparing them to be effective special education teachers?
>
> D. How do male preservice special education teachers in Saudi Arabia perceive their different environmental systems?

Significance of the Study/Statement of the Problem

The results of research on preservice special education teacher's perceptions of teacher preparation in Riyadh will make a significant contribution to the fields of special education and teacher preparation, especially in Saudi Arabia. The demand to conduct studies in special education in general and in teacher preparation come from various resources. Alghazo, Dodeen, and Algaryouti (2003) indicate that there is a need for conducting studies related to preservice teachers and programs. In Saudi Arabia, there are few studies focused on special education teacher preparation (Al-Wabli, 1983; Alhossan & Trainor, 2017; Alquraini & Rao, 2018; Murry

& Alquhtani, 2015; Aldabas, 2015). First, Alquraini & Rao (2018) explored the perceptions of 179 faculty from 30 universities in Saudi Arabia about their coursework. The participants agreed that the coursework provided multiple skills and knowledge that provide competencies of inclusive education. The results showed agreement in various competency areas (assessment, collaboration, service and outcomes, and professional and ethical practice). Faculty members from older special education programs agreed to a lesser extent that their courses provide necessary competencies related to professional and ethical practice, collaboration, and outcome and services.

A qualitative study by Murry and Alquhtani (2015) about preservice teachers and the KSA's perceptions about special education law (Saudi Arabia Disability code) used a survey data that shared preservice teachers in Saudi Arabia have not received special education law courses during their special education teacher preparation programs. In fact, one participant believed that the disability code to serve students with special needs did not exist. Preservice special education teachers are interested in knowing about special education law and how to implement it in their schools, but these contents have not been included in their teacher preparation programs. Schimmel and Militello (2007) stated that 75% of 1300 teachers did not take any courses in educational law while studying in preservice teacher programs. Aldabas (2015) suggested a collaboration between the general and special education departments in Saudi Arabia to meet the needs of preparing all teachers for inclusive schools. Aldabas (2015) explained preservice teachers are unprepared for meeting the needs of students with special needs. Specifically, Aldabas (2015) argued all teacher preparation programs should include foundation of special education and inclusive education courses be core courses. The result of Alghazo, Dodeen, and Algaryouti (2003) showed preservice teachers in Arabian countries have a negative attitude toward inclusion and working with students with students that have disabilities.

Other researchers explain that general education teachers also need to know the law related to working with students with special needs. They need to receive courses and workshops discussing special education law in order to improve their practices (O'Connor, Yasik & Horner, 2016). Alquraini and Rao (2018) called for the need for further studies in Saudi Arabia related to teacher education program structure and coursework. This present study provided an essential in-depth insight on two preservice special education programs in Saudi Arabia, and teacher perceptions of their experiences across their preservice program, with a particular focus on practicum and evidence-based practices.

Purpose /Rationale

The purpose of the study is to provide policymakers and faculty members in Saudi Arabia rich qualitative data related to preservice special education teacher's perceptions of special education teacher preparations. This included practicum, courses, and evidence-based practices. Preservice special education programs are provided for preservice special education teachers to prepare them for teaching students with special needs. Their experiences are valuable to understand since they are future teachers. For ongoing improvement by colleges of education, it is necessary to record preservice teacher's perceptions since they benefit from the programs. Additionally, it is important to contribute to the scholarly base of teacher preparation in Saudi Arabia. The movement of Vision 2030, the government and the Ministry of Education's dedications to improve teacher preparation programs require scholars and educational faculty members to work to provide in-depth information related to teacher preparation. In addition, the purpose of this study is to:

1. Present the preservice teacher's perceptions of their teacher preparation programs.

2. Contribute to the scholarly base of teacher preparation in Saudi Arabia.

3. Provide policymakers and faculty members in Saudi Arabia rich qualitative research related to preservice special education teacher's perceptions of special education teacher preparations including practicum, courses and evidence-based practices.

Theoretical Framework

The theoretical framework of the study was Interpretivism. In this framework, researchers listen to participant's perspectives and experiences to understand the issue being investigated, and then interpret these perspectives (Creswell & Poth, 2016). Interpretivists believe in the many truths that different individuals may hold. Interpretivist Theory can be enacted through detailed interviews in order for researchers to understand how people understand their social worlds (Creswell & Creswell, 2017). This framework allows all participants to have an opportunity to freely express their opinions about the research questions and preservice special education programs.

Interpretivism was an appropriate tool for this study since qualitative research is mostly a human instrument (Mack, 2010). Interpretivism seeks to understand and explain people's experiences by using multiple methodologies (Crotty, 1998). Interpretivist researchers use interviews and surveys to explore perceptions about phenomena. (Crotty, 1998). Therefore, I applied Interpretivism to explore preservice teachers perceptions about their preservice special education teacher programs. Interpretivism helped the researchers to have a specific understanding of participant's perceptions and experiences. In its methodology, Interpretivism values feelings and judgments of those whose reality they seek to understand as an individual' feelings and his/her experiences (Carson, Gilmore, Perry & Gronhaug, 2001, p.22). Interpretivism appreciates the diversity of knowledge and perspectives and Interpretivists believe that knowledge comes from people's experiences. By applying Interpretivism, I was open to the

diversity of knowledge and perspectives that preservice teachers provided during the interviews. Interpretivist researchers try to understand the participant's motives, meanings, reasons, and experiences. During the interviews, I asked many questions that helped to gain a better understanding of the preservice teachers' motives, meanings, reasons, and experiences. Interviews can be a necessary tool since researchers can receive in-depth qualitative data from the participants regarding their perceptions (Denzin & Lincoln, 2011).

Conceptual Framework

The conceptual framework of this study was the "Ecological Systems Theory." This framework was mostly produced by Urie Bronfenbrenner's work, the "Ecological Systems Theory." (1977). This theory is related to human development and includes five major systems: The Individual, Microsystem, Mesosystem, Exosystem, and the Macrosystem (Bronfenbrenner, 1977).

1. The Microsystem is the direct environment that every person has in his or her life. This includes activities and experiences that people have with family, friends, classmates, teachers, neighbors and other people who have sometimes daily contact and is an act of interaction, contribution, and being influenced.

2. The Mesosystem is related to the interconnection among micro sites, such as schools, homes, and neighbors on the same site. This means that the home experience that a child has might affect their school experience. For example, if a student has a negative experience at home, this might affect his behavior or his academic performance.

3. The Exosystem consists of the connection between the context, such as activities of local governments or the local education department and the individual.

4. The Macrosystem includes the culture of an individual, their country, socioeconomic status, and their ethnicity or race and living situation. These factors might affect people in different ways. People's ethnicity or race might influence his/her beliefs, views, and assumptions.

5. The Chronosystem includes common values, cultures, and laws that affect an individual. A community or group of people might be influenced by certain laws, historical events, and customs as well as socio-historical circumstances. Therefore, the pattern of historical events might influence people for a long period of time. One major event in a person's lifespan can change a person's behavior, such as being divorced can cause sadness for a long period of time.

Each one of these five systems influence both the whole community on the shared view of phenomena and influence each person in different ways because each person in this life has his/her own experiences, characteristics, and circumstances that are different from one another (Bronfenbrenner, 1977). In this study, based on this theory, preservice special education teachers are influenced by the experiences that they have during their four years in the programs. Therefore, I asked questions to preservice teachers to know how preservice teachers are influenced by their colleges' environment, and schools' environment during their practicum sessions. Moreover, application of this conceptual framework was that this theory guided the interview and research questions. By using this framework, interview questions included probes to understand the various social systems levels of the interviewees' that may have influenced their decisions and actions to pursue special education, as well as their understandings of all their various experiences in the pre-service program and what preservice special education teacher's experiences that are influenced by their teacher preparation programs in regard to courses, practicum, and evidence- based practices (figure 1). The study investigated the microsystem

which is the direct environment that preservice teachers had experienced during the four years.. There are a lot of questions related to these experiences in courses and practicums. I asked preservice teachers about the classrooms' environment while they were taking courses and the classrooms' environment during the practicum, social environment with classmates and instructors, how teacher preparation, school, and community' environments influenced your personal and educational developments (figure 2). The second system that was part of the study is the mesosystem. This means the questions which are related to what experiences that preservice teacher had in another site (school and neighborhood) was included in the protocol. For example, one question was about "why you went to college of education" and participants explained that they were influenced by another site.

Figure 1. Interview Questions 1

Figure 2. Interview Questions 2

Third is the macrosystem. The macrosystem is related to the culture of an individual, their country, socioeconomic status, and their ethnicity or race and living situation and these

things affect the perception of every human in any aspect of life including education. The chronosystem is also part of the study because the chronosystem of one person might affect a person' decision to be a teacher because teaching as a job might be a common job in some certain families and ethnicity in some states and cities. Finally, after the data analysis, it was interesting to see how ecological systems of preservice special education teachers influenced their education and personal developments.

Participants' Setting

In this study, the participants was special education preservice teachers from two universities in Riyadh: King Saud University and Shaqra University. I chose these two universities because these two universities include autism and intellectual disabilities pathways for preservice teachers which was my area of interests. All of the participants are male because the Saudi education/social system is based on the separation between females and males. In special education programs in Saudi Arabia, there are many separate pathways for special education: learning disability, autism and behavior disorder, deafness, intellectual disabilities, and speech disorders. For the purpose of the study, only teachers on the paths of autism and intellectual disabilities were included since these preservice teachers who graduated from these two paths work with students with severe disabilities.

Definition of Terms

Students with disabilities are students who qualify for one or more of the categories as defined by Individuals with Disabilities Education Act (IDEA, 2004): specific learning disability, speech impairments, intellectual disability, emotional disorders, attention-deficit

hyperactivity disorders (ADHD), multiple disabilities, hearing impairments, visual impairments, autism, deafness, visual impairment, other health impairment, deaf-blindness, and traumatic brain injury (Rothstein & Johnson, 2009).

In 1943, Leo Kanner first described individuals with Autism. He described the individuals he studied as experiencing an inability to relate to and interact with others. In addition, Hans Asperger in 1944, identified children he was observing as having social interaction challenges (Lyons & Fitzgerald, 2007). autism spectrum disorder (ASD) is a complex neurodevelopmental disorder characterized by a pattern of qualitative challenges in several areas including social skills and communication as well as the presence of restricted, repetitive, and stereotyped behavior and interests (American Psychiatric Association, 2013). The Individuals with Disabilities Education Act (IDEA, 2004) defines autism as a "developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age 3, 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 (2004). ASD affects the child's ability to communicate, and it causes challenges with social interactions including not making eye contact, starting a conversation, and engaging with other people (Koegel & Koegel, 1995).

Intellectual disabilities have been defined by researchers in the special education field. The American Association on Intellectual and Developmental disabilities (AAIDD) in 2013 provided a definition of intellectual disabilities as "a disability characterized by significant limitations in both intellectual functioning and in adaptive behavior, which covers many

everyday social and practical skills. This disability originates before the age of 18." (AAIDD, 2013).

Evidence-based Practices EBP is an effective approach to teach students with ASD socialization and other skills. EBP includes practices such as prompting, time delay, reinforcement, task analysis, social narratives (stories), picture exchange communication system (PECS), self-management, modeling, exercises, social group training, visual support, antecedent-based intervention (ABI), cognitive behavioral intervention (CBI), discrete trial teaching (DTT), extinction, functional behavior assessment (FBA), functional communication training (FCT), naturalistic intervention (NI), parent-implemented intervention (PII), peer-mediated instruction and intervention (PMII), prompting (PP), scripting (SC), self-management (SM), structured play group (SPG), task analysis (TA), and technology-aided instruction and intervention (TAII) (Wong, Odom, Hume, Cox & Fettig, 2014). EBPs are strategies that are used to improve the life and education for individuals with ASD and they have been proven by scientific research.

For this study, a preservice teacher is a person who is a recent graduate (one to two years) and holds a bachelor's degree. In Saudi Arabia, there are two pathways that lead to teach students with severe disabilities which are intellectual and autism.

Instructors. Instructors are members of a preservice special education program faculty. This includes teaching assistants, lecturers, assistant professors, associate professors, professors that work, teach, and supervise preservice special education teachers.

Practicum is the experience, or session that preservice special education teachers have to take in the last semester in Saudi Arabia. Typically, this experience lasts for four months and is worth 12 credits in most education colleges in Saudi Arabia. Preservice special education teachers mostly experience being a teacher, teacher assistant, and sometimes an observer. In the

second year of the teacher preparation program, preservice special education teachers have an opportunity to attend and observe special education teachers in his/her classroom to gain teaching experience. Preservice special education teachers might be required to create Individualized Education Program (IEP), behavioral intervention. Also, preservice special education teachers need to implement collaboration plans with school members (classroom teacher, social worker and psychologist) and implement collaboration plan with parents.

Special education courses refer to the numerous courses that preservice special education teachers must pass to graduate from the programs. Mostly, preservice special education programs take three years and have courses which must focus on information about the needs of students with disabilities, planning, and teaching strategies. The contents are provided in these courses; contents include books, lectures, visuals, and articles. Every semester, preservice special education teachers take five to seven courses. Preservice special education teachers take these courses during the program: introduction to special education, introduction to autism, introduction to learning disability, introduction to intellectual disability, introduction to behavior disorder, physical disability, mental health, basic of consulting and guidance, developmental psychology l, developmental psychology ll, behavior Modification, computer and their uses in teaching, speech disorder, aid and prostheses for people with disabilities, public awareness of disabilities, special physical education, and issues in special education. (King Saud University, 2020)

Chapter Two

Literature Review

The focus of this chapter is to address preservice Special Education programs, including the core components of practicum, evidence-based practices in preservice programs, teacher preparation courses. A review of the literature focused on special education in Saudi Arabia and preservice programs, evidence-based Practice, and practicum.

The ways in which male preservice special education teachers perceive their preservice special education teacher programs is the focus of the current study. Therefore, the research question of this systematic review is "What does current literature say about teacher preparation related to practicum experiences, teacher preparation coursework, and evidence-based practices?" The keywords for the research are: teacher preparation, preservice teacher, teacher preparation in Saudi Arabia, teacher preparation courses, and evidence-based practices. A qualitative study was used to conduct this research. Qualitative studies obtain attitudes, opinions, and beliefs (Creswell & Poth, 2016). The studies included in this research are related to EBP, teacher preparation, and teacher preparation courses. As such, any studies that are not related to these four areas were excluded. The search engines used are Google Scholar, ERIC, and the University of South Florida's library research engine. The search engines identified two hundred studies using these search words. The studies were then examined for those that met the criteria mentioned above. More than 180 studies were excluded by their abstracts, and 19 that met criteria were selected, 10% of all studies.

Preservice Courses

Greenfield, Mackey and Nelson (2016) conducted a study to explore preservice teacher's perceptions of students with learning disabilities at a private university in the U.S and examined the effectiveness of learning disability coursework. Specifically, the study examined the effectiveness of field work in learning disabilities courses, course experiences related to special education and lesson planning, and reading related to these courses. Overall, the results showed the experience was helpful for most of the participants, changing not only their perceptions regarding students with disabilities, but also with the language they used to describe them.

Allday, Neilsen-Gatti and Hudson (2013) reviewed courses related to preparation for inclusion in teacher education preservice courses for preservice elementary teachers. They examined 109 elementary education bachelor's degree programs to determine the number of course hours that were created for and dedicated to inclusion. The results demonstrated that few programs offer courses specifically related to differentiation of instruction for students with disabilities for inclusion of students with special needs. Main and Hammond (2008) conducted a study focusing on how preservice training provides self-efficacy training to preservice teachers. The results showed that self-efficacy in the group of preservice teachers was high and increased even further after the practicum.

Genç (2019) conducted a study to determine the perceptions of preservice teachers towards teacher education ethics courses. The results of this qualitative study show that ethics courses in teacher preparation programs show preservice teachers the "right direction" as future teachers. However, Glanzer, and Ream (2007) demonstrated that only 9% of schools of education and college programs provide ethics courses. In contrast, 71% of business programs,

60% of nursing programs, and 51% of social work programs provide ethics courses. Researchers suggest that educational programs need to have ethics courses just as significantly as other majors because teachers deal with ethical situations all day every day, and it is imperative that they learn how to face these challenges while upholding a strict set of ethical principles.

Alhossan and Trainor (2017) conducted a study about faculty member's perceptions of including transition courses in special education preservice programs in Saudi Arabia. The result of the study shows only 13% (8) participants reported that they had specialized courses for teaching transition services to preservice special education teachers. Fourteen of 61 participants reported that their special education preparation programs did not provide transition service content at all. Fourteen of 61 participants indicated that their special teacher preparation programs offered more than three courses that included transition services for students with special needs. Forty-one of 61 (70%) participants indicated that their special education teacher preparations planned to offer a course related to transition services in the next five years. In regard to transition competencies, 83% of participants reported that student's development was covered in one of their special education preparation courses, while 78% reported that family involvement was covered in at least one course. Using information assessment was included at least in one course for 90% of the participants, and 93% of the participants agreed that teaching academic skills was offered in at least one course. These results demonstrate that faculty members believed that special education transition services were necessary for students with special needs.

Nieto (2013) assured that a critical pedagogy course provides preservice teachers with information that will help them to act wisely in the future because caring about students will help to increase the student's learning outcomes. Furthermore, critical pedagogy courses provide future teachers with all necessary knowledge about how to act in certain situations and to meet

the needs of diverse students. Many researchers have criticized teacher preparation on their inability to meet the needs of certain groups of people or certain ethnicities. For example, Darder et al. believed that, "teacher preparation is culpable in the failure of teachers to teach African American students effectively." (Darder, Baltodano & Torres, 2017, pg. 463).

Preservice Programs

Special education preservice programs are responsible for providing candidates with important skills that are needed for educating students with a wide range of learning and behavioral needs across various settings (Leko et al., 2011). Universities are responsible for fully preparing preservice teachers to work with students with special needs (Brackenreed & Barnett, 2006). Korthagen (2004) stated that two questions should be asked to determine the competencies of teacher preparation programs. First, "What are the important qualities of an effective teacher" and second "How can we (Teacher preparation faculty) support preservice teachers to become effective teachers?" In addition, a look at the curriculum plans of ITE illustrates a diversity of methods of educating teachers, including research into teacher education programs as well as ways of integrating it into practice and course work (Flores, 2018). Preservice teaching programs have many responsibilities. Instructors in universities have to balance a number of different assignments related to teaching, research, and administrative matters (Teichler, Arimoto, & Cummings, 2013).

Teachers who had taken courses about teaching students with special needs in their teacher preparation programs were more likely to have positive perceptions toward inclusive settings (Dev & Haynes, 2015). Preservice teachers have reported that they had insufficient preparation for working with students with diverse needs (McKay, 2016). Grissmer, & Kirby (1997) blame teacher preparation for students with special needs low performance due to low

standards that provide the field with teachers that have insufficient expertise. Teacher preparation has been criticized for the lack of contributions to students learning outcomes (Walsh, 2001). On the other hand, the result of a study by Al-Wabli (1983) in Saudi Arabia showed that preservice teachers believed that they were well-prepared to be teachers; graduate students evaluated seven courses of the program as highly effective, and only one course below average. A study by Alhossan and Trainor (2017) showed that faculty members believed that special education transition services are necessary for students with special needs. The study by Scott, Gentry, and Phillips (2014) showed that preservice special education teachers in the U.S gain necessary skills during 8 weeks of practicum sessions that include planning for instruction, establishing positive and safe environments, and supporting student's learning.

Al-Wabli (1983) conducted a study on preservice special education student's evaluation of their teacher preparation program in Saudi Arabia. The survey used in this study focused on regular information about the program including teaching skills, teacher preparation courses, and proposed recommendations. The results of the study showed that graduates believed they were prepared to teach. Graduate students evaluated seven courses of the preservice program as highly effective, only one course was rated below average, and five courses were rated as average.

