Teachers and Practitioners’ Perceptions of Transition Services for Females with Intellectual Disability in Saudi Arabia

Reem Abdullah Almutairi

Follow this and additional works at: https://digscholarship.unco.edu/dissertations

Recommended Citation
Almutairi, Reem Abdullah, "Teachers and Practitioners’ Perceptions of Transition Services for Females with Intellectual Disability in Saudi Arabia" (2018). Dissertations. 482.
https://digscholarship.unco.edu/dissertations/482

This Text is brought to you for free and open access by the Student Research at Scholarship & Creative Works @ Digital UNC. It has been accepted for inclusion in Dissertations by an authorized administrator of Scholarship & Creative Works @ Digital UNC. For more information, please contact Jane.Monson@unco.edu.
TEACHERS AND PRACTITIONERS’ PERCEPTIONS OF TRANSITION SERVICES FOR FEMALES WITH INTELLECTUAL DISABILITY IN SAUDI ARABIA

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

Reem Abdullah Almutairi

College of Education and Behavioral Sciences
School of Special Education
Special Education
August 2018
This Dissertation by: Reem Abdullah Almutairi

Entitled: *Teachers and Practitioners’ Perceptions of Transition Services for Females with Intellectual Disability in Saudi Arabia*

has been approved as meeting the requirements for the Degree of Doctor of Philosophy in College of Education and Behavioral Sciences in School of Special Education, Program of Special Education

Accepted by the Doctoral Committee:

___________________________________________________
Lewis Jackson, Ph.D. Co-Research Advisor

___________________________________________________
Lori Peterson, Ph.D., Co-Research Advisor

___________________________________________________
Jennifer Urbach, Ph.D., Committee Member

___________________________________________________
Cassendra Bergstrom, Ph.D., Faculty Representative

Date of Dissertation Defense *April 19, 2018*

Accepted by the Graduate School

___________________________________________________
Linda L. Black, Ed.D.
Associate Provost and Dean
Graduate School and International Admissions
ABSTRACT


This experiential study was an in-depth examination of the current experiences and perceptions of five special education teachers and six vocational rehabilitation practitioners who provide training for transition-aged females with intellectual disability in Saudi Arabia. The research questions addressed participants’ perspectives about the overall value of transition services for students with intellectual disability and the feasibility of using the Taxonomy of Transition Programming 2.0 as a framework for transition programs to increase desirable postschool outcomes. Participants viewed an instructional video about intellectual disability, transition services, and the Taxonomy for Transition Programming. Following systematic qualitative methodology, the researcher used a questionnaire, focus group discussions, diagram analysis, and individual interviews to collect information about participants’ attitudes, perceptions, and suggestions regarding the value of transition services and the feasibility of implementing an adapted taxonomy for transition programming in Saudi Arabia.

The data analysis yielded the five following main themes: (a) system structures, (b) beliefs and values, (c) individual characteristics and integration, (d) collaboration, and (e) centrality of the family. The centrality of the family in the lives of persons with intellectual disability in Saudi Arabia consistently emerged across all
of the data. Family issues are connected to any effort to implement changes in how persons with intellectual disability are integrated into society, educated, and trained for any attainable work. Needed legislation, efforts to increase awareness, and organizational collaboration should focus on facilitating the changing perspective on the rights and responsibilities of persons with intellectual disability in Saudi Arabia and the fundamental importance of family involvement.

The results of this study suggest that any framework for transition programming in Saudi Arabia should engage students, parents, and numerous other stakeholders because it is vital for all groups to learn the legal processes and alternatives for transitioning students with intellectual disability to a successful postschool life. It is important for educational systems and transition services to focus on ensuring that students with intellectual disability are allowed to live (to the degree possible) as autonomous adults and that they receive adequate support.
ACKNOWLEDGMENTS

In Islam, there is an expression, which notes, “Those who do not thank people for their help, do not thank their God.” In light of this, I would like to begin with my foremost thanks to Almighty Allah who provided support to me as well as strength so that I could complete this work. I was able to complete this work in a different language and culture than the one I was used to and grew up with. Further, Allah gave me the power, health, time, and opportunity to attain my educational goals.