Alnahdi (2014) conducted a study related to special education teacher's perception of their preparations in preservice programs for transition services. The results demonstrated that the participants had negative perceptions of the transition service aspects of their preparations. The overall mean of the study was 2.49 which indicates that participants perceived that they were unprepared for providing transitional services for students with special needs. More than 75% (271) of the participants indicated that they had lack of preparation in terms of transition

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services. Of the participants, 54%, (190 of the 350) indicated that this was the first time they heard about transition services.

One hundred thirty-nine teachers (40%) agreed or strongly agreed that they were exposed to transition services in at least one course during their teacher preparation. On the other hand, more than 50% (177) indicated that transition services were not included in any courses during their teacher preparation. A percentage of 74.5 (261) of the participants agreed or strongly agreed that there was a need for transition services in teacher preparation programs. A percentage of 30 (137) of the participants believed that they were able to create a transition service plan for students with special needs.

Evidence-Based Practices

Special education teachers in the U.S must use evidence-based practices because of the Elementary and Secondary Education Act (ESEA, 1965), also referred to as No Child Left Behind Act (NCLB, 2002) in 2002 and the Individuals with Disabilities Education Act (IDEA, 2004) in 2004 requires teachers to implement scientifically based research in their teaching (Rothstein & Johnson, 2009). Special education teachers started to be responsible for applying EBP in 2001 under the No child left behind act (Kretlow & Blatz, 2011). Wong et al. (2014) explained that for practices or strategies to be deemed EBP, the following criteria must be met: First, the population of the studies must be from birth to 22 years of age identified as having a disability, such as autism, attention deficit/hyperactivity disorder, learning disability, intellectual disability, etc. Second, studies must be related to behavioral, developmental, or educational. The studies need to examine practices that could improve behavioral, developmental, or educational skills of students with special needs because the main focus in education is to improve behavioral, developmental, or educational skills of all students. Third, the study must compare an

experimental or treatment condition to at least one other condition. All features must be described to gain a clear understanding of all the conditions. Furthermore, studies design are mostly an experimental group design, quasi experimental design, intervention practices studies, or regression discontinuity designs (RDD).

Regrettably, many teachers may not implement evidence-based practices in their classrooms (Freeman, Simonsen, Briere, & MacSuga-Gage, 2014; Morrier, Hess & Heflin, 2011; Simpson, 2004). Although, there might be a reason for teachers to not implement some EBPs, having no background knowledge to apply EBPs may be one important reason (Freeman et al., 2014). The reason is that preservice teachers might learn little instruction in the area of EBP and have few opportunities to implement and apply EBP in their practicums (Begeny & Martens, 2006). It is impossible for teachers to apply EBPs when they have not been trained to use these practices (Paynter et al., 2017). The use of EBPs can help to improve the outcomes of students with autism and their families (Simpson, McKee, Teeter & Beytien, 2007). Therefore, it is crucial that preservice teachers be taught to apply EBPs effectively and have opportunities to practice and implement with guidance in the field. Teachers must be prepared to apply multiple effective practices to work with diverse students with special needs to improve their outcomes (Simpson, 2004). Hess, Morrier, Heflin and Ivey (2008) explain that using practices that are not evidence-based can result in a waste of time, energy, and money. EBP includes practices such as prompting, time delay, reinforcement, task analysis, social narratives (stories), picture exchange communication system (PECS), self-management, modeling, exercises, social group training, visual support, and others (Wong, Odom, Hume, Cox & Fettig, 2014). Although practices have been proven effective through empirical studies, teachers sometimes implement EBPs with unprecedented adaptations, in untested combinations, or not at all (Dingfelder & Mandell, 2011). In their study, Hess, Morrier, Heflin, & Ivey (2008) indicate that less than 10% of public-school

teachers in Georgia who work with students with autism use practices and intervention that were scientifically based practices. Morrier, Hess and Heflin (2011) conducted a survey study to explore training that teachers of students with ASD in one southern state. The results of the study showed only 15% of teachers received training to use EBPs from teacher preparation programs.

Hsiao and Sorensen Petersen (2019) conducted a study about evidence-based practices provided in both teacher education and in-service training programs. The result of the study showed that 60 % of the participants indicated that the 25 identified evidence-based practices were discussed or taught in their teacher education programs or in-service professional development. Twenty percent of preservice special education teachers reported that evidence-based practices were never taught. Almost 30% indicated that EBP were discussed, 20.83% indicated that the EBP were mentioned incidentally, and 29.97% of the participants indicated that the strategies were taught.

Barnhill, Polloway and Sumutka (2011) conducted a survey study about personnel preparation of evidence-based practice competencies in their programs. The results of the study showed that 36 of 87 participants did not have any courses related to best practices to support ASD courses. Fourteen of 36 institutions added that they address autism in other courses. Forty-four of 87 programs explained that their states had not provided any list of autism competencies whether for special education teachers or paraprofessionals, and 12 reported they had no idea if their states developed any list of autism competencies. However, 26 teacher preparation programs indicated that their states provided a list of autism competencies. Thirty-six of the 51 graduate programs offered practicum courses for their preservice teachers. The lengths of practicum sessions for these programs ranged from 6 hours to 700 hours. Six programs added that there was no specific requirement for practicum hours. Seven programs required more than

200 hours. Eleven programs required from 100 to 200 hours, and 13 programs required less than 100 hours.

O'Neill and Stephenson (2014) conducted a study to explore two evidence-based practices, behavior management and classroom management, in Australian preservice primary teachers' course contents. Researchers used a scale (survey) that included selections of motivational, preventative, reductive, and communicative practices of behavior management and many practices related to classroom management to evaluate preservice primary teachers course content related to behavior management and classroom management. Researchers examined 55 practices that related to behavior management and classroom management. Eighteen (32.7%) of the 55 studies were supported by at least one empirical study and at least three other studies that show the practice as effective. The rest of the 55 practices supported at least three studies as effective practices. The results demonstrated that preservice primary teachers' courses appear to provide practices both with and without research support as equivalent. Courses in this study did not provide information to their preservice teachers about which practices are effective and which are not. Researchers recommended providing information about which practices are effective to support teachers in preservice programs. Moreover, researchers suggest that courses need to focus on effective evidence-based practices rather than practices that are not supported by empirical studies. Walker-Davidson (2018) conducted a study to determine the effectiveness of evidence-based practices in teacher preparation programs. The results show that training regarding classroom management strategies, time management, and using appropriate assessments are needed to improve the outcomes of preservice teachers.

Barnhill, Sumutka and Lee (2014) created a survey in regard to preservice teacher preparation teaching evidence-based practices. The result of the study indicated that 17 of 172 programs did not offer a degree in Special Education; 9 provided associates degrees, 99 provided

bachelor's degrees, 143 provided master's degrees, 63 offered doctoral degrees, and 21 institutions provided educational specialist (Ed. S) degrees.

Practicum

Phillion, Miller and Lehman (2005) suggest that preservice programs need to focus more on field practices. Field experiences are an essential strategy to prepare preservice teachers for the complexity and diversity of the classroom . Field experiences help preservice teachers to engage in teaching as a job and begin to see themselves as educators (Hixon & So, 2009). The importance of "learning by doing" in education comes from the mid-nineteenth century (Cruickshank & Armaline, 1986). Above all, it helps preservice teachers to determine whether a career in education fits them and enables them to practice teaching skills (Labaree, 2008). Scott, Gentry and Phillips (2014) explain how teacher preparations that focus on practical experiences are essential for preservice teachers. Practical experiences help preservice teachers to be linked to real-life experiences, having the concept of learning through experience, and emotional involvement. Moreover, practical experience helps to improve preservice teachers' educational perspectives (Henry, 1989). Although practicums are essential for a preservice special education teacher, there is limited research about practical experiences (Scott, Gentry & Phillips, 2014). Preservice teachers believe practical experience is an important element in their teacher preparations. These experiences help teacher's retention (Guyton & McIntyre, 1990). Field experiences, especially practicums, are necessary to develop teaching skills and competencies (Macy, Squires & Barton, 2009; Noonis & Jernice, 2011). It is essential for teacher preparation programs to provide their student teachers with opportunities to put theory into practice (Darling-Hammond, 2014).

Programs that have teacher preparation that is grounded in practice increases teacher retention (Darling-Hammond, 2003) and promotes preservice teacher's practical capability in the classroom (Matsko & Hammerness, 2014). This helps to eliminate the tension between what preservice teachers know through their teacher preparation and what they can do in their classrooms (Hagger & McIntyre, 2006). Because of this, Forlian (2010) recommends professional learning as a solution for instituting practical applications. In other words, teacher preparation's focus on practicum helps to improve teacher's "doing" ability in classrooms.

Goh et al. (2009) conducted an exploratory study about preservice teacher confidence levels after practicum experiences in Singapore. Researchers explained that practicum experience is important since preservice teachers can translate what they learned in previous semesters to real experience. The results of study showed a significant increase in confidence after the practicum sessions. The mean of level at the beginning of teaching was 3.34, and at the end of Practicum I, the mean increased to 4.57, and before Practicum II, participant's mean dropped to 4.06. The study showed that practicum experience was effective for increasing the confidence levels of preservice teachers.

Scott, Gentry & Phillips, (2014) conducted a study in the U.S about the impact of practicum for preservice special education teachers. The result of the study showed that preservice special education teachers gained necessary skills during the 8 weeks of practicum sessions that included planning for instruction, establishing positive and safe environments, supporting student's learning, and professional development. Kaldi and Xafakos (2017) conducted a mixed method study about the relation among perceived self-competence, motivation, and sources of support for Greek preservice teachers in their practicums. The results of the study indicated that preservice teachers had very high levels of intrinsic motivation to teaching and rated the support they received while teaching as average, and external motivation

to teach from medium to high levels of self-competence in teaching. In the qualitative section of the study, preservice teachers who had been interviewed agreed that the relationship between them and their mentors in school were positive in all procedures. Moreover, peers were also supportive while facing difficulties during teaching in their practicum . Researchers believed that preservice teachers saw course professors as experienced colleagues. However, some preservice teachers explained that they did not receive any knowledge or experience from teachers in school.

Special Education in Saudi Arabia

In Saudi Arabia, special education was begun through the efforts of activists (Almosa, 2008). It was not until 1950 that the first special education service was offered, which was for people with visual impairments. Important people such as Abdullah Algnem, Mohamad Almufada, and Ali Alsuied were responsible for establishing special education schools for students with visual impairments (Al-Turki, 2008). Most education sessions that these students received were limited to braille strategies. In 1960, many of these activists requested official programs within formal schools. In the same year, the Ministry of Education in the KSA opened visual programs to serve students with blindness. In 1962, the Ministry of Education in the KSA opened the Special Education Department. The aim of the special education department was to provide services for all students with special needs in Saudi Arabia (Almosa, 2008).

By the end of 1962, special education programs and schools in Central Saudi Arabia began to serve students with learning disabilities, intellectual disabilities, hearing impairment, and behavioral and emotional disabilities. In 1967, 1968, and 1969 other regions of Saudi Arabia began serving students with special needs. In 1983, the King of Saudi Arabia and the Council of Ministers demanded the special education department to do three things. First, they required

planning for special education programs. Second, they required the provision of books and resources for students with special needs. Finally, they required supervision and management of special education programs (Almousa, 2008).

Preservice Special Education Programs in Saudi Arabia

Preservice special education programs were officially instituted in the country in 1984. Their goal was to prepare future special education teachers to teach students with special needs. Many courses were provided in the program such as behavioral modification, special education, learning disabilities, educational planning, managing special education programs, intellectual disabilities, developmental learning difficulties, and more (Almousa, 2008). Alquraini (2011) suggests that preservice special education teachers need to be trained to evaluate the capabilities and strengths of students with special needs. They also suggest that colleges prepare general education teachers and special education teachers for collaboration as it is an important element for inclusion. This can happen by providing courses that prepare future special and general education teachers for inclusion, co-teaching models and collaboration.

In Saudi Arabia, there are two pathways to teaching. The first way is studying and completing a bachelor's degree from a school of education with a major in teaching. This bachelor's degree with four years of education contains many courses related to education. Another way to become a teacher is to have any undergraduate degree with an educational certificate (Almousa, 2008). This method is used by many people in the KSA who decide to become teachers after they have finished their degrees out of school . Educational certification takes one year of additional courses. Teachers must also pass educational capacity testing with a score of at least 60 and complete specific subject area tests, such as Arabic, geography, history,

science, learning difficulties, and behavioral disorders with a score of at least 60 (Ministry of Education, 2018).

A qualified teacher is one who can plan, assess and evaluate students, apply and create IEPs, and is able to use many teaching methods and provide positive behavior improvement while collaborating with parents and other teachers (Boe, Shin & Cook 2007). Teacher preparation programs must review the courses they offer to ensure that teachers are prepared to work with students with special needs (Rose, 2007). Teacher education programs are different from college of education to college of education. There are many characteristics that teacher preparation programs might need to ensure that their candidates possess to meet their requirements. "If possessing a positive attitude is so important in becoming an excellent teacher, then surely this should underpin all work that teacher educators do to prepare teachers for inclusion." (Forlin, 2010, p.150).

Teacher Education in the U.S.

Almosa (2008) stated that because of the Saudi Arabia's interest to improve the special education personnel, preservice special education programs over numerous years have sent many students to the U.S to study high degrees of special education (Ph. D and master's). Thus, the preservice special education programs have a strong relationship with the special education teacher's preparation in the U.S. On the other hand, special education law in the Saudi Arabia has many similarities to special education law in the U.S, including IDEA (Alquraini, 2013). Preservice special education teaching existed long before teacher education. Before teacher education, a common assumption was that anyone who had completed a certain level of education could teach with no teacher education or preparation. Before the twentieth century, most teachers did not learn their professions by attending education colleges but rather by

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seeking an apprenticeship (Labaree, 2008). The first teacher's institutes started in 1839 when Henry Barnard and Horace Mann gathered twenty-six young men into a class. These twenty-six men were offered lectures about "the art of teaching" and completed observations in public schools in Hartford, Connecticut (Fraser, 2007).

Now, teacher preparation is offered in the institutional setting of the university. Teacher preparation across the U.S offers a variety of programs. Some new pathways or special education programs in teacher education are one or two-year graduate programs that serve graduate students or mid-career recruits. Other programs are five years that begin at the undergraduate level (Darling-Hammond, 2005). Teacher preparation has a long history in the United States. Teacher effectiveness is a top priority of policy planning, as many countries have become more aware that teaching is one of the most important factors to improve student academic performance (Darling-Hammond, 2017). Teacher education preparation is much more far-reaching and thorough. Many states in the U.S. have produced alternative pathways for special education teacher preparation programs to meet the educational system needs for new teachers. Some of these alternatives are shorter than other traditional preparation programs (Scott, Gentry, & Phillips, 2014). The alternative route might just have two or three semesters. This new mode of educational preparation is common throughout education, with probably 15% of new teachers taking advantage of it (Boe, Shin & Cook, 2005). The District of Columbia has over 144 programs available for individuals who want to be teachers (Rosenberg & Sindelar, 2005).

In the U.S, the development of professional teaching standards and the No Child Left Behind requirement demand schools to hire "highly qualified teachers" (Darling-Hammond & Sykes, 2004). The goal of highly qualified teachers is to improve school outcomes. Policymakers acknowledge the importance of teacher capabilities to student's learning outcomes. However,

there is a discussion among researchers about whether certified teachers are more effective than those who are not certified (Ballou & Podgursky, 2000; Darling-Hammond et al., 2005). On the other hand, some studies have shown a positive effect of teacher education and certification on student achievement (Betts, Rueben & Dannenberg, 2000; Fetler, 1999; Goldhaber & Brewer, 2000; Wilson, Floden & Ferrini-Mundy, 2001). Teacher education programs are required to provide their candidates with knowledge, skills, and dispositions. Darling-Hammond et al. (2005) criticized teacher education for focusing on theories and paying little attention to practices.

Ozturk (2017) conducted a study about teacher preparation competencies of collaboration with families of preservice teachers of students with special needs . The qualitative study's results showed the participant's perceptions were that they had a lack of opportunities to learn about family-school collaboration in teacher preparation courses. The results also indicated that creating collaboration between teachers and families could be achieved through " phone calls, texting, notes, face-to-face communication, and parent letters" (Ozturk , 2017, p. 49). All participants also indicated that " classroom culture, student motivation, academic success, and shared responsibility are the important areas for a better family-school collaboration" (Ozturk , 2017, p. 51). The study explained that barriers to achieving this include " time, lack of transportation, lack of technology, language barriers, negativity, and lack of interest from parents" (Ozturk , 2017, p. 50).

Tygret (2018) conducted a case study about the preparation of first year teachers and showed that first year teachers feel that they are prepared and showed effective educational strategies. However, his results also showed that first year teachers need more preparation in terms of dealing and teaching students with diverse disabilities. Nougaret, Scruggs and

Mastropieri (2005) demonstrated that teachers with traditional preparation in practices and pedagogies are more effective than teachers with some or little preparation. PSTQ divides teacher preparation into three categories (extensive, some, little/ no preparation). Teachers with extensive preparation, whether it is special or general preparation, are more effective in their ability to select curriculum materials, plan lessons, use multiple instructional methods, assess students, and manage their classrooms.

Summary

This chapter discussed topics relevant to the preservice programs, practicum, teacher preparation, and evidence-based practices in preservice programs. The chapter presented a history of teacher preparation and special education in Saudi Arabia and the U.S. The chapter discussed the history of preservice special education programs in Saudi Arabia. Preservice special education programs were officially instituted in the country in 1984 and the goal was to prepare future special education teachers to teach students with special needs (Almousa, 2008). The chapter discussed how preservice programs need to focus more on field practices (Phillion, Miller & Lehman, 2005) and how preservice programs are responsible for preparing preservice teachers to work with students with special needs (Brackenreed & Barnett, 2006). Moreover, the chapter presented how preservice programs need to include other elements in their programs. For example, Nieto explained that a critical pedagogy course is needed for preservice teachers because caring about students will help to increase the student's learning outcomes. Critical pedagogy courses provide future teachers with all necessary knowledge about how to act in certain situations and to meet the needs of diverse students. The chapter then reviewed several studies on the special education preservice programs and teacher education in Saudi Arabia. The

literature discussed in this chapter shows there is a lack of studies related to practicum, evidence-based practices, and special education preservice programs courses in Saudi Arabia. Therefore, there is a critical need to explore preservice special education teacher's perceptions of practicum, evidence-based practices, and special education preservice program courses. This study was conducted with the following questions in mind:

How do male preservice special education teachers perceive their preservice special education teacher programs, experiences, and environmental systems in their special education teacher program?

A. How do male preservice special education teachers in Saudi Arabia perceive the quality of the coursework?

B. What are the perceptions of male preservice special education teachers in Saudi Arabia about evidence-based practices and the extent to which their special education teacher preparation program incorporated them into the curriculum?

C. How do male preservice special education teachers in Saudi Arabia perceive the quality of their practicum and experiences with respect to preparing them to be effective special education teachers?

D. How do male preservice special education teachers in Saudi Arabia perceive the different environmental systems?

Chapter Three

Method

Qualitative Research

A qualitative study was used to conduct this research. Qualitative studies explore attitudes, opinions, beliefs, and perceptions (Patton, 2014). Qualitative research is employed in social science research to examine human behavior, thoughts, and experiences (Brinkman & Kvale, 2015). In qualitative study, researchers try to enter their participant's worlds and obtain a comprehensive view rather than a reductionist understanding (Bogdan & Bicklen, 1998). Thus, the role of a qualitative researcher is to know how the realities that participants make are constructed (Denzin, 2001). This study sought to gain insight in the reality of male preservice special education teacher's perceptions of teacher preparation courses, evidence-based practices, and practicums.

Research Design

Qualitative interview design was used to conduct this study. Qualitative interviewing is a method which helps to find out what others feel and think about their worlds. By using qualitative interviews, participant's experiences and events can be reconstructed and understood (Rubin & Rubin, 1995). Qualitative interviews can be a useful tool since researchers can receive in-depth data from educators about their perceptions on their experiences and knowledge (Desimone, 2009). Through this type of research design, the researcher is able to obtain

participant's thoughts, hear about their experiences, and receive their perceptions about the teacher preparation program (Glesne, 2001; Rubin & Rubin, 2005). Weiss (1994) explains that in-depth interviewing as a strategy is needed to learn about experiences and places that researchers have not been.

Qualitative researchers use interviews for many reasons, including questions about people's feelings, emotions, life story, perspectives, and experiences (Roulston, 2010). Creswell (2002) stated three advantages of using interviews. First, interview design might help the researcher to gain detailed and personal information that cannot be received by other tools. Second, the interviewer has control over the types of information received, because he can ask specific questions to elicit this information. Finally, interviews might provide useful information when direct observation of the participants is not possible. On the other hand, there are disadvantages of using interviews. First, the interviewee might provide perspectives that the interviewer wants to hear, not his/her perspectives. Second, the presence of the interviewer may affect how the interviewee responds. Third, the interviewer needs to have communication skills so the interviewee can feel comfortable talking to them. Roulston (2010) stated Sharan Merriam's perspectives which are that interviews are powerful and effective to learn about people's feelings, perspectives, and personal experiences.

Participants and Sampling

The participants of the study were male preservice special education teachers of students with severe disabilities (autism and intellectual disabilities) in the capital city of Saudi Arabia, Riyadh. The participants included five preservice special education teachers. The participants who were a part of the study met the following selection criteria: (1) studying in special education teacher preparation (autism, intellectual disabilities pathways), (2) recently graduated

from the program, and (3) studying in one of the universities in Riyadh. The study locations were the two universities in Riyadh that provide special education teacher preparation: Shaqra University (SU) and King Saud University (KSU). Purposive snowball sampling was used to reach the participants (Creswell, 2016). The snowball strategy was utilized after the study began and the researcher asks the participants to recommend others to be sampled. Purposive snowball sampling is used when the population is too small and difficult to reach (Tran & Perry, 2003).

The population of the study was small because the participants of the study were preservice special education teachers, and they were difficult to reach. The reason for only including male preservice teachers is cultural norms within the Kingdom of Saudi Arabia (KSA). Women tend to not talk to men in the KSA. The second reason is availability, as male and female students attend separate colleges.

Three participants' focus was intellectual disability and two participants' focus was autism. Code names were used to refer to the participants. The first participant is Aaron. Aaron studied at King Saud University with a focus on intellectual disability. The second participant is Adam. Adam studied at King Saud University and also focused on autism. The third participant is Michael. Michael studied at Shaqra University, and his focus was autism. The fourth participant is Andrew. Andrew studied at Shaqra University and his pathway was intellectual disability. The last participant is Amir. Amir studied at King Saud University with a focus of intellectual disability. All participants graduated at the beginning of 2020.

Data Collection

The qualitative interview design is different from everyday conversation. It is an interview that is planned, conducted, analyzed, and written (Seidman, 2006). Qualitative study starts first by identifying the participants and the location in which the study will take place

(Patton, 2014). The researcher then needs to engage in a sampling strategy that will best help him to understand the central phenomenon and the research question (Tran & Perry, 2003). The next phase of the study is to gain access to these individuals and sites by obtaining permission (Creswell, 2016). Once permissions are in place, the researcher needs to consider what types of information will best answer their research questions. Then, at the same time, the researcher needs to design protocols and instruments and prepare the data for collecting and recording the information.

To improve the quality of conducting qualitative interview design, Seidman's (2006) recommendations were followed: researchers must be active listeners by following up on what the interviewee says, carefully listening and not interrupting. Careful listening allows the interviewer to hear the participant's "inner voice." (p. 78). Participants were asked specific questions, engaged in the conversation, and asked follow up questions to gain the participant's "inner voice". Follow up questions which the interviewer develops during the interview helped to receive detailed and in-depth information related to participant's experiences and perceptions.

Kvale and Brinkmann (2015) provide many guidelines that a qualitative interviewer needs to follow. The qualitative interviewer must remain open to unexpected information or experiences. This means the qualitative interviewer must meet the participants without preconceived ideas. The interviewer must be curious about the participant's comments and interested in learning about his/her experiences. However, a qualitative interviewer must guide the conversation and keep focus on the interview topic and subjects. At the same time, a qualitative interviewer must not influence the participant's opinions related to the interview's subjects, and they must be aware to not overstep the participant's own boundaries while searching for detailed information.

Following Seidman (2006), three interviews were completed with each participant. An interview protocol was created to plan for each of the three interviews. The focus of each interview is described below. All the interviews were audio recorded. Each interview lasted 45-90 minutes. Seidman (2006) believed that more than 90 minutes is too long, and less than 45 minutes might not provide detailed data. The study explored each participant's interpretation of his experiences, but this interpretation cannot be generalized (Johns, 2004). The study's focus was on gaining participant's individual subjective truth (Duffy, 1995; Weick, Sutcliffe & Obstfeld, 2005).

All interviews were conducted using online communication applications. Then, interviews were scheduled depending on the schedule of the participants. Interview questions were provided to each participant four days before each interview. This helped the participants to recall and reflect on their experiences before the interview. After each interview, data analysis and transcriptions (member checking) were sent to the participants. Before the first interview, consent paperwork and study details were sent to all the participants. Additionally, the researcher completed a pre-interview meeting with each participant in which the study goals were explained and participant's questions were answered.

First Interview

The goal of the first interview was to ask preservice teachers about what they thought of the courses that they had taken. Also, they were asked to describe their experiences during the past three and a half years, relationship with their program's faculty, how the programs influenced their overall educational experience, and what they thought of their academic development. They were asked about what they thought of the environment that they had experienced during the courses and in preservice programs. Also, they were asked about how

they were influenced by their culture, past experience, and religion and how they were influenced by their backgrounds. (see Appendix A, and B).

Second Interview

The goal of the second interview was to gain in depth-data about preservice special education teacher's perceptions related to their practicum experience. Each participant was asked to describe his experiences during practicum sessions, specifically, what they thought of the practicum experience, school administration, relationship with school members, teachers, and college advisers. In the second interview, preservice teachers were asked to describe their experiences during the practicum, their relationships with the advisers, relationship with classroom teachers, and school administration. Also, preservice special education teachers were asked about how the practicum influenced their overall educational experiences. They were asked about what they thought of the environment that they had experienced during the practicum and in preservice programs (see Appendix A, and B).

Third Interview

The goal of the third interview was to gain in-depth data about preservice special education teacher's perceptions related to evidence-based practices (EBP). Specifically, the participants were asked about courses that have provided information about evidence-based practices, what EBP they used during their practicum session, and what resources the teacher preparation provided to preservice special education teachers. Moreover, follow-up questions were applied in all the interviews. In the third interview, preservice teachers described their

experiences in terms of educational strategies during the courses, practicum, and what experiences they had to implement regarding evidence-based practices (see Appendix A, and B).

Follow-up Questions

What do you mean here by... ?

Give me an example of...?

Could you explain to me what happened here?

Could explain more about...?

Why is this course important or unimportant?

Data Analysis

The main data sources are open ended, semi-structured interview transcripts of preservice special education teachers. The analysis of data took place in Arabic before the data was written in English. This was helpful to ensure that the meaning of participants' words was not changed due to language translation issues. Because of that, member checking was able to occur by sending the findings to the participants. Moreover, two doctoral candidates, fluent in Arabic and English and specialists in special education, were asked to review the quotes and the data and to choose appropriate words in English that represented the meaning of the participants. Many meetings took place to discuss the appropriate translations. The open-ended interview design helped to seek illustrations, instances, and explanations of all subjects during the interview (Turner, 2010). Semi-structured interviews help to receive in-depth data by asking follow-up questions.

This study used an a priori coding process with subsequent thematic analysis (Clarke & Braun, 2013). Predetermined categories were identified based on a review of the literature and focus of the study's research questions. The coding and thematic analysis processes occurred across six steps. First, the researcher transcribed the interviews. The time of transcribing was not

wasted, as it is the earliest phase of analyzing. The researcher started by transcribing all

interviews. Then, the researcher familiarized himself with the data from the interviews. This step

is not unique to this method because it is popular in all types of qualitative studies. In this step,

the researcher read and re-read the transcripts and listened to the audio recordings at least once

for each interview (Maguire & Delanhunt, 2017). The transcripts of all interviews of this study

were 230 pages.(See Figure 3).