I also would like to provide my undying gratitude and appreciation for my parents, Abdullah and Nourah. They have devoted their lives, sent prayers on my behalf, and offered gifts during my journey that are impossible to count. They have provided unfaltering support and guidance to me, especially during this stressful time of my life.

There is no way that I can possibly express enough appreciation and gratitude to my husband, Fahad. He has stood by my side during many difficult times, and I am forever grateful to him for being my biggest supporter over the years. Without the support of Fahad, I could not have completed this challenge. He has shown me so much encouragement and has shared in my dream of someday reaching this goal. From the very beginning, Fahad, you have helped and supported me. You have continually held high expectations for me and have held strong confidence in my abilities. Your love has upheld me and I can never express enough thanks to you.
I would also like to provide a special and deep thank you to my brother, Abdulrahman, and to all of my family members, including my brothers Waleed, Mohammed, and Meshal and my sister Deem. I would like to provide a special mention to my three children, Meshal, Najla, and Nawaf, who have been a bright light in my life and have added such joy to each day. They have been so patient and understanding of the time that I have had to spend away from them to pursue my education.

A special thank you is necessary to my two academic advisors, Dr. Lewis Jackson and Dr. Lori Peterson. They have both extended immense patience and fortitude throughout all the times they spent with me. I would never have been able to complete this dissertation without all of the support, advice, guidance, and direction. I also would like to give proper thanks and appreciation to the members of my dissertation committee: Dr. Jennifer Urbach and Dr. Cassendra Bergstrom. Their generosity with their time and their insightful suggestions played an impactful role in my success.

I am also very grateful to the staff at the Saudi Cultural Mission in Washington, DC for the immense assistance they gave me while I studied here. Finally, to the University of Northern Colorado and all of the magnificent people with whom I have had the pleasure of meeting, I cannot begin to define the sadness I feel as I leave you to return to my country. You will be in my fondest memories for the rest of my life.
# TABLE OF CONTENTS

## CHAPTER

### I. INTRODUCTION ................................................................. 1
- Background of the Study
- Statement of the Problem
- Purpose of the Study
- Significance of the Study
- Research Questions
- Definition of Terms
- Summary

### II. REVIEW OF LITERATURE .................................................. 13
- General Education Systems in the United States and Saudi Arabia
- Special Education System in the United States and Saudi Arabia
- Overview of Transition Services in the United States
- Current Status of Transition Services for Students with Intellectual Disability in Saudi Arabia
- Teacher Preparation for Transition Service Delivery
- Summary

### III. METHODOLOGY ............................................................. 66
- Research Questions
- Epistemology and Theoretical Framework
- Research Design and Procedures
- Data Analysis
- Research Trustworthiness
- Summary

### IV. RESULTS ........................................................................... 86
- Data Collection Procedures
- Thematic Analysis
- Diagram Analysis
- Summary
CHAPTER

V. DISCUSSION ................................................................. 119
Research Question Q1
Research Question Q2
Research Question Q3
Research Question Q4
Implications of the Results
Limitations of the Study
Recommendations for Implementation
Recommendations for Future Research
Summary

REFERENCES ........................................................................ 143

APPENDIX

A Institutional Review Board Approval ............................... 156
B Permission from Dr. Kohler .............................................. 158
C Consent form for human participation in research .......... 160
D Video Script, Verbatim .................................................... 162
E Pre-Focus Group Questionnaire ....................................... 171
F focus group discussions .................................................. 173
G Individual Interviews ...................................................... 175
H Blank Copy of Taxonomy ................................................ 177
LIST OF TABLES

TABLE

1. Participant Descriptions .......................................................... 89
## LIST OF FIGURES

### FIGURE

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Taxonomy for Transition Programming 2.0</td>
<td>36</td>
</tr>
<tr>
<td>2.</td>
<td>Special education teachers’ taxonomy model</td>
<td>120</td>
</tr>
<tr>
<td>3.</td>
<td>Vocational rehabilitation practitioners’ taxonomy model</td>
<td>121</td>
</tr>
<tr>
<td>4.</td>
<td>Integrated taxonomy model</td>
<td>130</td>
</tr>
<tr>
<td>5.</td>
<td>Blank copy of taxonomy</td>
<td>171</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