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┌─────────────────────────────┐      ┌─────────────────────────────┐
│ 1-Transcribing the Interviews,│      │   4-Analysis the Themes     │
│   Read and Re-read the        │      │                             │
│        Transcripts            │      │                             │
└─────────────────────────────┘      └─────────────────────────────┘
               ↓                                     ↓
┌─────────────────────────────┐      ┌─────────────────────────────┐
│   2-Generating the           │      │   5-Defining the Themes      │
│        Codes                 │      │                             │
└─────────────────────────────┘      └─────────────────────────────┘
               ↓                                     ↓
┌─────────────────────────────┐      ┌─────────────────────────────┐
│   3-Search for Themes        │      │      6- Writing              │
└─────────────────────────────┘      └─────────────────────────────┘
```
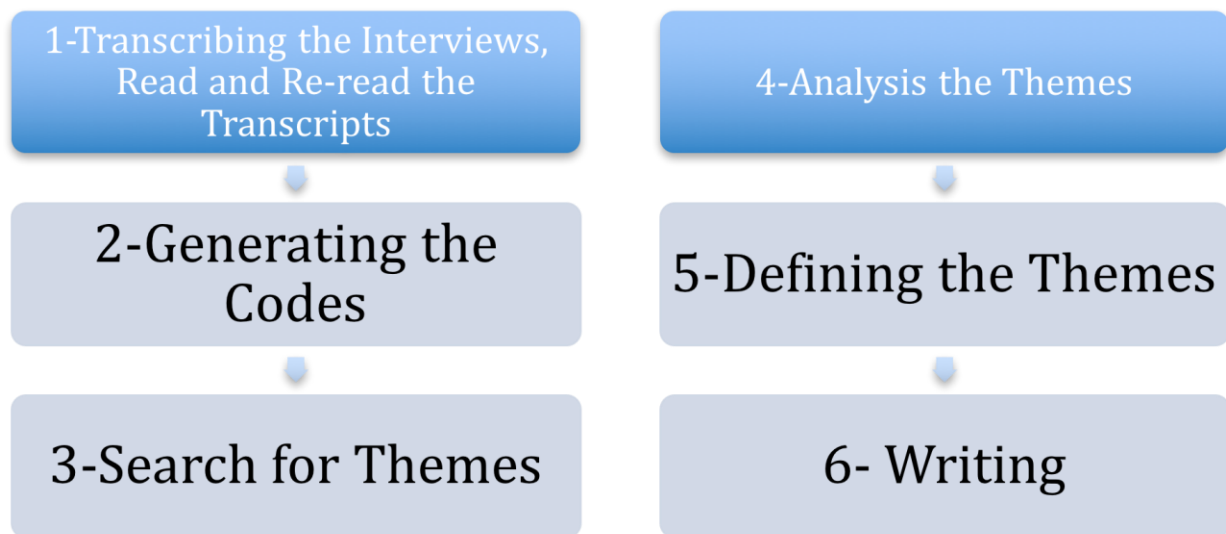
Figure 3. Data Analysis Steps (Adopted from Braun and Clarke, 2006)

Second, the researcher generated codes. More than 100 codes were generated and

subsequently each code was assigned to one or more of the a priori categories. Braun and Clarke

(2006) stated, codes are used to identify features of the data, including semantic and latent

themes. Codes are the most basic segments of information which a researcher can assess in a

meaningful way (Boyatzis, 1998; Braun & Clarke, 2006). As Bhattacherjee (2012) notes, is the

coding approach that a researcher can use to understand data that they have collected about a

phenomenon. By using this strategy, the interpretations that researchers make are based on

observed data. The data were examined sentence by sentence to identify actions, interactions, events, incidents, and ideas of relevance. Cohen, Manion and Morrison (2007) stated that "open coding involves exploring the data and identifying units of analysis to code for meanings, feelings, actions, events and so on." (p. 600). This information then is coded as concepts that will be linked to specific textual data for validation. Bhattacherjee (2012), stated that the researcher might easily explain and establish the meaning of some concepts of the data. On the other hand, some other concepts of the study may be complex and unclear. The researcher needs to work to name concepts using standardized terms from established literature. Although some concepts might not have standardized terms, the researcher might try to name these concepts. The concepts are used to code the rest of data, but the researcher looks for new concepts and refine established concepts (Bhattacherjee, 2012). Each code was then assigned to the predetermined categories as appropriate.

Third, the researcher searched for themes within categories. Unlike the second step, the researcher in the third step did not work on the basic elements of the raw data. Instead, the researcher concentrated on sorting the coded data into themes by collating information across all extracted codes (Braun & Clarke, 2006) within each category. To do this the researcher analyzed how different codes combined to form a broader theme.

Fourth, the researcher further analyzed the themes that emerged for possible further revision (Braun & Clarke, 2006). In this phase, the researcher first verified the themes in relation to relevant codes. Then, the researcher checked the themes in relation to the whole data.

Fifth, the researcher defined the themes within each category. The researcher worked to identify the meaning of each theme and linking the theme to specific aspects of the data (Braun & Clarke, 2006). In order to do this, the researcher completed a detailed analysis of each theme to ensure

the data supports each theme. Additionally, the researcher verified that the themes appropriately captured the meaning of the coded data.

Sixth, the researcher worked to outline and determine how to best present the data in a way that convinces the reader and makes an explanation of the data and the themes in a logical, concise, and no-repetitive way (Braun & Clarke, 2006). (See Figure 4). Chapter four is the result of this final step (See Appendix C).

Figure 4. Study Themes

Ethical Considerations

During any research, ethical issues might arise at any stage of the study, such as before the study, in the beginning, data collection, data analysis, or publication (Creswell, 2014). Knowing the ethical issues that might arise is not enough; the researcher must know the solution and action to take for each issue. It is difficult to identify all circumstances that may involve an

ethical concern (Seidman, 2006). To mitigate and avoid ethical issues, IRB approval should first be obtained. IRB institutions are in every college or research center. The goal of IRB is to protect the communities, researchers, students, and children who take part in research. IRBs answer ethical questions through their experts in many fields. Therefore, the exemption from IRB at USF was obtained before this study was completed (see Appendix D).

The second ethical issue is respecting the privacy of the person that is willing to do the interview (Sieber, 1992). Consent must first be obtained, and names must be kept anonymous. Participants have the right to refuse to engage in the study and to withdraw at any time (Creswell, 2014). If the participants are forced to be a part of the study, the participants might provide the wrong information. Participants must be fully willing to be a part of the study. Therefore, participants in this study were informed of this and their willingness was recorded. (see Appendix E and F). Each participant received a consent form that clarified the ethical principles discussed in this section. Confidentiality is essential in every research study. Every participant was informed that their identities would be kept anonymous. Video recording and transcript were seen only by the researchers.

In the beginning of the study, the participants were apprised of all the information related to the study. Any questions that they had were answered. Full information of the study was given to all to ensure the participant's full understanding of the topic and what they would be involved in. Informed consent from each participant was obtained, preserving the rights of both parties. Contact information of the researcher was administered both before and after the study. This gave the participants the full rights to add, change, or withdraw from the study.

Credibility of the Study

All researchers whether qualitative, quantitative, or mixed method try to produce valid and reliable research results. Maxwell stated credibility as, "The correctness or credibility of a description, conclusion, explanation, interpretation, or other sort of account." (2013, p. 122). To increase the credibility of the research, qualitative researchers employ member checks, peer review, translation, and thick description. For this study's credibility, member checks were used to help improve the credibility, validity, and trustworthiness of the study (Potton, 2002). Member checking occurs when the participants review the transcriptions, result and confirm the data accuracy (Figure 5) (Creswell & Miller, 2000). After the data was analyzed, it was shared with participants along with transcripts. Participants reviewed all study materials and provided feedback (see Appendix G).
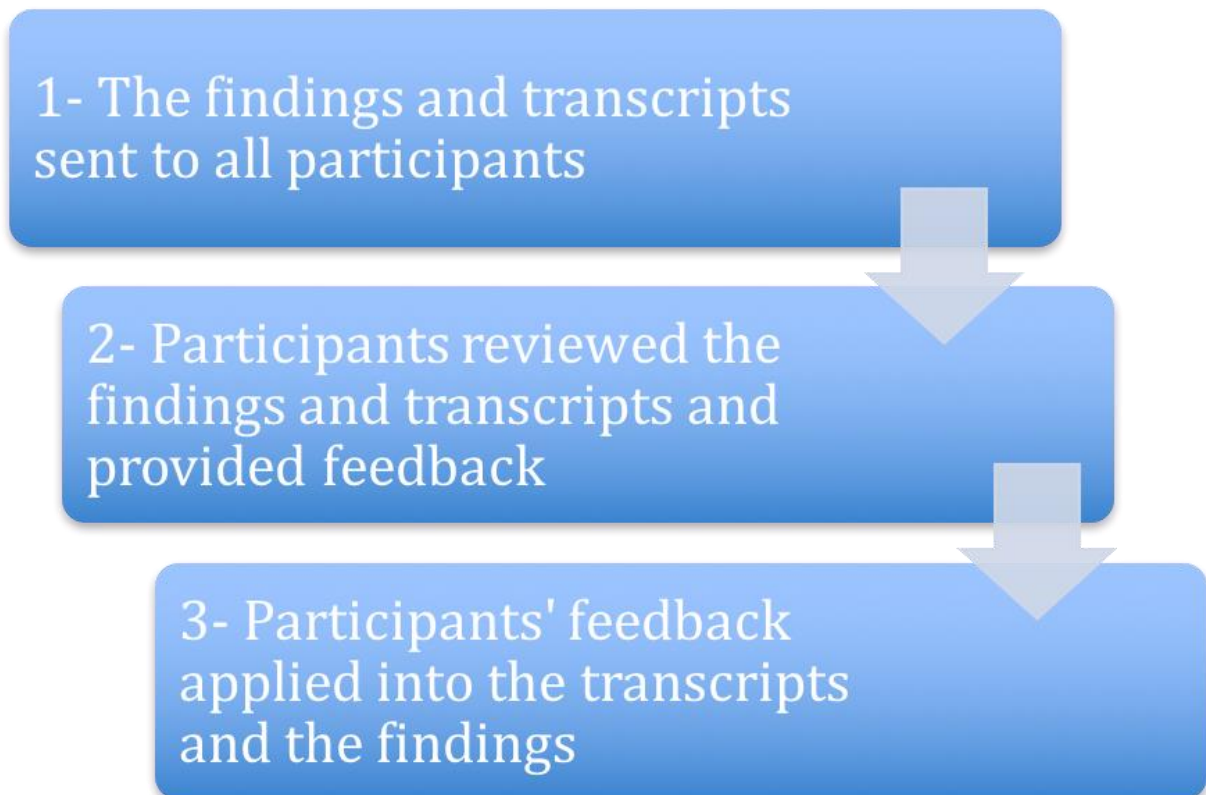

Figure 5. Member Checks Steps

The researcher reviewed participant feedback and used it to make revisions as appropriate. Participants' feedback was an important part of analyzing data's progress. Also, it improved the trustworthiness of the study. For example, the first participant asked to add that he learned the definition of learning disability, autism, language impairment, visual impairment, deafness, hearing impairment, Intellectual disability and multiple disabilities in Introduction to special education course. Another participant asked to add that he learned in a special education law course the responsibilities that special education teachers have and what categories of special education that the school serves by the law. A third participant asked to add that he applied for the IEP during the practicum.

Peer review was employed by professors in Saudi Arabia interested in the topic and qualitative study. Peer review is a strategy that can be used when a peer who knows the study contents and is an expert in qualitative study, reviews and analyzes the data to determine the quality of analysis. The study and interpretation of the data were sent to a professor. The professor reviewed the study and interpretation and provided feedback. The feedback was read and discussed. Peer feedback might also be applied in this study if reviewers provide comments and feedback in each section of the study (Creswell & Miller, 2000). The criteria for selecting the peer reviewer was that the peer was from a different university than the participants' universities. The peer was determined to have no relation with SU and KSU. He was asked directly whether he had worked with SU or KSU or not. Second, the peer had to be a faculty with a Ph.D. Third, the peer had to be an expert in qualitative and related to the topic of the research. The peer had specific assignments to do to review the study. First, the peer reviewed the transcripts of the interview. This helped the peer to get familiar with the data. Second, the peer reviewed the results of the study and provided the feedback to the researcher. The feedback was applied to the study. (see Appendix H)

The peer had specific assignments to do to review the study. First, the peer reviewed the transcripts of the interview. This helped the peer to get familiar with the data. Second, the peer reviewed the codes of the study. Third, the peer reviewed the themes. Fourth, the peer checked the themes in relation to codes and full data. Fifth, the peer checked the definitions and the naming of the themes. Generally, the peer reviewer suggested to include more evidence from the data in courses categories, to include more evidence from the data in the theme of preservice special education teachers' outcomes, to include what skills that preservice teachers learned from the programs, and to include which definitions that preservice teachers learned from their Introduction to Special Education course.

Reflexivity

Qualitative interview studies require researchers to examine themselves and the connection that they have with the research. This approach of constant reflection builds self-awareness and improves the credibility of findings (Attia & Edge, 2017; Probst, 2015). Therefore, reflexivity was used in this study at all stages including during the data analysis, writing of the results, and discussion of the study.

Galdas (2017) defines bias as any form of influence that may bring about the distortion of study results. Pessoa et al. (2019) cautions against the descriptive reporting of participants' experiences in favor of an approach where the participants describe the reality of their environment, without any interference of researchers' biases and experiences. Therefore, the responses of the participants were accurately recorded, and only the responses of the participants during data analysis and discussion were relied upon.

To increase the credibility of the study and to gain the credible perspectives of the participants, member-checking and peer review were utilized. According to Birt et al. (2016),

member checking is a method of examining the trustworthiness of study findings, on which high-quality qualitative research is founded. After the interviews were conducted and the results were finalized, the results and interview transcripts were given back to the five preservice teachers for them to validate the results. Preservice teachers were asked to review the transcripts, codes, themes, and the data analysis. Through this strategy, all participants were able to check for accuracy and provide further feedback on the sections that require revision. Participants provided feedback on each section of the data analysis that requires revision. Then participants' instructions were applied, and the revised findings were sent. The cycle of member check was two times. Then, the participants approved the data. Data analysis results and discussions were presented to a peer. According to Kelly et al. (2014), researchers should subject their work to the scrutiny of experts in the same field to ensure that disseminated scholarly works meet expected standards. Through these reflexive strategies, the study findings ensured that the final research outcomes are verified and credible.

I am interested in special education and my bachelor, master, and doctoral degree which I am working now is in special education. My interest is in the area of teacher preparation of students with severe disabilities. My teaching background is related to working with students with autism and intellectual disabilities. Moreover, I am working now as a teaching assistant in Prince Sattam University. My interest in education came from my father, who was a teacher that taught history and geography. He loves his job and cares about his students so much. These multiple experiences lead me to be interested in the field in preservice programs for students with severe disabilities. After graduating from USF, I plan to work in preservice special education program development. My goal is to improve preservice special education programs in my country. As the community changes, teacher preparation and schools have to adapt. I worked

with a preservice special education teacher and I think sometimes their perspectives related to the preservice program which they experience every day are not available. I think that preservice special education teacher's perspectives are important since the preservice programs are for them and to prepare them. Thus, the need for research about preservice teachers' perceptions in Saudi Arabia is essential. In this study, I reflected through journal writing throughout the periods of data collection and data analysis. The aim of reflexivity is to improve the reliability of research and remove bias. I believe reflexivity helped me to be aware of my own feelings and biases and decreased the chances of biases interfering with data analysis. I reflected on this after each interview. I have my own biases as I had experienced as a preservice teacher ten years ago. Therefore, I followed three steps: first, member checks; second peer reviews; third researcher reflexivity.

Interpretivism requires researchers to be open, respect different perspectives, and be open in discussing all the potential biases that the researchers might have. I applied the whole notion of Interpretivism as a framework in all the study procedures whether in data collection, reflexivity, data analysis, and credibility. Therefore, in the reflexivity, I clarified my experiences with a relevant point to show readers these biases will not affect the data analysis of the study. Before any procedure related to King Saud University, I reflected, wrote, and addressed the biases in my journal. Although I admit that I graduated from King Saud University in 2012, today after I explored the department of King Saud University through the website, I found that the university, the special education department, and I do not have any common interest. The department had been majorly changed in many aspects. The degree plan, courses, and faculty members had been changed. In other words, it is not the same program as I graduated. Through

my reflexive journaling, I attempted to eliminate any potential biases that might interface with

data analysis.

Chapter Four

Findings

Preservice Teachers' Perceptions of Preservice Special Education Program and Courses

This study aimed to explore the perceptions of preservice special education teachers on their special education program and courses. Preservice teachers were asked to describe what they learned from the program, their perceptions of the program and to describe their insights about the content and courses. These perceptions were categorized into the following sub-themes: the redundancy of contents, the most important course in the teacher preparation Programs: and preservice special education teachers' outcomes. Courses are the most important part of special education programs. Preservice teachers spent most of their programs taking these courses. Amir: "we spent three years and a half taking these courses". The courses in the programs could be divided into three categories: courses that are required by the university, courses that are required by the college of education, and courses that are required by the program. Aaron: "the total credit of the program is 128 credits, and these credits are divided into eight semesters. The number of credits of each semester is varied, but the average is 16 credits." Adam: " the courses that are a requirement by the university focus on Social studies, linguistics, and religion. The courses that are a requirement by the college of education focus on educational studies, educational research, psychology, Psychology of human development, and Educational Psychology. The courses that are a requirement by the department of special education include many categories of disabilities (autism, intellectual disability, learning disability, physical

disability, and hearing disabilities), educational and behavioral theories, special education,

educational strategies, behavioral modification, management and supervision in special

education programs, and services in special education.

The Redundancy of Content

Five participants believed that the courses and degree plan needed reform because many

of them provided similar content or did not support their educational growth. The participants

explained that these courses had the same content that they had in previous courses. One

participant stated that the redundant content and courses should be replaced by courses related to

issues in school and practical knowledge. The participants stated the following regarding courses

and content:

> "We had taken some courses that were similar to what we had taken in previous
> semesters. I believe the plan of programs should be updated as well as the content.
> " (Aaron)

> "I believe that some courses that we had taken helped me to gain knowledge, but
> we had taken many courses and content that were the same with other courses'
> content. " (Amir)

> "We had taken many courses in which the contents of these courses were similar
> to each other. " (Michael)

> "Some courses and contents were not necessary for my educational growth."
> (Andrew)

> "We had taken some contents and sessions that did not provide new outcomes and
> new knowledge. It is important for the courses to be reviewed by the college."
> (Adam)

Two participants gave an example of one topic that has been repeated in many courses.

The example was the definitions of the disabilities. They believed he had taken this content in many courses. One participant suggested the redundant content should be replaced by academic writing or educational research. Another participant suggested the redundant content should be replaced by inclusion applications, and practical knowledge.

> "We had many sessions and courses that related different definitions of intellectual disability. One course would be enough to focus on definitions. Other courses' contents should not have repeated the same thing." (Amir)

> "These courses provided definitions and content that we had in previous courses. We could have new topics and courses that might be related to academic writing or educational research." (Michael)
> "Similar content needs to be integrated and important topics should be provided with detailed content, information, and resources, such as inclusion applications, and practical knowledge." (Aaron)

The Most Important Course in the Teacher Preparation Program

Four participants stated they had taken a course titled "Introduction to Special Education" in their second semester of the program. This course was the most important course for them. In it, they gained knowledge related to inclusion and special education. One participant satiated that they learned the definition of the disabilities. One participant stated this course was the first experience that he had related to special education. Also, he believed that the instructor of the course helped him to learn by the instructor knowledgeable of the course's contents and objectives.

> "One course that was interesting and we learned a lot during that semester was the introduction to special education. This course gave us highlights of each category that special education programs serve. I think that I learned the definition of learning disability, autism, language impairment, visual impairment, deafness, hearing impairment, Intellectual disability and multiple disabilities, and we learned about inclusion of students with special needs." (Andrew)

"Introduction to special education was the most important course during the four years. I think this course provided me with necessary information about special education and all the disabilities that relate to special education and inclusion." (Aaron)

"Introduction to special education was a great course because the instructor of the course was knowledgeable of the course's contents and objectives. Also, I think the course was the first experience that I had in special education. I learned a lot during the course, as before the course, I did not have a lot of knowledge about special education." (Adam)

"The introduction to the special education course was important. We learned about special education and inclusion." (Amir)

Three preservice special education teachers from KSU stated that they did not receive any courses related to special education law. They also reported that they did not receive any content about Saudi Arabia's disability code. In contrast, the two preservice special education teachers from SU stated that they learned about Saudi Arabia's disability code and received highlights related to the disabilities that special education programs must serve and the objectives of the special education program.

"I did not have any special law courses during my four years in the program. I don't believe Saudi Arabia's disability code was included in the program, either. I would want to learn about special education law if the course was available." (Aaron)

"We did not take a course about special education law. I would love to learn about Saudi Arabia's disability code if I had the course, but it was not offered." (Adam)

"I have not heard of Saudi Arabia's disability code in my four years in my special education preparation program, but I know I would learn a lot if I took it." (Amir)

"I learned about Saudi Arabia's disability code during my special education program. We learned the responsibilities that special education teachers or teachers of students with autism have and what disabilities the school and special education programs must serve. It was useful." (Michael)

> "We took a course related to Saudi Arabia's disability code. We learned about the objectives of the special education program and special education teacher requirements. It was interesting to learn about the code." (Andrew)

Participants stated that texts and resources in the program needed to be improved. One participant explained that some of them originated in other countries but had been poorly translated and included in the courses. He believed they were not well adapted to the culture and the environment of Saudi Arabia. The second issue noted is the course textbooks. One participant stated that some books used definitions that are not current, and they used special education terms that are no longer socially acceptable.

> "I believe the references that we have mostly come from different environments, such as the US or UK. They are not well adapted to the culture and the environment of Saudi Arabia. Also, references had repetitive information." (Andrew)

> "References were books. Some of these books used old definitions that are not modern and use some special education terms that should not be used to refer to people with special needs. The terms that old books use to refer to people with special needs are not acceptable." (Adam)

Preservice Special Education Teachers' Outcomes

Participants explained that after they finished their special education programs, they believed the program helped them to improve in many different ways. One participant stated that he had excessive sympathy toward people with special needs before he entered the program. Now, he believes that he has controlled his sympathy and become more professional. Before the teacher preparation program, he had sympathetic feelings toward people with special needs. After he completed the program, he learned that he should not be too sympathetic toward people with special needs. Instead, he needs to be professional and think about how to help students

with special needs academically. One participant stated that his teacher preparation program provided a knowledge-base related to disabilities, their definitions, and special education. Three participants agreed that the activities in their teacher preparation programs helped them to gain skills in communication, problem-solving and proactiveness. One participant believe that teacher preparation helped him to do civic duties.

> "I pitied people with special needs before I entered the special education program. Now, after I finished my program, I think as a special education teacher I should treat them as professionals, and I should not let my sympathy impact my work and my professionalism as a special education teacher. Also, I think people with special needs do not like people pitying them. I believe the experience that I had in the program made a shift in my perceptions toward people with special needs" (Aaron)

> "The program gave us an opportunity to improve our skills and do community work. We had an opportunity to do some activities in the mall, and we volunteered on special education awareness day. In the mall, we met mothers and fathers of children with special needs. We tried to answer the parents' questions related to their children's education. Some parents had concerns about their children' behaviors, and we provided them contact information and addresses of evaluation centers in Riyadh. This experience helped me to learn about families' issues and think about their perspective. Also, these opportunities helped me to be more connected with volunteer work." (Amir)

> "Special education teacher preparation programs provided me with a knowledge-base of disabilities, their definitions and special education in general. These topics are important for every special education teacher." (Andrew)

> "My special education programs influenced me in many different ways. During the program, I was provided with some activities that improved my skills in collaboration, communication and problem-solving. These are life skills." (Aaron)

> "The special education program helped me to develop initiative. The program had activities outside of the classrooms that helped me to gain many skills that are important for teachers of students with autism, such as collaboration, communication and teamwork." (Adam)

"Through the special education program, we learned how to carry out civic duties in our community, especially how to serve people with special needs. We worked with our city administration to provide parking for people with disabilities. Also, we worked with the city to make parks, gardens and malls more accessible for people with special needs. We asked them to provide wheelchairs for them in the mall in case anyone with special needs needed them. We also ran awareness programs in the mall and worked on International Special Education Day. These activities helped me to be proactive." (Michael)

Environmental Systems of Preservice Special Education Teachers

This section of the study aimed to explore the perceptions of preservice special education teachers on environmental systems. Preservice teachers were asked to describe how their community, religion and culture influenced them and their relationships with faculty members. Their perceptions were arranged into the following sub- themes: The influence of family, community, culture, religion, common values, and local government on preservice teachers, the lack of interaction between preservice teachers and instructors in the classrooms, and the relationship between preservice teachers and the faculty members. In this theme, preservice teachers explained that all environmental systems were important for their personal and educational growth. Aaron: "all these environmental systems are important to develop my beliefs, identity, perceptions, ethical principles, and my vision of life". Michael: "family, community, religion, experiences that I had shaped my personality."

The Influence of Family, Community, Culture, Religion, Common Values on Preservice Teachers

Participants explained the factors that had influenced their decisions to enter the preservice special education programs. All five participants agreed that family and community influenced their decision in combination with other things. The second most mentioned motive is

humanitarian work and helping others. One participant explained his reasons for entering a special education program were sympathy toward people with special needs and his father and brothers. He said his daily experience with teachers in his family influenced him. Another participant stated that his two cousins with special needs influenced his decision. His interest to teach his cousins and improve their lives led him to enter the special education field.

> "I have two cousins with special needs. One of my cousins is a person with an intellectual disability, and the second one is a person with a physical disability. I wanted to know how to teach them and to learn skills that will help me to understand how I can help support them. Therefore, I went to the preservice special education program at KSU. The second reason is I think I love to do humanitarian work. Doing humanitarian work makes me satisfied with myself. Also, my family encouraged me." (Amir)

> "Many reasons influenced my decision to go to a special education program at KSU. One factor that influenced my decision to pursue special education is that it is a Humanitarian field, and I believe people like to help others, especially, people with special needs. The second reason is the sympathy that I had toward people with special needs before I entered the special education program. The third reason is my father and my family because my father and two of my older brothers are general teachers. I believe teaching as a job is the only job that I had a connection with before I went to a special education program because I saw how teachers made a difference in their students by helping them to learn. It has a major influence on my life. The fourth reason is that I love teaching. Also, we as a family talk about teaching almost every day because we are all in the same field. My culture also influenced me as my culture respects the teachers. (Aaron)

> "I think my community and my family are proud of me for studying special education. This environment influenced me to work hard and study hard because this environment is positive. Also, I always try to make my environment positive. If I had any family member that had a negative attitude toward my profession, I would leave him." (Adam)

> "My family and my uncles. My father and my uncle are teachers. They supported my decision." (Andrew)

> "My family supported my decision to go to a college of education. My family has had a major impact." (Michael)

Five participants explained that religion, culture and common values influenced their decisions. One preservice teacher stated that he was influenced by religious common values, such as kindness. Other participants stated that their religion encouraged them to be teachers.

> "I believe religion influenced my decision. Islam sees teaching as a job of the prophets because prophets taught people many things. Prophets teach people how to pray, to help each other and to respect each other. Teaching is an honorable job. Religion impacts my beliefs." (Andrew)

> "I believe religion is important in my life, and it helps me in many ways. Religion supports people to be kind and compassionate toward people. Also, religion encourages people to help people who are in need." (Amir)

> "Religion is important for me. I believe religion supports helping others to learn." (Aaron)

> "Islam, my religion, has influenced me to do good deeds. Teaching is a good deed" (Adam)

> "Islam sees teaching as a job of Prophets. This influenced me" (Michael)

Preservice special education teachers explained how their community helped them to gain many skills that were important for their academic success. One participant explained that he learned a lot from experienced teachers in his community.

> "I think my community influenced me in many ways that helped me to finish my degree in special education. For example, all my community members were supportive, and they encouraged me to make a commitment and work hard to achieve what I have now achieved" (Andrew)

> "In my community, there are many teachers. I think I have learned many skills from them because they have 30 years of experience. These experiences were necessary for me as a preservice teacher." (Amir)

One preservice special education teacher explained how their culture and their environment affected their relationship with and attitudes in the university. One participant explained that he was late to the class one time because his classmate asked him to go to his house because he forgot his papers and books at his home. because his culture engorged him to make sacrifices. Also, he insisted that he cannot say "no" for people who want a favor. He added that his classmates were also influenced by their cultures because one of his classmates made a sacrifice for him when he was not able to come to do the presentation.

> "I think my culture affected me in college in many ways. One time, I came to class late because of my friend. My friend called me and asked me to go to his home because he forgot his papers and books. I knew I would be late, but the culture and the community that I came from taught me to sacrifice for one another and sacrifices benefit you later. I could not say no to my friend when he asked me. Another example is when one of my classmates could not work with me on a presentation and he could not present. I did his part and I also presented his part. The interesting thing is that I had the same situation, and my classmate did the same thing for me later" (Adam).

One participant explained that his community was supportive of him. They were engaged in an assignment for the program. One participant stated that his instructor asked them to search for perspectives from teachers in their community. He believed his community's teachers were really engaged in that dialogue. He said that he learned a lot from that experience because these teachers had 30 years of teaching experiences.

> "One instructor asked us to search for many perspectives that teachers and special education teachers have on certain topics. I engaged in discussion with my community's teachers. The perspectives that I received were interesting. I gained many perspectives from my community which helped in my teacher special education preparation success. The teachers I spoke to have a lot of experience. Some of them have 30 years of experience in education. Imagine what I learned from them considering I was a preservice special education teacher." (Michael)

Four Participants explained how the program itself made a shift in their perceptions that they had before entering the program. Two participants said he thought people with special needs cannot learn. After one participant started in special education teachers preparation, he learned that people with special needs can learn. This shift made him sad because in his community, there are many people who believe that people with special needs cannot learn. Another participant explained that his knowledge before the program related to special education was limited. He thought special education's categories are only hearing difficulties, visual difficulties and intellectual difficulties.

> "I believe the special education program made a huge shift in my perceptions toward people with special needs or people with autism. I had a lot of experiences before entering the program. First, I had many thoughts about the causes of disabilities. Some of the thoughts that I had do not make sense now. Before I entered the program, I thought people with special needs and people with autism were not able to learn. The sad thing is I know many parents of students with special needs and students with autism hold this idea which is that people with special needs cannot learn. Also, many people in my community have the same idea. The community needs some awareness about that." (Michael)

> "I had a perspective that people with special needs cannot learn. My perspectives have been changed during the program" (Andrew)

> "Before I entered that program I thought that there were only two or three disabilities which are hearing difficulties, visual difficulties and intellectual difficulties. Now, I have learned that special education serves 14 disabilities.." (Adam)

> "The program shaped my perception toward people with special needs." (Aaron)

Local Government

Three participants believed they had a good relationship with local government, and when they submitted their requests to work in schools, the local educational office accepted immediately. On the other hand, one participant said that he did not have a strong relationship

with the educational office. He believed that process was short and could not foster relationships.

One participant reported the government's support for scholarship programs for the faculty of his

program provided members of faculty who were well prepared.

"We went to the educational office to do the paperwork to work in the schools for practicums. The office was supportive, and we received resources that are important to our practicum assignments related to the statistical education data. They gave us many options for accessing several schools. We were able to choose the closest school to our home, and we were accepted immediately. Also, they provided us with resources that are important for our success." (Andrew)

"We do not have a strong relationship with the education office. We were just accepted, and we went to school to work there." (Amir)

"In the teacher preparation program, I believe the ministry of education provided us with an appropriate environment. The faculty that we had in the programs are capable in their educational field. They graduated from the best universities in the world and I believe the government supported that program for faculty to study abroad which made them well prepared to work with us." (Adam)

"I believe the educational government office provided us with many things. They told us to work on any project that we would like. Also, we had some discussion on how to help people with special needs and people with autism to engage and be included in the community and they asked us about our thoughts about what students with special needs and autism should have in the classrooms. We told them that students with special needs and autism should have books and resources. They were positive about our discussion, and they helped me to choose the closest school to my home." (Michael)

The Lack of Interaction between Preservice Teachers and Instructors in the Classrooms

Five preservice special education teachers explained that the communication in the

classroom environment was mostly one-sided. The instructor was the speaker, and the preservice

teachers were listeners. Participants felt this way of communication was uninteresting.

"I found an issue with class conversation during my time in the teacher preparation special education program. Instructors in the program tend to be a

speaker while we are the listener. One-way communication seemed uninteresting." (Aaron)

"We had only one instructor that made the class more engaged in strategies that helped us to receive feedback. Most of the classes were where the instructor talked, and we listened most of the time." (Michael)

"In many cases of the classrooms, it seemed that classmates were not engaging with class. My classmates during the class were waiting for the instructor to finish the class. Instructors were talking and students were silent. I believe there might be some ways that instructors could bring excitement, information and productivity to the class." (Andrew)

"Many courses we experienced the instructor talked about most of the time.." (Amir)

"Most of the courses used the lecture method which was not very helpful." (Adam)

Two participants explained that they believed some preservice special education teachers did not have motivation because they were accepted only in special education programs and they had no other choice or motivation.

"I feel somehow that some of the classmates did not have the motivation to study. I do not know what the reason is. Maybe they did not like the environment of the classroom, or they did not want to enter a special education teacher in the first place. I do not know the reason." (Amir)

"I felt like some of my classmates were not engaged. I do not know the reason for that, but maybe they did not have motivation." (Andrew)

All preservice special education teachers stated they had a good relationship with faculty. One participant said they even played soccer with faculty. Another stated that many members of the faculty he took courses with were from many foreign Middle Eastern countries. He stated that they did not have connections with Saudi schools, which was important because he would

work in these schools after he graduated. He explained the experiences that these instructors had were different from the Saudi educational system.

> "I believe we had a good relationship with the instructors. When I needed to go to the instructor, I could meet them during their office hours. They would listen and try to help me." (Aaron)

> "I think we had a good relationship with faculty, and what made the relationship strong is the activities that we had outside of the classrooms. I played soccer with our instructors as part of college activities. This made the relationship very special with faculty." (Adam)

> "The faculty is supportive and treats the students well, but during the courses, we had an issue with some courses because many of our faculty are from other countries and they had educational experience in their countries' environments. Because of that, I felt like they had no experience with the school environment in Saudi Arabia. Therefore, in the courses, they were talking about their educational experiences in their countries. Their educational experiences in their countries are interesting and valuable, but I wish they had an experience with our educational systems which would make their understanding of our educational environment more comprehensive." (Michael)

Preservice Teachers' Perceptions of Practical Knowledge and evidence-based Practices

This part of the study aimed to explore the perceptions of preservice special education teachers on evidence-based practices and practical knowledge. Teachers were asked to describe how they perceived the contents in educational strategies and evidence-based practices, and they learned about educational strategies. Their perceptions were arranged into the following sub-themes: The lack of courses related to educational strategies and evidence-based practices, and the lack of practical knowledge:

The Lack of Courses related to Educational Strategies and Evidence-Based Practices

Participants explained how they perceived their experience with Evidence-Based Practices (EBP). Five participants stated that they did not take any courses related to EBP. All participants agreed that they did take courses that related to educational strategies. However, they believed the courses that they took provided limited content related to educational strategies. Two participants took courses related to reinforcement and modeling. One participant wished he had taken a course about applied behavior analysis because he believed that schools needed behavioral analysis. During their educational strategies' courses, participants stated that instructors did not explain whether or not the strategies utilized evidence-based research. Also, two participants stated he did not apply evidence-based practices in the practicum because it was not required by the instructor. On the other hand, one participant stated that the instructor provided explanations of the educational practices, but the instructor did not provide specific steps or applicable explanations for implementing these practices. All participants agreed that the educational practices are important for preservice teachers for their future jobs as teachers.

> "We did not take any course related to evidence-based practices. We just took a course about behavior modification. We learned in the course about reinforcement. The course was fine, but I believe the program could have been better because we learned the strategies as theory, but we did not take the steps of applying the strategies. In the practicum, I only applied reinforcement and modelling. The strategies were limited, and we did not learn the application of the strategies that we learned. During the behavior modification course, we learned many strategies, but the course did not state whether or not the strategies were evidence-based research." (Aaron)

> "We took two courses related to educational strategies, but we did not take any courses related to evidence-based practices. In the two courses related to educational strategies for teachers of students with autism and the strategies were few, the only strategies that we learned were how to help the students with autism use the bathroom. During the practicum we were not required to apply

educational strategies. We were trying to help students with autism to learn. We were not given any explanations regarding whether these strategies were based on evidence-based research. I would have liked to take courses in evidence-based practices of teaching students with autism if it was offered." (Adam)

"I did not take any courses related to evidence-based practices in my preservice special education programs. I took one or two courses about a few educational strategies for special education, but I believe there is a gap between what we learned in college and what we practice in school. We do not have the practical knowledge. Instructors provided us with explanations of the educational practices. Steps of applying these strategies were not provided. Also, the instructors did not explain whether these strategies are evidence-based research. We did not apply evidence-based practices in the practicum. Instructors did not ask us to do that. They only explained what the strategy was. I believe I would like to take a course on evidence-based practices if given the chance." (Michael)

"We did not take any courses related to EBP, but we took courses that were related to educational strategies. The courses gave us highlights of limited educational strategies like reinforcement and modeling. We did not have any sessions about what strategies could be used to teach certain subjects, such as literacy, social skills, or math. The courses that we took during the special education program related to educational strategies were few." (Andrew)

"The program provided us with limited strategies but did not provide us with courses related to evidence-based practices. It was needed for us to have courses that focus on applied behavior analysis because it is important for all special education teachers. Additionally, schools need behavior analysts, but the college did not provide a degree for that. I would love to take a course on evidence-based practices." (Amir)

The Lack of Practical Knowledge

All five preservice special education teachers agreed that there was an issue with the contents of courses that they took during their four-year programs. Course contents were more focused on theory instead of practical knowledge and strategies. One participant stated the application of theoretical knowledge was not provided. Another participant stated the courses were more connected to the theories than practical knowledge. He believed the opportunities to

learn practical knowledge were limited. The third participant stated the courses did not prepare

him for the practicum.

> "I believe that the courses and the content of the programs are related to the theories that relate to disabilities more than the practical knowledge. I believe this is an issue because the program should have given us more opportunities to learn strategies and educational applications. I had limited opportunities to learn about educational strategies and applications." (Andrew)

> "The issue is that the courses did not prepare us for the practicum. More courses related to practical knowledge are needed." (Aaron)

> "The issue is there is a gap between practical application in schools and theoretical knowledge in college. For example, we had a session that explained modeling. The session explained what the modeling is and why the modelling is an important strategy, but the steps and the tactics that we should use to apply modeling were missing." (Michael)

> "I did not receive sufficient experience related to applying strategies. The courses explained only theoretical knowledge." (Adam)

> "The courses focused only on theoretical knowledge." (Amir)

Preservice Teachers' Perceptions of Practicum

This area of the study aimed to explore the perceptions of preservice special education teachers on their practicums. Teachers were asked to describe how they perceived their practicum, how they experienced the practicum, how they perceived the practicum's environment, and how they perceived the relationships in the practicum environment. Their perceptions are arranged into the following themes: learning through the practicum, the lack of supervision, practicum environment, and the relationship between preservice teachers and schools' teachers and administrations. In the last semester, preservice teachers take the practicum session. Andrew: " we spent the last semester in schools which was the last requirement for preservice teachers to take before graduating." Most preservice teachers explained they had to

work with students with special needs directly alone. Also, preservice teachers were required to

teach students with special needs multiple subjects. Michael: " we were required to teach

students many subjects, such as reading, writing, math, grammar, and religion". During the

practicum session, preservice teachers were required to work all school day and all the semester.

Andrew: "during the practicum we had to work from 6 am to 12 pm every day until the end of

the semester."

Learning Through the Practicum

Preservice special education teachers explained their perceptions related to the practicum.

Four participants had their practicum in public schools with separated special education

classrooms. Only one participant had his practicum in a center that provided education for

students with Autism Spectrum Disorders. First, participants started with what they learned

during the practicum. One clarified that during the practicum he learned that students with severe

disabilities had limited opportunities to attend university. Another participant explained that he

learned during the practicum students with severe disabilities were not included in mainstream

classrooms.

> "I believe I learned a lot during the practicum. Practicum was the most important
> session in my four years in the program. I worked with students with special
> needs, and I learned many things. One thing that I learned is that most students
> with special needs do not have a lot of opportunities to go to college. Only
> students with physical and visual needs and learning disabilities have the
> opportunity to go to college. I believe students with autism, intellectual and severe
> disabilities have limited opportunities to be accepted into colleges. I had four
> years of experience at King Saud University and I have not seen any students with
> autism, intellectual or severe disabilities." (Aaron)

> "After I went to the schools while I was taking the practicum session I found that
> schools are not inclusive. I found that students with severe disabilities are in
> separate classrooms. Students with special needs have limited opportunities to

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interact with other students. We learned in the preservice special education program that students with special needs should be in mainstream classrooms and in the same environment as general education students. Inclusion helps students with special needs to have equal opportunity. Also, I saw that the resources of students with special needs were limited." (Adam)

"I believe that the practicum session gave me an opportunity to apply individualized education programs (IEP) and work through the semester. I learned and improved my teamwork skills. The special education teacher that I worked with spoke every day about students' with special needs educational objectives. Also, I discussed with him my work on IEPs. I learned a lot during the practicum, and I believe that I created relationships with special education teachers." (Michael)

"During the practicum we learned how to apply IEPs." (Amir)

"I applied for an IEP for my students during the practicum." (Andrew)

Participants explained how the experience they had in the college environment related to the experience they had in the school during the practicum. One participant stated he was not able to apply all what they learned in the college although he attempted to apply some educational strategies and IEP.

"During the practicum, my classmates and I tried to apply and connect what we learned in the college environment to the school environment. We attempted to apply IEPs and educational strategies like reinforcements." (Amir)