“The degree of success in adult life for individuals with disabilities is strongly
determined by the quality of education or training received during the school years”
(Goupil, Tasse, Garcin, & Dore, 2002, p. 127). Transition services are important for
preparing adolescent students with disabilities for the shift from high school to
postsecondary education, employment, independent living, and a quality life. Teachers
play a critical role in identifying student needs and providing appropriate transition
services. The United States has served as a model for educational development and the
creation of special education services in Saudi Arabia. This research focused on a
model for transition services currently applied in the United States and how this model
may support efforts to implement a framework for transition services in Saudi Arabia
and prepare teachers to effectively provide these services to individuals with
disabilities, specifically women with intellectual disability. This chapter will present
the background of the study, statement of the problem, purpose of the study,
significance of the study, research questions, and definition of the terms used in this
paper.

Background of the Study

Throughout the world today, education is considered to be a major
developmental need. Therefore, it is important for all governments, districts, teachers,
and parents to ensure that all school children, including those with disabilities, have
the opportunity to be educated to the greatest extent possible (Al-Mousa, 2010; Disability Welfare System Law 224, 2002; Essex, 2015; Individuals with Disabilities Education Act, 2004). Generally, individuals with disabilities face difficulties adjusting, completing schoolwork, and finding jobs; consequently, they are not as successful in their career achievements as their peers without disabilities (Alnahdi, 2013; Cimera, Burgess, & Bedesem, 2014; Cimera, Burgess, & Wiley, 2013; Neubert & Leconte, 2013). Research has shown decreased success in various aspects of postschool life for students with disabilities compared to students without disabilities, including low graduation rates, low employment rates, lower incomes, and lower rates of completing education after high school (Grigal, Hart, & Migliore, 2011; Lindstrom, Hirano, McCarthy, & Alverson, 2014).

Since the mid-20th century, the United States and Saudi Arabia have made advances in non-discrimination efforts and educational reforms that have led to establishing and developing special education services to provide for the needs of students with disabilities. During the past three decades, an increasing number of disabilities have become acknowledged and defined in legal terms, and educators are required to meet the special needs of these students (Aldabas, 2015; Al-Mousa, 2010; Individuals with Disabilities Education Act, 2004; Zigmond, 2001). Since the 1980s, improving postsecondary outcomes for students with disabilities has been a key concern in the United States (Brolin, 1983; Halpern, 1991). To address this concern, the United States has established extensive programing for educating students with special needs. Saudi Arabia has modeled the United States in its efforts to develop and improve its special education programing, making significant changes during the past two decades (Aldabas, 2015; Al-Mousa, 2010; Alnahdi, 2013; Disability Welfare
The number of special education programs for people with all types of disabilities has increased dramatically during the past two decades in both the United States and Saudi Arabia (Aldabas, 2015; Al-Mousa, 2010; Individuals with Disabilities Education Act, 2004).

As interest turned to facilitating positive postschool outcomes for students with disabilities, accomplishing these meaningful outcomes has become the focus and intent of transition services. Transition services include, among other things, facilitating independent living, active community participation, and employment (Brolin, 1983; Halpern, 1991). Research has shown that transition services have become an important part of improving postsecondary outcomes for students with disabilities (Grigal et al., 2011). West (1991) emphasized special education needs to focus on promoting meaningful outcomes instead of focusing on following a correct educational procedure, and other researchers strongly agree with this shift in focus (Madaus et al., 2013).

For students, with or without disabilities, high school is a critical juncture (Papay & Bambara, 2014). For students with disabilities, the change from living with family and attending school to establishing an independent life can be facilitated through effective, outcome-focused transition services (Alnahdi, 2013; Papay & Bambara, 2014). Research conducted in the United States supports practices where transition services are systemically developed and regulated using the Taxonomy for Transition Programming 2.0, which is a goal-directed, outcome-focused conceptual framework for creating successful transition programs for students with all types of disabilities (Kohler, Gothberg, Fowler, & Coyle, 2016). This taxonomy focuses on five key elements of outcome-oriented transition programming: student focused
planning, interagency collaboration, student development, family engagement, and program structure (Beamish, Meadows, & Davies, 2012; Kohler & Field, 2003; Kohler et al., 2016; Kohler & Greene, 2004). One of the key assets of this model is it is easily applied by most educational and vocational professionals.

A substantial part of most special education programming involves providing needed education and transition services to students with an intellectual disability. Although special efforts to provide these services to students with an intellectual disability have been made in the United States and Saudi Arabia, service evaluations report continuing difficulty in providing transition services to these students that result in successful postschool outcomes. These students require more assistance and support through the transition period of their lives than those without disabilities or with less significant disabilities. Consequently, it is important to determine ways to make these services more effective in preparing adolescents with an intellectual disability to make the transition to a quality adult life (Al-Hoshan, 2009; Almuqael, 2008; Alnahdi, 2013; Alrusaiyes, 2014; Lindstrom et al., 2014; Shogren & Plotner, 2012; Simonsen & Neubert, 2013).

In Saudi Arabia, transition services for students with intellectual disability are still limited, but efforts to establish effective transition programing are currently a priority (Alnahdi, 2013, 2014b; Alrusaiyes, 2014). One of the greatest challenges facing special education teachers in Saudi Arabia is ensuring that students with intellectual disability receive services and planning to prepare them for life after school. Alnahdi, (2014b) emphasized that Saudi Arabian special education teachers need to have specific knowledge and abilities to deliver transition services successfully and achieve positive transition outcomes. It follows that to prepare
special education teachers to provide transition services effectively requires focusing on specific competencies related to transition that are often beyond what is currently involved in most special education programs.

In both the United States and Saudi Arabia, studies indicate that students with intellectual disability face massive challenges through transition to postsecondary life that may be due to special education teachers feeling unprepared to provide transition services. A lack of training may contribute to poor outcomes for these students (Alnahdi, 2013; Benitez, Morningstar, & Frey, 2009; Defur & Taymans, 1995; Flexer & Baer, 2005; Knott & Asselin, 1999). In addition to training, teachers’ perceptions and attitudes about transition services also influence their involvement and commitment in providing services to students with intellectual disability (Alnahdi, 2013; Alrusaiyes, 2014; Benitez et al., 2009). Alnahdi (2013) found that even though the existing special education specialists in Saudi Arabia have positive attitudes toward the concept of transition services, they lack adequate training and education to provide these services in working with students with intellectual disability.

This study focused on the critical role of teachers in providing transition services for females with intellectual disability in Saudi Arabia. This study examined the perceptions of professionals who work with females with intellectual disability in Saudi Arabia regarding providing transition services based on the Kohler et al. (2016) Taxonomy for Transition Programming 2.0. Specifically, the perceptions of Saudi Arabian special education teachers and vocational rehabilitation practitioners about the value and feasibility of using the taxonomy for transition to develop transition service programs were investigated, as well as their current experiences and training with transition services. Participants also shared their insights and suggestions for a
transition service model uniquely tailored to address the needs of females with intellectual disability in Saudi Arabia.

**Statement of the Problem**

Research indicated teachers in Saudi Arabia lack skills in providing transition services to students with intellectual disability (Alnahdi, 2013, 2014b; Alrusaiyes, 2014). Alnahdi (2013) and Alrusaiyes (2014) conducted studies indicating teachers in Saudi Arabia had positive attitudes towards transition services, but they did not feel well-prepared to deliver these services. Also, although an obvious focus on outcomes is a crucial element in providing effective transition services, middle and high school programs for students with intellectual and developmental disabilities in Saudi Arabia have not yet met the expectations of officials, educators, and families for independent living, preparation for work, and further training or education in preparing students for life after school. In Saudi Arabia, individuals with disabilities face difficulties with a lack of integration into society.

These individuals are less likely to pursue postsecondary education or find jobs. Also, at least one study has documented that persons with disabilities are rarely seen outside of their homes (Al-Hoshan, 2009). In Saudi Arabia, transition services for students with intellectual disability are still limited due to special education teachers’ lack of skills, training, and preparation. Furthermore, an effective framework for providing transition services does not currently exist. Therefore, Saudi Arabia would benefit from the identification of a culturally specific model for transition services to be used in providing effective training for transition service practitioners.
Purpose of the Study