"I tried in school to apply what we learned in the college environment, but somehow, this was not possible because I believe we were not prepared. I believe there is a huge difference between the school's reality and the theories that we learned in college. I believe we had the theoretical experience, but we did not have the application steps of applying the theories." (Amir)

"During the practicum session, we were required to attend the whole school time every day and be with the students all the time. At the end of the semester, we had to give our faculty adviser our project. The project was students' with special needs IEPs and students' paperwork. The students' paperwork was writing numbers, and sentences." (Aaron)

The Lack of Supervision

Preservice special education teachers explained their perceptions related to the many issues that they faced during the practicum. One issue that four participants talked about was the lack of supervision by their faculty advisers and school members. One participant believed that having the faculty advisor provide immediate feedback in his work with students with special needs would have helped. Two participants had an issue with applying case studies, educational assessments and evaluation assessments . They believed the school did not support them to work on case studies, educational assessments and evaluation assessments. One participant believed he was not able to help the students to achieve anything because he worked as a special education teacher in the first week of practicum. He believed he should have been an assistant teacher in the first seven weeks so that he could learn from experienced teachers. Another participant was shocked because students with special needs were not included in the mainstream classrooms and the school was not organized. One participant had a positive experience as he had his practicum which was in a private center for students with Autism Spectrum Disorders.

> "During the practicum, I worked as a teacher on the first day at the school. I had no supervision or feedback from anyone and, during four months, my college adviser visited us once or twice. I feel that this was not fair for us as preservice teachers or for the students with special needs because students with special needs wasted four months of their life with beginner teachers, and we did not have an opportunity to have an environment that had immediate feedback. I believe a preservice teacher needs to be a teacher assistant during the practicum. This would help them to get feedback from experienced teachers and learn from observing experienced teachers. During the practicum, we did not have any chance to observe." (Aaron)

> "I thought that I would be a teacher assistant, but I was shocked because I immediately got to be the only teacher in the classroom. I believe since the practicum is 15 weeks, we could have started the first 8 weeks as teacher

assistants. This would have given us a chance to learn from experienced teachers. Then in the last seven weeks, we could have been teachers. I felt this process was not a good move because how could I teach students for one semester when I had not yet become a special education teacher? Because of this situation, I was not able to help the students to achieve anything. My adviser was not around. I was looking for my adviser to help me to overcome the challenges" (Amir)

"I believe I was lucky to have my practicum in a private center that supported my experience in the practicum by being a teacher assistant. This helped me to gain experience, observe and practice at the same time. I believe my classmates from other pathways, such as intellectual disability and hearing difficulty did not have the same situation. I asked them while I was doing my practicum and they told me that they were alone in the classroom on their second day of the semester. The center could not provide inclusion because the center serves only students and children with autism. I did not have a chance to include students with autism in mainstream classrooms and schools. Also, the faculty adviser visited me only once during the practicum. " (Adam)

"During the practicum, there were some issues. Schools were not organized. We learned the special education classrooms need to be organized. Also, inclusion was not applied in the school that I had my practicum. Students with special needs were in separate classrooms. Also, I think school administration did not support me applying what I needed to apply as a special education teacher. First of all, in the first week of my practicum, I was looking to apply case studies of my students, so that I could be aware of the students' environment in school and at home as well as other information which would help me to improve their life skills. Special education is not only about academic skills. It goes beyond that. School administration was not supportive. Also, my adviser was not around. My adviser would have supported me if he was in school." (Michael)

"On the first day of the practicum, I think I was looking to work collaboratively with school members and apply educational assessments and evaluation assessments as well. However, I was not able to do that because my adviser was not available in the practicum. I was looking to work on assessments. my adviser visited me twice in the last two months. Therefore, I did not have a chance to learn or apply any assessments, or work collaboratively with a psychologist, social worker, principal or even other special education teachers." (Amir)

One preservice special education teacher was not able to work with students with autism because he did not find a student with autism in his town. although his pathway is autism. Therefore, his instructor asked him to use his imagination and complete the IEPs.

> "We had an issue during the practicum. I think the special education program was not able to provide any accessibility to work with students with autism. Instead, we worked with students with intellectual disabilities. We learned through working with students with intellectual disabilities, but still, we did not have any experience working with students with autism with whom we are specialized to work with after we graduate. The instructor told us to use our imagination and try to provide IEPs for students with autism." (Michael)

Practicum Environment

Preservice special education teachers explained how they perceived the environment of the school. Two participants explained that the environment of school and classrooms was appropriate and organized. One participant had his practicum in a center for students with autism. The center where he had his Practicum had support services, such as physical therapy, occupational therapy, speech therapy, counseling and social therapy. Also, the center has three departments which are intervention educational, and vocational department. This helped him to observe different types of educational systems of students with autism. One disadvantage that he had in the center was that students with autism are not included with the students in mainstream schools. One participant had his practicum in a private center of autism in the capital city, Riyadh. That participant explained that the classrooms were organized. The environment of the classroom had many sections. He believed this made the students with special needs feel comfortable. Two participants believed the environment was not organized, and one participant was not able to achieve goals as he was the only one in the classroom with the students. One participant could not remember the school environment.

"I believe the environment in the school was good, but I feel the placement of students with severe disabilities should not be in school with seven students. I believe the acceptable environmental placement for students with special needs should be one teacher with one student and with many resources and educational tools. Also, the environment was not organized. Special education classrooms should be well organized and include many activity sections, such as playing, laptop, independent, and learning sections." (Aaron)

"I had my practicum in a private center that serves students with autism . The environment of the center was great. The classrooms had many places for each student to work on his own schedule and daily objectives. Also, the center had support services, such as physical therapy, occupational therapy, speech therapy, counseling and social therapy. The center serves students with autism in many periods of their lives. The center has an intervention department which serves children with autism from 2 to 7 years old. Then, there is the educational department which serves children with autism from 7 to 17 years old. Finally, there is a vocational department which serves adults with autism from 17 to 25 years old. The center cannot provide inclusion because the center serves only students and children with autism. I worked as a teacher assistant, and I was able to gain experience, observe and practice. The teacher of students with autism that I worked with was helpful because if I had any questions or if I needed help, I could ask for it immediately because the teacher of students with autism had practical knowledge which I needed more than theoretical knowledge." (Adam)

"The classroom was organized." (Michael)

"The classroom environment was not organized for students with special needs." (Andrew)

Preservice special education teachers stated they had good relationships with the schools' teachers and administrations. They emphasized that the school environment was positive. One preservice special education teacher explained that he had an issue with working with one student with special needs. He met with his father and his father was supportive and provided him with some useful instruction. This preservice special education teacher believed that the relationship with the father helped him during the practicum to meet the IEP's objectives.

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"We had a good relationship with special education teachers, the principal and all school members. Also, we had a good relationship with the students. I believe the school environment was positive. All school members were collaborative and positive. This is important and helps to have a positive educational environment. Also, my relationship with my classmates was strong." (Andrew)

"The environment was positive, and this was helpful because I believe we were productive and we learned during the practicum." (Adam)

"The relationship with students with special needs was very important. I had one student in my class during the practicum. In the first week, the student did not feel comfortable working with me. I talked with the special education teacher and the special education teacher told me to talk with his father. Then, I met his father and I told him that I was not able to work with his son, and I would like to get his thoughts on how to get along with him. His father was understanding, and he gave me some points that I should consider every time I work with his son. The father told me to give him a gift and then the student started to work with me, and I was happy with that. I believe the family knows the students better than the special education teacher." (Michael)

"I had a good relationship with school." (Aaron)

"My relationship with school members was positive." (Amir)

Summary of Findings

The purpose of the study was to explore the perceptions of preservice special education teachers in courses, environmental systems and evidence-based practices. Five preservice special education teachers were interviewed. A total of four themes were extracted that addressed all research questions. The first theme was about the perceptions of preservice special education teachers of the courses. The key finding was that although all the preservice teachers believed they gained skills through their time in the programs, five preservice teachers believed that there were similarities among some courses' contents, and they faced issues throughout their time in the programs. Preservice teachers also believed that new courses should be offered that provide

in-depth information related to practical knowledge needed. Preservice teachers reported that the special education professors focused on theoretical experiences rather than practical experiences.

The second theme focused on the perceptions of preservice special education teachers toward their environmental system. A key finding was that preservice special education teachers were influenced by their cultures, communities, common values, families and religion. The third theme was about the practicum. Preservice teachers believed that the practicum gave them valuable experience, but they faced challenges, such as faculty support, administrative support and working as special education teachers instead of being teachers' assistants. The fourth theme was evidence-based practices. Preservice teachers believed that they did not have sufficient experiences and learning related to evidence-based practices and educational strategies.

Chapter Five

Discussion

Discussion

The purpose of the study was to explore the perceptions of five preservice special education teachers on their specializations in Autism Spectrum Disorder and intellectual disabilities regarding courses, environmental systems, practicums, special education teacher preparation and evidence-based practices in two universities in Riyadh, Saudi Arabia. In this chapter, the implications of the findings are discussed in relation to the themes that emerged within the context of the relevant literature and the KSA educational context.

Five preservice teachers believed there were similarities among courses. They believed the courses and degree plans were in need of reform. The Crown Prince of Saudi Arabia, Mohammed bin Salman initiated Vision 2030, which details the necessity of teacher preparation program reform (Ministry of Education, 2019). The proposed reform covers teacher preparation programs for elementary, childhood and special education (Saudi Vision 2030, 2020). Shi & Englert (2008) explained that China made reform in teacher preparation programs by advancing hiring teachers with a bachelor degree and above. Also, China's teacher preparation institutions have increased to more than 270 institutions of higher education (Yuan, 2004). In european countries' teacher preparation reform 68% of teacher preparation programs have started the bachelor's-master's degree system to increase the quality and competencies of their graduated teachers (Sursock & Smidt, 2010). On the other hand, Walker & Epp (2010) indicated there is a

resistance to reforming Teacher preparation in Kosovo. The resistance came from some vested interests and opposition. Bauer & Prenzel (2012) point out that teacher preparation reform can not be examined whether it was successful or not if empirical evidence on the achievements is limited or or comparative studies on teacher education provide no clear evidence of the effectiveness of the educational system.

While the programs do need reform, participants in this study explained that the current programs helped them to improve in many different ways. One participant believed that he was able to control his sympathy and become more professional. Hastings, Hewes, Lock & Witting (1996) state that teachers perceive children with special needs less positively than they do non-disabled children. The results of the study showed teachers who received special education courses are more positive toward students with special needs compared with teachers who had not yet completed the course.

Three participants agreed that the activities that teacher preparation provided helped them to gain skills in communication, problem-solving and proactiveness. One participant believed that teacher preparation helped him to perform civic duties. One participant stated his teacher preparation program provided a knowledge-base related to disabilities, their definitions and special education. Campbell, Gilmore & Cuskelly (2003) conducted a study on preservice special educators who took a course that focused on human development, education and inclusion of students with disabilities and attitudes towards disability. The result of the study showed that the course helped preservice teachers to obtain accurate knowledge of students with special needs and more positive attitudes towards inclusive education of students with disabilities. Tait & Purdie (2000) conducted a study on preservice teachers' attitudes toward disability over a one-

year general teacher training course. The result of the study showed the effectiveness of training courses was minimal.

Four participants explained that they believed the books that the courses used as references had some issues. The first issue was that some of these texts included repetitive information and definitions that are no longer acceptable. The second issue was that one participant believed texts were not well adapted to the culture and the environment of Saudi Arabia. He believed the books should take advantage of international references with an adaptation of Saudi culture and the Saudi educational system. Ramírez-Castañeda (2020) states that there exists a disadvantage in publishing scientific papers caused by the dominance of the English language; although it is important to have a common language of scientific publication, using one language for scientific publication creates a gap, and 98% of publications are written in English (Gordin, 2015). Ramírez-Castañeda (2020) states there is a necessity to recognize and protect multilingualism in science to close this gap. The dominance of the English language in the sciences creates inequality in knowledge production between English-speaking countries and those that are non-English speaking. Four participants stated that introduction to special education courses was helpful because they gained knowledge related to inclusion. Preservice teachers who had taken courses about teaching students with special needs in their teacher preparation programs were more likely to have positive perceptions toward inclusive settings (Dev & Haynes, 2015). Al-Wabli (1983) conducted a study on preservice special education student evaluations of their teacher preparation programs in Saudi Arabia. The results of the study showed that preservice teachers rated seven courses of the preservice program as highly effective; only one course was rated below average, and five courses were rated as average.

Three participants from KSU commented that special education law and Saudi Arabia's disability code were not covered in course topics. Two participants from SU stated that they learned about Saudi Arabia's disability code and received highlights related to special education law. Murry and Alquhtani (2015) conducted a study about preservice teachers' in the KSA perceptions about special education law and Saudi Arabia's Disability Code. The results of the study showed that preservice teachers in Saudi Arabia have not been offered any special education law courses during their special education teacher preparation programs. Schimmel and Militello (2007) stated that 75% of 1300 teachers in seventeen states did not take any courses in special education law while studying in preservice teacher programs, and most teachers are misinformed or uninformed about special education law. Two participants from SU stated that they took a course that provided highlights about the history of special education in Saudi Arabia. Three participants from KSU stated that they did not take any courses related to the history of special education in Saudi Arabia, but they took two sessions about the history of people with special needs in general.

Participants explained there were many environmental influences related to their decision to enter the preservice special education programs. According to the Ecological Systems Theory (Bronfenbrenner, 1977), every human develops within a special context or ecology. This ecological system comprises five connected systems: the human, Microsystem, Mesosystem, Exosystem and the Macrosystem. Participants' responses demonstrate how their professional development had been impacted by these five systems. All five participants explained how they were influenced by their direct environments (microsystems) which are their families and communities. Koshy, G. E. (2011) indicated that personal factors (Microsystem), social factors (Mesosystem), and (Exosystem) societal factors played important roles for teachers of students

with autism to remain in the profession. McLinden et al. (2016) explained that teachers of students with visual impairments need to work to facilitate curriculum access within and between different ecological systems for students with visual impairments. McLinden et al. (2016) assured that students with visual impairments need to be active participants in the

The learning process through different ecological systems. In the study preservice teachers are influenced by their personal experiences in many different ways. For example, The family's support, personal preferences and history influenced the participants to enter the special education programs. Also, Dobson & Douglas, G. (2020) indicated that the experiences that Teachers bring a range of personal experiences affect the teacher to have the desire to change school practice and different ecological systems influence teachers into choosing their careers. Moreover, Keyes (2000) emphasizes how ecological systems between the teacher and parents play an important role in the effectiveness of Parent-Teacher Partnerships. One factor is similarities between teachers' and parents' cultures and values. All five participants explained how they were influenced by their beliefs and common values (macrosystem and chronosystem) which are the culture and religion in Saudi Arabia. It is important to note that in Saudi Arabia, "the religion of Islam is the main, though not the only, factor that shapes the Saudi culture." (Al-Shahri, 2002, 133). All five participants stated that religion was one of the most important factors in their lives and they were influenced by their religious values. Abu-Gaueh (1995) states that Islam is the most influential aspect of cultural heritage in Saudi Arabia. According to Halligan (2006), the influence of Islam was evident in the people of Saudi Arabia in all narratives since its inception.

All the participants agreed that they had a good relationship with faculty members.

The quality of relationships between students and educators are valuable; caring about students aids their learning (Nieto, 2013). Hodges & Forrest Cowan (2012) indicated that pre service teachers had a good relationship with their instructor, clear instructions, instructor availability. Five participants explained they had an issue in their classroom environments as the communication was one directional. Lecturing overwhelms students with a lot of information, applies one-way communication, does not engage students in learning and the lesson and creates an ineffective environment (Huggins & Stamatel, 2015; Palmer, 1990) On the other hand, discussion as a method is suggested to be used at all educational levels (Hale & City, 2006; Stronge, 2018). Gall & Gillett (1980) state that discussion is effective in all grade levels and the discussion method has great potential for all classrooms, "yet many teachers are reluctant to use this method (Gall & Gillett, 2001, p. 96). Two studies have shown that there is a positive relationship between student participation in discussions and motivation, problem-solving and learning (McKeachie, 1970; Smith, 1980).

Four participants explained that the program shifted the perceptions that they had before entering the program. Participants believed that the teacher preparation program helped them to realize that students with special needs are capable of learning anything. Greenfield, Mackey and Nelson's (2016) study results show that the experience of preservice teachers was helpful for most of the participants in changing their perceptions toward people with disabilities. Two participants explained that some of their classmates had issues with lack of motivation. Special education teachers are at risk of burnout, which can emerge during teacher education (Hong, 2010). Teacher preparation should, therefore, provide resources for their preservice teachers on burnout with which preservice teachers can learn strategies that might help to buffer burnout. For example, high levels of commitment, motivation, active and social coping are suggested to be

effective in buffering burnout (Skaalvik & Skaalvik, 2010; Clunies-Ross, Little & Kienhuis, 2008).

None of the participants stated that they had taken any courses related to EBP. All participants did take two courses related to educational strategies. However, the classes were reported as being deficient in educational strategies and providing background on evidence-based practices (Freeman, Simonsen, Briere, & MacSuga-Gage, 2014; Morrier, Hess & Heflin , 2011; Simpson, 2004). Another major issue for all five participants was the prioritization of theory over practice. While preservice teachers took courses that discussed evidence-based practices, they were given few opportunities to apply their knowledge or understand its practical application (Begeny & Martens, 2006). This issue is not unique to Saudi Arabia. Morrier, Hess & Heflin (2011) found that 85% of special education teachers in Southern states received no training in EBP implementation during their preservice teacher education programs. Without the practical aspect of teacher preparation, it is unreasonable to expect teachers to apply EBPs, which have the ability to improve student outcomes (Paynter et al., 2017; Simpson, McKee, Teeter & Beytien, 2007). It is crucial that preservice teachers be given the opportunities to implement multiple EBPSs to improve student success rates (Simpson, 2004). Three participants explained that they learned to apply IEPs in their practicums. Preservice teachers believed practical experience was an essential element in their programs. These experiences help teacher retention, and develop teaching skills and competencies (Macy, Squires & Barton, 2009; Noonis & Jernice, 2011; Guyton & McIntyre, 1990). Teacher preparation programs must provide preservice teachers with opportunities to connect coursework with rich clinical experiences. (Darling-Hammond, 2014). Teacher preparation programs should focus more deliberately on instructional practice.

Preservice special education teachers explained their perceptions related to the practicum. First, participants started with what they learned during the practicum. One clarified that during the practicum he learned that students with severe disabilities have limited opportunities to attend university. Wolanin & Steele, (2004) report few opportunities in higher education for disabled students, and they suggest that higher education policy makers should work on eliminating barriers that prevent these students from going to college. The goal of most students (high school graduates) with special needs is to have postsecondary education (Cameto, Levine, and Wagner 2004). Cortiella & Horowitz (2014) stated that 54% of students with a learning disability in the U.S planned to attend college. However, only 34% of these students have earned a four-year degree. This issue is after students with special needs graduate from high schools, the burden is only on the student to administer appropriate programs in universities and colleges (Wolanin & Steele, 2004). (Newman et al, 2011). Another participant explained that he learned during the practicum that students with severe disabilities were not included in mainstream classrooms. Arab countries still struggle to provide inclusion for students with disabilities (Al Khateeb, Hadid & Alkhateeb, 2016). In Saudi Arabia, students with mild and severe disabilities receive their education in special education classrooms separate from mainstream classrooms in schools (Alquraini, 2013).

One issue in practicums that participants talked about was the lack of supervision by their faculty advisers. One participant believed he was not able to help the students to achieve anything because he was the only one in the classroom. White (2009) states that preservice teachers need to work with experienced educators to receive knowledge through useful feedback. Participants believed that they should have had a faculty advisor to provide immediate feedback on their work with students with special needs. White (2007) states that preservice teachers in

New Zealand believed that receiving immediate feedback by their instructors during the practicum helped them to have a clear focus and direction for their professional teaching practice. Phillion, Miller and Lehman (2005) state that preservice programs need to focus more on field practices because they help preservice teachers to engage in teaching and start to see themselves as educators (Hixon & So, 2009).

This study's findings show that preservice special education teachers in Riyadh do not receive adequate support during their training. Specifically, two participants noted that their trainers did not support them in preparing case studies and educational assessments. These practices undermine the quality of teacher preparations by preventing preservice teachers from acquiring critical skills (Brownell, Bettini & Benedict, 2018). Besides, preservice teachers rely on the guidance provided by their instructors to perform complex evaluations. These findings demonstrate that the lack of support for preservice special education teachers is one of the primary factors that undermine their training. Other countries worldwide have managed to overcome many challenges associated with special education by ensuring that their trainee teachers receive all the support they require (Gavish, 2017). Thus, teachers preparation programs need to review their training programs to enhance the quality of special education.

Collaboration between schools and other institutions could help preservice special education teachers in Saudi Arabia access the support they need for their training. Contemporary research has shown that professional development schools (PDSs) allow preservice teachers to learn from more experienced teachers (Helms-Lorenz, 2018). By collaborating with institutions, schools can provide preservice special education teachers an opportunity to interact with in-service teachers. Further, such an arrangement would allow preservice teachers to apply their theoretical knowledge to real-life scenarios by evaluating learners and receiving feedback from

educators (Burns & Baker, 2016). PDSs have also proven effective in helping preservice special education teachers benefit from experienced instructors' mentorship. All these considerations show that despite the challenges faced by preservice special education teachers, PDSs could enable these preservice special education teachers to overcome such problems. Scott, Gentry & Phillips (2014) conducted a study in the U.S. that shows that preservice teachers have very high levels of intrinsic motivation to teach and rate the support they received while teaching as average. Participants believed the relationship between them and their mentors in school were positive in all procedures which helped them to succeed in the practicum.

Teacher preparation programs are responsible for finding schools with an appropriate and organized environment. Two participants explained that their environment was appropriate and organized, and two participants believed their environment was not organized. Ganz (2007) states that organizing the classroom, providing visual schedules, organizing the materials and tools, and providing visual details of every step are necessary for students' with autism classrooms. Students with autism spectrum disorders (ASD) are visual learners, and adults with ASD have reported that they comprehend more easily via pictures and written visuals compared to auditory means (Earles, Carlson & Bock, 1998; Earles-Vollrath, Cook & Ganz, 2006). Teachers of individuals with ASD are recommended to apply visually based interventions (Schopler, Mesibov & Hearsey, 1995).

Implications

The study's findings have significant implications that could influence policies, practices and future research involving special education teachers preparations in Saudi Arabia. Many countries, including Saudi Arabia, work to have quality education, and this cannot occur without

high quality teacher preparation (Hussain & Mahmood, 2010). The government and the people of Saudi Arabia want to improve the education system in the country, and the key factor in that is to improve the teacher preparation programs. The results demonstrate that stakeholders in the programs should review the curriculum used to train special education teachers. These efforts should prioritize the need to ensure that the courses taught to preservice teachers are free of redundant content that would otherwise undermine their competence. Special education teachers should acquire knowledge and skills through training that considers the unique challenges associated with their profession (Brownell, Kiely & Urbach, 2017). Instead of using repetitive content to educate these preservice teachers during their four-year training program, programs should strive to provide the preservice special education teachers with the competencies they need to help students with special needs. Additionally, special education teacher preparations should ensure that communication in the classroom is two-way to make lessons more interactive (Brownell, Jones, Sohn & Stark, 2020). Initiatives will enhance the quality of special education programs in Riyadh.

Moreover, the study's findings emphasize the need for reforms that would enable preservice special education teachers to take advantage of high-leverage practices (HLPs). When utilized appropriately, HLPs tend to help preservice teachers to gain the most out of their program (McLeskey, Brownell, Maheady & Lewis, 2019). Evidence-based practices and practicum sessions are examples of HLPs pertinent to special education teachers' programs in Riyadh. An analysis of the study's findings showed that some of preservice teachers did not pursue courses with evidence-based practices. Such a finding demonstrates that many preservice special education teachers in Riyadh cannot use HLPs such as evidence-based practices to support their training. These results show that colleges of education, through policymakers in the

education sector, should review the curriculum used to train special education teachers to allow these preservice teachers to use HLPs as part of their training.

Aside from the need to provide preservice teachers with access to evidence-based practices, stakeholders in Riyadh's education sector should ensure that practicum sessions have been integrated effectively into the training process. Practicum sessions allow preservice teachers to apply their theoretical knowledge to practical contexts (Pua, Peyton, Brownell & Jones, 2021). In doing so, preservice teachers would acquire additional skills that enable them to prepare for their future role as an educator (Brownell & Richards-Tutor, 2019). The study's findings showed that preservice special education teachers have few opportunities to engage in practicums. Further, preservice teachers lacked adequate support from their faculty advisors. Policyholders should use these insights to implement reforms that ensure each preservice special education teacher has an opportunity to undertake a practicum session with adequate support.

The findings of this study indicate that preservice teachers are influenced by multiple environmental systems. This indicates that preservice special education teachers are influenced by their common values, cultures and religions (Bronfenbrenner, 1977). These environmental systems are important for preservice teachers' identities. Knowing this means teacher preparation programs in Riyadh should recognize and work to develop a design that accommodates, celebrates and includes all preservice teachers regardless of their faith, religion, gender, background and cultures. This design should accommodate, celebrate and include each preservice teacher's chronosystem system (common values, religions and cultures), macrosystem system (socioeconomic status, race, background), and microsystem system (community and family). A design that values each preservice teacher's common values, cultures, community, family, socioeconomic status, religion, and background.

Recommendations for Future Research

This study focuses on preservice special education teachers' perceptions of their teacher preparation courses, practicum, evidence-based practice and environmental system of preservice teachers by using interview qualitative design. Future research could use other types of qualitative or quantitative studies. Future research could also be conducted on the perceptions of graduate or doctoral students about their environmental systems, courses, dissertations and their graduate and doctoral programs. This study addressed preservice special education teachers' perceptions in Riyadh; future research might study teacher perceptions of preservice teachers in other regions or cities. Studying the perceptions of preservice teachers of courses, practicum, evidence-based practice and the environmental system will provide more data and understanding of teacher preparation programs. Future studies could focus on instructor perceptions about courses, practicum, evidence-based practice and their environmental system of the instructors for how the instructors' perceptions are influenced by their environmental systems. Another potential for future research is to study the perceptions of special education teachers on EBP and how special education teachers are influenced by their environmental systems. Further studies on environmental systems of preservice special education teachers are important because in this study, preservice special education teachers explained how their environmental systems influenced their decisions, personality and perceptions. Further studies on environmental systems will provide more data that will help policymakers and researchers to understand the perceptions of preservice teachers. Preservice teachers' perceptions about teachers preparation programs' inclusion of all preservice teachers regardless of their faiths, religions, background and cultures could also be explored.

Reflexivity

  I applied reflexivity after each interview to guide the next interview. The first reflexive strategy that I used is checking for potential psychological harm. Labott et al. (2013) stated the contemporary research community is more sensitive to the well-being of study participants, especially when addressing emotionally distressing topics. Although the topic of preservice teacher education and how preservice special education teachers perceive it is not sensitive, it still has the potential to cause psychological harm to the participants. For example, some interview questions might make the participants feel worried, humiliated or undereducated. Therefore, I asked all the participants to provide me with what they felt after each interview and all the participants responded that they felt positive during and after the interviews. I then took time at the end of each interview to reflect on any attitude change during the interview. I wrote the attitudes that needed to be changed, and I wrote how I could change these attitudes, such as emphasizing welcoming the participants, asking the participants if there was something that I could change, and thanking the participants for their collaboration at the end of the interviews.

  Looking for areas to build rapport is another reflexive approach that I employed in between interview sessions. Building rapport is an important skill in an interview setting since it improves the connection between the researcher and the participants. This led to effective communication. The researcher's speech and body language should make the participants feel accepted and comfortable. Connecting with the participants regardless of age, background or ethnicity is essential in a qualitative interview study. Since the first impression that any individual builds towards someone is critical, creating a strong rapport in the first phase was my top priority. Rabbidge (2017), explains that because rapport builds the trust between the participants and the researcher, researchers should not focus too much on the study goals at the

expense of the interviews. Although I made sure to build rapport in the first interview sessions, I then reflected on the experience and determined the areas I needed to improve in the next interviews. I then applied the new communication strategies in upcoming interviews. These strategies were maintaining eye contact, referring to the participants by their names, and doing more listening than talking.

To make the upcoming interviews more content-rich, after each interview, I drafted more in-depth questions. The first interview session was like a guide to support me to know the amount of information that could be received from the participants. Although my questions seemed understandable to me, to ensure that the participants understand the responses required, I reflected on whether further information could be obtained and, thereby, I amended the questions accordingly. According to Pessoa et al. (2019), in-depth questions can help to explain certain elements that may have come up in the prior states of data collection. Therefore, switching from simple to in-depth questions helped me to gather more comprehensive details in successive interviews. For example, after the reflection of the first interviews, I found some of the participants answered questions that related to the practicum. I then updated the questions in the second interviews to be more specific, and I asked the participants to explain what they meant in the first interviews. Some of the participants stated in the first interviews that they had faced issues in the practicum. In the second interviews, I asked the participants to name the issues that they faced and to give an example of each issue that they faced during their practicum experience.

Finally, reflexivity was utilized to guide upcoming interviews by drafting clarification questions. While conducting the first interviews, some issues emerged that may not have been clear at first. To avoid any confusion during data analysis and reporting, I considered asking

more questions which helped to eliminate confusion during data analysis. For example, the participants provided new themes in the first session, while the theme in question was scheduled for discussion in an upcoming session. This required me to change the question which helped to have more in-depth data. According to Pessoa et al. (2019), "clarification questions are used when issues are obscure and the researchers consider it is necessary to ask the participants to explain certain subjects that do not seem logical or, at the time of the pre-analysis of the data, seem confusing." (7). To ensure that nothing was left to chance, such issues were studied and clarifying questions were drafted to avoid any confusing elements. Overall, the goal was to make sure that improvement was ongoing.

The actions that have been taken after each interview:

1. Check for potential psychological harm

2. Build rapport

3. Draft more in-depth questions

4. Draft clarifying questions

Overall, I believe the participants were open and collaborative to provide examples and answers to the interview questions. Some of the participants did not answer some questions because they did not remember some of their experiences. Before the study, I was worried that I would not be able to recruit five preservice teachers. Luckily, it was not difficult to recruit the participants. I sent a letter to special education clubs at KSU and SU, and participants connected with me. Participants were collaborative and happy to provide insights about their experiences. I thanked all the participants for their collaboration during the interviews. Before conducting any steps of the data analysis. I wrote my thoughts related to teachers' preparations every day which helped to be aware of my biases. Reflective journaling helped me to make sure that my biases did not

affect the study and to focus on the research process. During data analysis, I learned that the participants faced some issues that I was not aware of, although I had read many studies related to special education teacher preparation in Saudi Arabia. In fact, I was surprised by many issues that preservice special education teachers explained. I learned that participants believed references needed to be reformed and their teacher preparation programs needed to provide preservice teachers with Evidence-Based Practices that would help them to be prepared to work with students with special needs. The method that instructors use in the classrooms needs to be different. For example, instructors need to use discussion to help preservice teachers learn from each other and to be more engaged. Also, instructors need to have ongoing communication with their preservice teachers during the practicum because this will help preservice teachers to surpass all the obstacles they face during. I learned special education preparation programs helped the participants to understand special education' categories, definitions of each disability, inclusion and special education law in some cases. I learned special education preparation programs helped the participants to be professional, create IEPs, perform civic duties and gain communication, problem-solving and proactiveness skills. This study has motivated me to work to improve special education teacher preparation. I plan to go home to the KSA and work in special education teacher preparation. In the future, I plan to conduct more studies related to special education teacher preparation in Saudi Arabia.

Conclusion

This qualitative study focused on perceptions of preservice special education teachers on courses, evidence-based practice, practicum and environmental systems of special education teachers. Preservice special education teachers' perceptions can provide policy makers insight

and data that can help to reform special education teacher preparation. Based on the findings of this study, preservice teachers believed that the courses and the degree plan need reform because many courses provide similar content; course contents are more focused on theory instead of practical knowledge and strategies and have limited experiences related to evidence-based practices. This finding is consistent with previous research indicating that teacher preparation programs have issues preparing teachers to work with students with special needs. The Ministry of Education in Saudi Arabia states that teacher preparation programs in the country have struggled to prepare the teachers for their Teacher Competency Test and to produce teachers that can increase students' educational achievements in the public schools; therefore, the Ministry has deemed reform vital (Ministry of Education, 2019).

On the other hand, preservice teachers believed teacher preparation programs provided opportunities for them to gain many personal and educational skills as well as educational knowledge and background that is necessary for every educator. The perceptions of preservice teachers at SU and KSU varied in a few topics. For example, participants from SU stated that they received highlights of special education law, while participants from KSU stated that they did not receive courses or content related to special education law. Participants in both programs agreed that EBP and educational strategy competencies were limited, and courses and contents of the teacher preparation programs needed to be improved and the method that many instructors used to deliver the courses needed reform.

This study was framed, in part, using the Ecological Systems Theory which specifies that each human is influenced by five ecological systems. Participants explained how they were influenced by each of these five systems. The impact of each environmental system varies in each participant. Some participants believed they were more impacted by common values,

culture and religion. Other participants believed they were more impacted by families and communities. Some participants believed they were impacted by all of the above. The Ministry of Education has started to work to reform the teacher preparations programs. The reform will be a long process as it will take place in all universities and colleges in Saudi Arabia. The hope is that the reform will provide future special education teachers and general education teachers competencies, knowledge, skills, practices and pedagogy that teachers and students need to be successful.

Limitations

Many limitations arise in any qualitative study. The first limitation is hermeneutics, which means that others might interpret the data in different ways. This can happen because of the differences that humans have in experiences, beliefs, cultures and backgrounds. To reduce this limitation, peer debriefing was employed by professors in Saudi Arabia that were interested in the topic and qualitative study. The second limitation is that some participants might be afraid to tell the truth because it might cause unpleasant feelings or fear. Participants might feel that telling the truth could result in unpleasant consequences. Thus, the participants were ensured that the data would be confidential, names would be anonymous, and data would not be exposed by others. The third limitation is that there is a difference between the language of the study and the language of the interviews while conducting the study. The study's language is English, but the language of the interviews is Arabic. While translating the transcript from Arabic to English, mistranslating might have occurred. Data was transcribed in Arabic. Then, two doctoral candidates who are fluent in both Arabic and English and are specialists in special education were asked to review the quotes and choose the appropriate words in English that represented the

meaning of the participants. Another limitation is that the study population is only male due to

the separation of colleges by gender in Saudi Arabia.

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Appendices

Appendix A: Interview Protocol Question

First Interview Questions for "How do male preservice special education teachers in Saudi

Arabia perceive the quality of the coursework in their special education teacher program?"

1. Why did you choose to go to a special education program?

2. What are the factors that influenced you to go to a special education or educational field?

3. What experiences did you have in your lifetime that have influenced in relation to education ?

4. What was your academic pathway?

5. Tell me about your experience in the teacher preparation programs.

6. What courses have you taken in the program?

7. What do you think of the courses that you have taken in the programs?

8. What do you think of special education courses in particular?

9. How do you describe your experience in the programs in terms of skills and opportunities?

10. How was your relationship with your program's faculty?

11. What do you think of the resources, books and modules that the departments and the faculty provide?

12. In what way have the programs influenced your overall educational experience?

13. What are the factors that affect your experience?

14. Could you give me an example of this?

15. Since you are finished with your program, what do you think of your academic development?

16. What courses have you taken that are related to special education law?

17. How did teacher preparation and school environments influence your personal and educational developments?

18. How did the community' environments influence your personal and educational developments?

19. Why did you enter the field of special education?

20. What are the factors that influenced you to go to a special education or educational field?

21. What services did you notice or were you aware of for individuals with special needs?

22. How have family, social life, religion, culture, and life experience influenced your decision to enter special education programs ?

23. How do you think of the social environment with classmates and instructors in the program?

24. What do you think of the social environment in school classrooms during the practicum?

25. What do you think of the classrooms' environment while they were taking courses ?

26. How have you been influenced by your life experience and background and how these factors interact with your educational experiences in college?

27. How have you been influenced by activities that you've experienced in the programs?

Second Interview Questions for "How do male preservice special education teachers in Saudi Arabia perceive the quality of their practicum with respect to preparing them to be effective special education teachers?"

1. Tell me about your practicum experience?

2. How long is the practicum session?

3. How do you describe your experience?

4. What opportunities has the teacher preparation offered to you during the session?

5. How do you describe your relationship with your adviser?

6. How do you describe your relationship with your classroom teacher?

7. How do you describe your relationship with students?

8. How do you describe your relationship with parents?

9. What do you think of school resources?

10. What do you think of your experience with school administration?

11. In what way did the practicum influence your overall educational experiences?

Third Interview Questions for "What are the perceptions of male preservice special education teachers in Saudi Arabia about evidence-based practices and the extent to which their special education teacher preparation program incorporated them into the curriculum?"

1. What EBP did you use to help students with severe disabilities to improve in life and all academic aspects including social, behavioral and literacy while you were working with students with severe disabilities in practicum sessions?

2. How do you describe your experience in terms of educational strategies?

3. How do you describe your experience in terms of learning educational strategies during the programs?

4. How many courses provided you information related to EBP?