This study focuses on the role of special education teachers and vocational rehabilitation practitioners for females with intellectual disability in Saudi Arabia in providing transition services. Currently, very limited research exists regarding the development of transition services programs, and additional studies will aid the development of needed services. Although some initial transition programs have been instituted in Saudi Arabia, educational professionals need increased training for awareness about transition services and how to provide these services effectively (Alnahdi, 2013, 2014b; Alrusaiyes, 2014). The purpose of this study was to complete an in-depth investigation of the experiences and perspectives of current special education and vocational rehabilitation practitioners on the use of the Kohler et al. (2016) Taxonomy for Transition Programming as a framework for transition programs in Saudi Arabia. Information about the current state of transition services, the attitudes of practitioners toward these services, effective frameworks for transition services, and needed training will assist efforts to develop programs that yield desirable outcomes for females with intellectual disability in Saudi Arabia. Given that males and females with intellectual disability in Saudi Arabia experience similar services and programming, the results of this study likely have strong transferability to male students.

Significance of the Study

The significance of this study is based on the importance of teachers in providing and supporting transition services. Research has documented that teacher training, attitudes, and general perspectives can have a major influence in the delivery of needed instruction and services to students with intellectual disability (Lubbers,
Repetto, & McGorray, 2008; Morgan, Callow-Heusser, Horrocks, Hoffmann, & Kupferman, 2014). This study explored several critical aspects of improving transition programs in Saudi Arabia, and effective transition programs are likely to be a primary factor in increasing positive postschool outcomes for students with intellectual disabilities.

Specifically, this study explored the usefulness of the Kohler et al. (2016) Taxonomy for Transition Programming as a framework for providing transition services to females with intellectual disability from the perspectives of the people providing these services in Saudi Arabia. Furthermore, participants generated an initial culturally-specific model guided by the Kohler et al. Taxonomy for Transition Programming services for females with intellectual disability in Saudi Arabia. This information will support ongoing efforts to develop effective transition service programs throughout Saudi Arabia. The current field experiences and opinions educational practitioners were also examined in this study, which will provide important feedback about the current state of practice in Saudi Arabia and the degree to which transition programs are acceptable and feasible. Overall, this study offers both breadth and depth to the current body of research in the area by adding the perspectives of special education teachers and of vocational rehabilitation practitioners and exploring frameworks for transition services suitable for use in Saudi Arabia.

**Research Questions**

The primary research questions for this study were:

Q1 What are teachers and practitioners’ perceptions of the overall value of transition services for females with intellectual disability in Saudi Arabia?
Q2 What influence do teachers and practitioners perceive that transition services could have on increasing desirable postschool outcomes for females with intellectual disability in Saudi Arabia?

Q3 What are teachers and practitioners’ perceptions about the feasibility of using the five components of the Kohler et al. (2016) Taxonomy for Transition Programming 2.0 to develop transition services in Saudi Arabia (student-focused planning, student development, interagency collaboration, program structures, and family engagement)?

Q4 What recommendations do the teachers and practitioners have for implementing a modified taxonomy for transition programming for females with intellectual disability in Saudi Arabia?

**Definition of Terms**

**Family involvement.** These are practices associated with increasing the ability of family members’ involvement in planning and delivering transition services, including training and family empowerment activities to work effectively with educators and other service providers.

**Intellectual disability.** Intellectual disability is “a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior which covers many everyday social and practical skills. This disability originated before the age of 18” (American Association on Intellectual and Developmental Disabilities, 2010).

**Individuals with Disabilities Education Act.** The legislation most recently reauthorized in 2004 designed, to ensure that all children with disabilities have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for further education, employment, and independent living. (Individuals with Disabilities Education Act, 2004, Sec. 601(d))
**Interagency collaboration.** These are processes and routines that aid the participation of public business establishments, other organizations, and direct service agencies in all aspects of transition services, including the development of interorganization agreements that clearly define the roles of each organization and persons within them, specific responsibilities, communication policies, and other cooperative activities that enrich curriculum and transition program development.

**Program structure.** These are processes, guidelines, and systematic activities that facilitate to well-organized and successful delivery of transition-focused learning and services. Program structures include a statement of transition philosophy, the required structures and attributes of schools, specific program policies, a program evaluation loop, and definitive human resource management and development processes.

**Special education teacher.** This is a teacher who is trained and qualified to offer special education to students with special needs according to criteria defined and established by a recognized special education training body.