5. Which courses that you have taken provided you with information related to EBP?

6. What do you think of the books and resources provided by the teacher preparation program?

7. How do you describe the faculty's support in terms of EBP?

8. In general, how do you describe your teacher preparation programs in terms of providing opportunities to improve skills that are needed to implement EBP.

9. In what way did the EBP influence your overall educational strategies?

Appendix B: Interview Protocol Question (Arabic)

اسئلة المقابلة

:الاسم الاول

:زمن

:تاريخ

سيبدأ الباحث في شرح الغرض من الدراسة والغرض من المقابلة

ما هو تخصصك؟

ما هو مسارك؟

ما هو الفصل الدراسي الذي ستأخذه؟

ما هي الجامعة التي تدرس فيها؟

ما هي الدورات التي تدرسها؟

سيستغرق كل سؤال من 9 إلى 15 دقيقة

المقابلة الأولى

اسئلة المقابلة بالعربي

1- ما الخبرات التي جعلتك تدخل قسم التربية الخاصة لماذا اخترت قسم التربية الخاصة

ما هي العوامل التي لها تأثير سواء كانت عوامل الدينية الثقافية الاجتماعية العائلية الخبرات الحياتية ماهي الخبرات الحياتية

التي لها لكي جعلتك تذهب لقسم التربية الخاصة

ماهي العوامل الأخرى التي جعلتك تذهب لقسم التربية الخاصة

ماهي الخدمات التي تقدم للمعاقين لحظتها في مدينتك

ما مدى تأثير الخبرات البيئية والخبرات البيئية في التدريب الميداني التي حصلت عليها خلال أربع سنوات في قسم التربية

الخاصة على تطورك الشخصية والتربوي

ما مدى تأثير مجتمعك ليس مجتمع الجامعة بل مجتمعك خارج الجامعة على نموك التربوي والشخصي

2-ماهي الأسباب أو العوامل الخارجية التي جعلتك تدخل قسم التربية الخاصة (سواء في المنزل او الاصحاب)

٣- هل هناك تأثير المجتمعي والثقافي كان له عامل للذهاب لدراسة البرامج التربوية ، هل هناك عوامل ثقافية أو عائلية أثرت

لك في التقديم على كلية التربية؟

مثال شخص قد يذهب للجامعة ليست رغبه منه بل بسبب نظرة المجتمع الإلزامية للدراسة الجامعية

٤-هل هناك أشخاص أثروا في اتخاذ قرارك للذهاب لكلية التربية؟

3ـلماذا دخلت التربية خاصة

7ـما هي المعلومات التي حصلتم عليها التي لها علاقة بالقوانين الحكومية لتقديم الخدمات لذوي الاحتياجات الخاصة تعليميا

ومدني

هل هناك خبرات المرتبطة بالتعليم خلال حياتك في مرحلة الابتدائية او المتوسطة لها أثرت في تطورك نحو التعليم؟

أخبرنا عن تجربتك في برامج إعداد المعلم للتربية الخاصة في جامعتك

ما رأيك في والكتب والمواد ،الخبرات التي يقدمها الأقسام والكلية؟

رأيك بـ الخطة الدراسية للمواد ؟

ماذا قدم لك هذه البرامج من حيث تطور مهاراتك الأكاديمية والتربوية؟

. ما مدى تأثير برنامج البكالوريوس والتدريب الميداني على تطوراتك الشخصية والتعليمية؟

٢٠.ما مدى تأثير المجتمع كالبيئة في تطورك الشخصي والتعليمي؟

٢١. ماهي متطلبات اجتيازك للمواد (الدرجات)؟

أخبرنا عن تجربتك في برامج إعداد المعلم للتربية الخاصة في جامعتك؟

ما هي المواد التي درستها في البرنامج وما طبيعتها ؟

ما رأيك بهذه المواد التي درستها في البرامج؟

كيف تصف تجربتك في البرنامج من حيث المهارات والفرص

كيف علاقتك بالكلية؟

كيف علاقتك بالقسم؟

ما رأيك البرامج والكتب والوحدات التي توفرها الأقسام والكلية؟

ماذا قدمت لك هذه البرامج من حيث تطور مهاراتك الأكاديمية والتربوية؟

أعطني مثال؟

بما أنك انتهيت، ما رأيك في تطورك الأكاديمي بشكل عام؟

ماهي المواد التي درستها ولها علاقة بالقوانين التعليمية للتربية الخاصة او القانون بشكل عام

ماهي المواد التي درستها ولها علاقة بالدمج؟

ماهو رأيك بالبيئة الاجتماعية داخل فصول الدراسية في القسم داخل الكلية ؟ وما مدى تأثير ذلك على صعيدك الشخصي

هل اخذت اي مادة لها علاقة بالتفكير النقدي او التفكير النقدي التربوي

هل اخذت مادة لها علاقة بأخلاقيات المهنة ؟

بشكل عام ما رأيك بالبيئة داخل المدارس خلال التدريب الميداني ؟

بشكل عام ما رأيك بالبيئة داخل الكلية؟

هل اخذت مواد لها علاقة بالتاريخ التربية الخاصة او تاريخ التربية الخاصة في السعودية

المقابلة الثانية

أخبرني عن تجربتك العملية؟

ما هي مدة التدريب العملي؟

كيف تصف تجربتك؟

ما الخبرات والفرص التي قدمها لك برنامج التربية الخاصة خلال التدريب العملي

كيف علاقتك بالكلية؟

3. كيف تصف تجربتك؟

4. ما هي الفرص التي قدمها لك إعداد المعلم أثناء فترة التدريب الميداني؟

5. كيف تصف علاقتك مع المشرف الدراسي خلال فترة التدريب الميداني وإشرافه عليك داخل المدرسة ؟

6. كيف تصف علاقتك مع معلم صفك؟

7. كيف تصف علاقتك بالطلاب؟

8. كيف تصف علاقتك بالوالدين الطلاب؟

9. ما رأيك في الخدمات المدرسية؟

10. ما رأيك في تجربتك مع إدارة المدرسة؟

11. بأي طريقة أثر التدريب العملي على خبراتك التعليمية الشاملة؟

١٢.كم مرة زارك المشرف الدراسي

١٣. ماهي المطلوب منك لإجتياز التدريب الميداني؟

١٤.برنامجك اليومي خلال فترة التدريب الميداني؟

كيف اثر عليك هذه الخبرات خلال التدريب الميداني في تطورك الشخصي ؟

مقابلة الثالثة

ماهي الاستراتيجيات التي استخدمتها لمساعدة الطلاب ذوي الإعاقة الشديدة على التحسن في جميع جوانب الحياة والجوانب الأكاديمية بما في ذلك الجوانب الاجتماعية والسلوكية بينما كنت تعمل مع الطلاب ذوي الإعاقة الشديدة في جلسات التدريب العملي؟

ماهي الاستراتيجيات المضمنة في المنهج ؟ هل هي استراتيجيات مدعومة ببحوث تجريبية او غير مدعومة

ماهي الاستراتيجيات (الممارسات المبنية على الادلة) التي استخدمتها لمساعدة الطلاب ذوي الإعاقة الشديدة على التحسن في جميع جوانب الحياة والجوانب الأكاديمية بما في ذلك الجوانب الاجتماعية والسلوكية بينما كنت تعمل مع الطلاب ذوي الإعاقة الشديدة في جلسات التدريب العملي؟

كيف تصف تجربتك وخبرتك من حيث الاستراتيجيات التعليمية؟

لماذا ا؟

كيف تصف تجربتك من حيث تعلم الاستراتيجيات التعليمية خلال المواد المنجية في برنامج البكالوريوس

لماذا ا؟

ماهي الاستراتيجيات الممارسات المبنية على الأدلة المتضمنة في المنهج ؟ هل هي استراتيجيات مدعومة بحوث تجريبية او غير مدعومه

3. كيف تصف تجربتك من حيث تعلم الاستراتيجيات التربوية أثناء البرامج؟

4. كم عدد المواد التي قدمت لك معلومات تتعلق بـ EBP؟

5. ما المواد التي درستها زودتك بالمعلومات المتعلقة بـ EBP؟

6. ما رأيك في الكتب ،الخبرات التي يوفرها برنامج البكالوريوس التي لها علاقة في الاستراتيجيات؟

7. كيف تصف دعم البرنامج التربية الخاصة من حيث EBP؟

كيف تصف دعم البرنامج التربية الخاصة دعم أعضاء هيئة التدريس من حيث EBP؟

8. بشكل عام، كيف تصف برامج إعداد المعلم من حيث توفير الفرص لتحسين المهارات اللازمة لتطبيق EBP.

9. بشكل عام ما مدى تأثير مواد الممارسات المبنية على الادلة او طرق التدريس على تطورك التعليمي المهني

ما هو رأيك في الخبرات التي اكتسبتها اول سنه

ما هو رأيك في الخبرات التي اكتسبتها ثاني سنة دراسية

ما هو رأيك في الخبرات التي اكتسبتها ثالث سنة

بشكل عام ما مدى تأثير مواد الممارسات المبنية على الادلة او طرق التدريس على تطورك التعليمي المهني

Appendix C: The Data Analysis

Predetermined Category

1-Preservice Teachers' Perceptions of Preservice Special Education Program and Courses

2- Environmental Systems of Preservice Special Education Teachers

3- Preservice Teachers' Perceptions of Practical Knowledge and evidence-based Practices

4-Preservice Teachers' Perceptions of Practicum

Themes

A: 1-the redundancy of contents

2-the most important course in the teacher preparation Programs:

3-special education law

4- preservice special education teachers' outcomes

B: 1-The influence of family, community, culture, religion, common values on preservice

teachers, local government,

2-The lack of Interaction between Preservice Teachers and Instructors in the Classrooms,

3- the relationship between preservice teachers and the faculty members.

C: 1- The lack of courses related to educational strategies and Evidence-Based Practices, 2-The

lack of practical knowledge.

D: 1- learning through the practicum

2-the lack of supervision, practicum environment,

3-the relationship between preservice teachers and schools' teachers and administrations.

Codes:

1- Preservice Teachers' Perceptions of Preservice Special Education Program and Courses

Codes: similarity of contents in some courses, plan needs a reform, content needs a reform, applications, and practical knowledge are important, some courses are useful, some other courses had similarity of contents, similarity of contents in some courses, some courses provided repeated information, courses with new knowledge like academic writing , and educational research are important, some courses and contents were not necessary, some courses that did not provide new outcomes and new knowledge. Introduction to Special Education was a helpful course, Introduction to Special Education was interesting, they learned a lot, they learned special education definitions, categories, and learned inclusion, learned a lot new knowledge by Introduction to special education' course, learned inclusion, the instructor of Introduction to Special Education course was knowledgeable of the course's contents and objectives, Introduction to Special Education was first experience of special education, before Introduction to Special Education, he did not have knowledge of SE, no special law courses, he did not take special law courses, did not take Saudi Arabia's disability code, he took special law courses, books rely on foreign references. Some books use old definitions, similarity of contents in some courses, similarity of contents in some courses, similarity of contents in some courses, similarity of contents in some courses, reform, reform of contents, reform of contents, reform of contents, reform of contents

Codes: special education preparations helped pre-service teachers to be professional, community work, improve educational skills, personal skills, provided knowledgebase of disabilities, collaboration, communication and problem-solving, carrying out civic duties,

2- Environmental Systems of Preservice Special Education Teachers

Codes: his community and my family are proud of him, his father and my uncle are teachers, his family supported my decision to go to a college of education, Religion impacts his beliefs, Religion impacts his beliefs, religion influenced me to do good deeds, my culture affected him in college, he made sacrifice, the community needs some awareness of the capabilities of students with special needs, before the program students with special needs cannot learn, before the program students with special needs can learn

Codes: Educational office was supportive, they did not have a strong relationship with the education office, Government provided faculty graduates from the best universities, and the educational government office was supportive.

Codes: communication in the classroom environment was one-sided, one-sided communication seemed uninteresting, one-sided communication, one-sided communication, one-sided communication a good relationship with the instructors, a good relationship with faculty, The faculty is supportive

3- Preservice Teachers' Perceptions of Practical Knowledge and evidence-based Practices

Codes: no course related to evidence-based practices, no course related to evidence-based practices, two courses related to educational strategies, no course related to evidence-based practices, the strategies were few, there is a gap between what we learned in college and what we practice in school. The courses gave us highlights of limited educational strategies like reinforcement and modeling, no course related to evidence-based practices, educational strategies were limited, educational strategies were limited, educational strategies were limited, educational strategies were limited

Codes: content of the programs are related to the theories that relate to disabilities more than the practical knowledge, limitations of learning educational strategies, courses did not prepare for the practicum, courses focused on theory more than the practical knowledge, courses focused on theory more than the practical knowledge, courses focused on theory more than the practical knowledge, courses focused on theory more than the practical knowledge

4- Preservice Teachers' Perceptions of Practicum

Codes: there is a gap between practical application in schools and theoretical knowledge in college, students with special needs do not have a lot of opportunities to go to college, schools are not inclusive, help to apply (IEP), preservice teacher applied (IEP) during practicum,

Codes: no supervision or feedback, being a teacher in the first week was not helpful, no supervision or feedback, it was a good opportunity to have the practicum in a private center, no supervision or feedback, no supervision or feedback,

Codes: seven students in one classroom does not help students, one teacher to one student is more helpful

Codes: they have good relationships with special education teachers. The environment was positive and helpful, good relationships with students with special needs is the most important thing.

Appendix D: IRB exemption

UNIVERSITY of SOUTH FLORIDA

EXEMPT DETERMINATION

October 26, 2020

Salman Almughyiri
4121East busch blvd
Tampa, FL 33617

Dear S. Almughyiri:

On 10/24/2020, the IRB reviewed and approved the following protocol:

Application Type:	Initial Study
IRB ID:	STUDY000852
Review Type:	Exempt 2
Title:	Perceptions of Preservice Teachers of Students with Autism and Intellectual Disabilities in their Teacher Preparation Programs in Saudi Arabia
Funding:	None
Protocol:	• Version #1, October 23,2020;

The IRB determined that this protocol meets the criteria for exemption from IRB review.

In conducting this protocol, you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Please note, as per USF policy, once the exempt determination is made, the application is closed in BullsIRB. This does not limit your ability to conduct the research. Any proposed or anticipated change to the study design that was previously declared exempt from IRB oversight must be submitted to the IRB as a new study prior to initiation of the change. However, administrative changes, including changes in research personnel, do not warrant a modification or new application.

Ongoing IRB review and approval by this organization is not required. This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these activities impact the exempt determination, please submit a new request to the IRB for a determination.

Institutional Review Boards / Research Integrity & Compliance
FWA No. 00001669
University of South Florida / 3702 Spectrum Blvd., Suite 165 / Tampa, FL 33612 / 813-974-5638

Page 1 of 2

Various Menzel
IRB Research Compliance Administrator
Institutional Review Boards /Research Integrity & Compliance
FWA No. 00001669
University of South Florida / 3702 Spectrum Blvd., Suite 165 / Tampa, FL 33612 / 813-974-5638

Appendix E: Participant Consent

UNIVERSITY OF SOUTH FLORIDA
USF RESEARCH & INNOVATION

Informed Consent to Participate in Research Involving Minimal Risk Information
Information to Consider Before Taking Part in this Research Study
Title: Perceptions of Preservice Teachers of Students with Autism and Intellectual Disabilities in their Teacher Preparation Programs in Saudi Arabia

Study # _____852_____

Version #1
10/23/2020

Overview: You are being asked to take part in a research study. Research studies include only people who choose to take part. This document is called an informed consent form. Please read this information carefully and take your time making your decision. Ask the researcher or study staff to discuss this consent form with you, please ask her to explain any words or information you do not clearly understand. The nature of the study, risks, inconveniences, discomforts, and other important information about the study are listed below. The information in this document should help you to decide if you would like to participate. The sections in this Overview provide the basic information about the study. More detailed information is provided in the remainder of the document.

 We are asking you to take part in a research study called

Perceptions of Preservice Teachers of Students with Autism and Intellectual Disabilities in their Teacher Preparation Programs in Saudi Arabia

This study is being led by *Salman* who is a *doctoral student* at/ USF . This person is called the Principal Investigator. He is being guided in this research by Dr. Phyllis Jones, USF, professor.

Why are you being asked to take part?

 We are asking you to be a part of the study because you are a preservice special education of students with severe disabilities in Riyadh.

Study Procedures:

 If you take a part of the study. You will be interviewed three times, and each time might take up to 90 minutes.

 Interview will be online

 The interview will be audio recorded and you will be notified and your approval will be taken before the interview

 Recordings will remain in electronic format and be deleted after the final report is presented to the IRB or 5 years later. After 5 years, images, recordings and transcripts will be deleted.

Total Number of Subjects

About *Five* individuals will take part in this study at all sites.

Alternatives / Voluntary Participation / Withdrawal

You have the rights to not take a part of this study and to withdraw from the study at any time.

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this study.

Benefits

You will receive no benefit(s) by participating in this research study.

Risks or Discomfort

This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day. There are no known additional risks to those who take part in this study.

.

Compensation

There is no payment for the Participants.

Costs

It will not cost anything to be in this study.

Privacy and Confidentiality

We will do our best to keep your records private and confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Certain people may need to see your study records. These individuals include:

- The research team, including the Principal Investigator, study coordinator, research nurses, and all other research staff.

- Certain government and university people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your records. This is done to make sure that we are doing the study in the right way. They also need to make sure that we are protecting your rights and your safety.

- Any agency of the federal, state, or local government that regulates this research. This includes: the Department of Health and Human Services (DHHS) and the Office for Human Research Protection (OHRP).]

- The USF Institutional Review Board (IRB) and its related staff who have oversight responsibilities for this study, and staff in USF Research Integrity and Compliance.

Your information or samples collected as part of the research, even if identifiers are removed, will NOT be used or distributed for future research studies.

We may publish what we learn from this study. If we do, we will not include your name. We will not publish anything that would let people know who you are.

You can get the answers to your questions, concerns, or complaints.

If you have any questions, concerns or complaints about this study, call Salman Almughyiri, 8133353510]. If you have questions about your rights, complaints, or issues as a person taking part in this study, call the USF IRB at (813) 974-5638 or contact by email at RSCH-IRB@usf.edu.

Consent to Take Part in Research

I freely give my consent to take part in this study [: and authorize that my health information as agreed above, be collected/disclosed in this study]. I understand that by signing this form I am agreeing to take part in research. I have received a copy of this form to take with me.

_____   _____
Signature of Person Taking Part in Study   Date

_____
Printed Name of Person Taking Part in Study

Statement of Person Obtaining Informed Consent

I have carefully explained to the person taking part in the study what he or she can expect from their participation. I confirm that this research subject speaks the language that was used to explain this research and is receiving an informed consent form in their primary language. This research subject has provided legally effective informed consent.

_____   _____
Signature of Person Obtaining Informed Consent   Date

_____
Printed Name of Person Obtaining Informed Consent

الموافقة المستنيرة للمشاركة في البحوث التي تنطوي على الحد الأدنى من المخاطر

معلومات

طلب منك المشاركة في تصورات المعلمين ما قبل الخدمة للطلاب من ذوي اضطراب بالتوحد والإعاقة الذهنية عن برامجهم للإعداد المعلمين في الرياض في المملكة العربية السعودية

الدراسة # _____852_____

10/23/2020

نظرة عامة: يُطلب منك المشاركة في دراسة بحثية. تشمل الدراسات البحثية فقط الأشخاص الذين يختارون المشاركة. تسمى هذه الوثيقة نموذج الموافقة المسبقة. يرجى قراءة هذه المعلومات بعناية وخذ وقتك في اتخاذ قرارك. اطلب من الباحث أو طاقم الدراسة مناقشة نموذج الموافقة هذا معك، يرجى مطالبتهم بشرح أي كلمات أو معلومات لا تفهمها بوضوح. يتم سرد طبيعة الدراسة والمخاطر والمضايقات وغيرها من المعلومات الهامة حول الدراسة أدناه. يجب أن تساعدك المعلومات الواردة في هذا المستند على تحديد ما إذا كنت ترغب في المشاركة. توفر الأقسام الموجودة في هذه النظرة العامة المعلومات الأساسية حول الدراسة. يتم توفير معلومات أكثر تفصيلاً في الجزء المتبقي من المستند.

نطلب منك المشاركة في تصورات المعلمين ما قبل الخدمة للطلاب من ذوي اضطراب بالتوحد والإعاقة الذهنية عن برامجهم للإعداد المعلمين في الرياض في المملكة العربية السعودية

• الجزء المتبقي من الوثيقة

تسمى الدراسة نطلب منك المشاركة في دراسة

تصورات معلمي التربية الخاصة قبل الخدمة لبرامج إعداد معلم التربية الخاصة في الرياض، المملكة العربية السعودية

يسمى هذا الشخص باحث رئيسي. يتم توجيهه في هذا • جامعة جنوب فلوريدا سلمان / يقود هذه الدراسة، وهو طالب دكتوراه في

الأستاذ البحث من قبل الدكتورة فيليس جونز، في جامعة جنوب فلوريدا ،•

معلومات يجب مراعاتها قبل المشاركة في دراسة البحث هذه

لماذا يطلب منك المشاركة؟

نطلب منك أن تكون جزءًا من الدراسة لأنك مدرس تعليم خاص قبل الخدمة.

إجراءات الدراسة:

إذا أخذت جزءًا من الدراسة. سيتم مقابلتك ثلاث مرات ، وقد تستغرق كل مرة 90 دقيقة.

المقابلة ستكون عبر الإنترنت

سيتم تسجيل المقابلة صوتيًا وسيتم إعلامك وسيتم اتخاذ الإجراءات اللازمة قبل فترة التدخل

إجمالي عدد المواضيع

ستبقى التسجيلات في شكل إلكتروني وسيتم حذفها بعد تقديم التقرير النهائي إليها

أو بعد 5 سنوات. بعد 5 سنوات ، سيتم حذف الصور والتسجيلات والنصوص. **IRB**

سيشارك حوالي خمسة أفراد في هذه الدراسة في [.USF. سيشارك ما مجموعه خمسة أفراد في الدراسة في جميع المواقع]

البدائل / المشاركة الطوعية / الانسحاب

تتضمن بدائل المشاركة في الدراسة ما يلي: إذا لم يرغب المشارك في المشاركة. لديك الحق الكامل بالرفض ان تكون جزء من هذه الدراسة. أيضا لديك الحق الكامل بالانسحاب من الدراسة قبل او اثناء او بعد الدراسة

يجب أن تشارك في هذه الدراسة فقط إذا كنت ترغب في التطوع. لا يجب أن تشعر بوجود أي ضغط للمشاركة في الدراسة. لك مطلق الحرية في المشاركة في هذا البحث أو الانسحاب في أي وقت. لن تكون هناك عقوبة أو خسارة للمزايا التي يحق لك الحصول عليها إذا توقفت عن المشاركة في هذه الدراسة.

فوائد

لن تحصل على أي مزايا من خلال المشاركة في هذه الدراسة البحثية.

المخاطر أو الانزعاج

يعتبر هذا البحث الحد الأدنى من المخاطر. وهذا يعني أن المخاطر المرتبطة بهذه الدراسة هي نفسها التي تواجهها كل يوم. لا توجد مخاطر إضافية معروفة لأولئك الذين يشاركون في هذه الدراسة.

.

تعويضات

لا يوجد مدفوعات للمشتركين نطلب منك المشاركة في دراسة

تصورات معلمي التربية الخاصة قبل الخدمة لبرامج إعداد معلم التربية الخاصة في الرياض ، المملكة العربية السعودية

يسمى هذا الشخص باحث رئيسي. يتم توجيهه في هذا البحث من قبل .USF / يقود هذه الدراسة سلمان ، وهو طالب دكتوراه في USFالأستاذ ،، الدكتورة فيليس جونز ،

معلومات يجب مراعاتها قبل المشاركة في دراسة البحث هذه.

التكاليف

لن يكلف أي شيء

الخصوصية والسرية

سنبذل قصارى جهدنا للحفاظ على سرية وسرية سجلاتك. لا يمكننا ضمان السرية المطلقة. قد يتم الكشف عن معلوماتك الشخصية إذا كان ذلك مطلوبًا بموجب القانون. قد يحتاج بعض الأشخاص إلى الاطلاع على سجلات الدراسة الخاصة بك. يشمل هؤلاء الأفراد:

• فريق البحث ، بما في ذلك الباحث الرئيسي ومنسق الدراسة والممرضات البحثية وجميع موظفي البحث الآخرين.

• بعض أفراد الحكومة والجامعات الذين يحتاجون إلى معرفة المزيد عن الدراسة. على سبيل المثال ، قد يحتاج الأفراد الذين يقدمون الإشراف على هذه الدراسة إلى النظر في سجلاتك. يتم ذلك للتأكد من أننا نقوم بالدراسة بالطريقة الصحيحة. كما أنهم بحاجة للتأكد من أننا نحمي حقوقك وسلامتك.

• ومكتب (DHHS) أي وكالة تابعة للحكومة الفدرالية أو الولائية أو المحلية تنظم هذا البحث. وهذا يشمل: وزارة الصحة والخدمات الإنسانية (OHRP).] حماية البحوث البشرية

• والموظفين المرتبطين بها الذين لديهم مسؤوليات الإشراف على هذه الدراسة ، والموظفين في USF (IRB) مجلس المراجعة المؤسسية USF النزاهة والامتثال البحوث.

قد تتم إزالة معرفاتك من سجلاتك الخاصة أو عيناتك. يمكن استخدام و / أو توزيع معلوماتك أو عيناتك على محقق آخر لإجراء دراسات بحثية مستقبلية دون موافقة إضافية منك أو من ممثلك القانوني أو

لن يتم استخدام أو توزيع معلوماتك أو عيناتك التي تم جمعها كجزء من البحث ، حتى إذا تمت إزالة المعرّفات ، للدراسات البحثية المستقبلية.

قد ننشر ما نتعلمه من هذه الدراسة. إذا فعلنا ذلك ، فلن نقوم بتضمين اسمك. لن ننشر أي شيء يسمح للناس بمعرفة هويتك.

يمكنك الحصول على إجابات لأسئلتك أو مخاوفك أو شكاواك.

إذا كانت لديك أية أسئلة أو مخاوف أو شكاوى حول هذه الدراسة ، فاتصل على سلمان المغيري ، 8133353510]. إذا كانت لديك أسئلة حول حقوقك أو شكاويك أو RSCH- على الرقم (813) 974-5638 أو اتصل عبر البريد الإلكتروني على جامعة جنوب فلوريدا مشكلاتك كشخص يشارك في هذه الدراسة ، فاتصل بـ [يجب أن تُدرج الأبحاث التي تُجرى فيهنا معلومات الاتصال التابعة لها. IRB@usf.edu

الموافقة على المشاركة في البحث

والتفويض بجمع المعلومات الصحية واستخدامها والكشف عنها

أمنح موافقتي بحرية للمشاركة في هذه الدراسة [: وأصرح بجمع / الكشف عن معلوماتي الصحية كما هو متفق عليه أعلاه في هذه الدراسة]. أنا أفهم أنه من خلال التوقيع على هذا النموذج ، أوافق على ذلك

_____   _____

التوقيع

التاريخ

_____

الاسم

بيان بالحصول على الموافقة المستنيرة وتفويض البحث

لقد شرحت بعناية للشخص المشارك في الدراسة ما يمكن أن يتوقعه من مشاركته. أؤكد أن موضوع البحث هذا يتحدث اللغة المستخدمة لتفسير هذا البحث ويتلقى نموذج الموافقة المستنيرة في لغتهم الأساسية. قدم موضوع البحث هذا موافقة مستنيرة فعالة من الناحية القانونية.

Appendix F: Member check feedback of all the participants

Andrew: Add that Introduction to special education course was the most important course in the four years, I learned the definition of learning disability, autism, language impairment, visual impairment, deafness, hearing impairment, Intellectual disability and multiple disabilities in Introduction to special education course,

Michael: add that We learned in special education law course the responsibilities that special education teachers have and what disabilities the school served by the law, we also volunteered on special education awareness day during my program, add in the quotes that because they (teacher) have 30 years of experience, add I learned many things during the practicum,

Amir: add I applied for the IEP during the practicum.

Adam: change it two courses about educational strategies for special education,

Aaron: change it to with limited strategies of EBP

Appendix G: Peer review' feedback

You did a great job. I believe that you have done a perfect job coding, theming the data, and data analysis. I believe the data in this study represent the whole study transcripts. I had my comment below. There are four parts which I think you might consider to raise the quality of the study high. I believe you might provide more evidence and quotes from the data. I will call you tomorrow to discuss the review further.

1- Combined special education courses, introduction to special education into one theme which is courses theme 2- Include more evidence from the data in courses 3- Include more evidence from the data in Preservice Special Education Teachers' Outcomes 4- Include what skills they learned 5- Include what skills they learn, Include what skills they learned 5- include they learned definitions 6- include The special education program helped me to develop initiative 6- write all the reasons influenced his decision to be a teacher 7- add the environment was positive. 7- His uncle was also a teacher 8- add religion impacts his beliefs 9- it is going to be interesting if you add how the program itself made a shift in the participants perceptions 10- add more quotes in local government 11- write more in his quotes about the faculty. 11- add more evidence from the data in Evidence-based Practices 12- add more evidence from the data in practical knowledge 13- add more evidence from the data in the practicum 14- expand the quotes in the Practicum 15- expand the quote in the Practicum.