**Student development.** Student development practices include individual student assessments that guide the provision of accommodations designed to maximize opportunities for student knowledge and skill development that results in successful life outcomes. These activities emphasize using school- and work-situated learning experiences that facilitate the development of needed life skills and employability.

**Student-focused planning.** This practice refers to the use of individual student assessments to develop effective Individual Educational Plans that are based
on comprehensive, objective information and each student’s postsecondary goals. Student-focused planning practices are also directed at helping students develop self-determination.

**Transition services.** Transition services means a coordinated set of activities for a child with a disability that:

- Designed to be within a results-oriented process focused on improving the academic and functional achievement of a child with a disability to facilitate the child’s movement from school to postschool activities, including postsecondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation;

- Based on the individual child’s needs, taking into account the child’s strengths, preferences, and interests; and

- Includes instruction, related services, community experiences, development of employment and other postschool adult living objectives and, if appropriate, acquisition of daily living skills and functional vocational evaluation (Individuals with Disabilities Education Improvement Act Amendment, 2004).

**Vocational rehabilitation program.** This program is for people with mental or physical disabilities. The program provides training and preparation for any appropriate occupation and provides individuals with disabilities with the skills needed to become more productive individuals able to interact with the rest of
their community members. Vocational rehabilitation services help participants with job-related attitudes and expectations as well as providing appropriate information, learning resources, and opportunities for skill training that result in successful job acquisition and retention (Ministry of Labor and Social Development of Saudi Arabia, 2017).

**Summary**

Current studies in Saudi Arabia clearly indicate a lack of teacher preparation for transition service delivery. Furthermore, the importance of effective practitioner preparation for transition services is supported by studies indicating training for educational providers has a positive influence on positive student outcomes. Such studies support the value of efforts in Saudi Arabia to provide effective training to professionals who work with students with intellectual disability. The purpose of this study was to provide an in-depth exploration of the perspectives of special education teachers and vocational rehabilitation practitioners regarding their current values, experiences, and preparation related to providing evidence-based transition services for females with intellectual disability in Saudi Arabia. The Kohler et al. (2016) Taxonomy for Transition Programming 2.0 served as an initial example of theoretical approach in transition services in this exploration of teacher perceptions of providing transition services to females with intellectual disability in Saudi Arabia, as well the feasibility of implementing programs based on this model. Participants also generated potential frameworks for theoretical approach transition service practices specific to Saudi Arabia. Chapter II presents a literature review related to this study providing background, context, and empirical evidence supporting the objectives and process of this research.
CHAPTER II
REVIEW OF LITERATURE

The growth of special education services for people with disabilities in Saudi Arabia has historically modeled that of the United States; while not as fully developed, advancements to Saudi Arabia special education systems have followed a similar path to those of the United States. Progression in the philosophy of appropriate education for students with varying disabilities in Saudi Arabia added to the complexity of actually providing needed services for these students. Similar to that of the United States, a greater interest in educating and integrating persons with disabilities into the broader society and a growing emphasis on quality of life for adults with disabilities in Saudi Arabia has led to the increasing importance of successful transition services for students with disabilities, particularly for those with more significant disabilities. This literature review details developments in transition services for students with intellectual disability in the United States and Saudi Arabia, beginning with an overview of past and current general education and special education systems in both countries. This broader overview is followed by an in-depth discussion of a taxonomy for transition service development in the United States and how the taxonomy provides the theoretical framework for this study and research regarding the role of teachers in providing transition services for students with intellectual disability.
In the United States’ enactment of federal law, control of the public education system has traditionally rested with local communities (McGuinn, 2016). The Elementary and Secondary Education Act of 1965 was the first major federal law that offered resources for elementary and secondary education with the intention of improving educational opportunities for low-income and disadvantaged students. The Elementary and Secondary Education Act has been revised several times, and in 2002 the law was written as the No Child Left Behind Act. Each revision introduced changes to the system details, but the main goal of improving education for all children remained. The law focused on providing a high quality education, where schools must maintain expected grade level performance among all students. This program determined instructional content, required standardized test administration to monitor student performance levels, and ensured qualified teachers to support student development in the content areas. As a result, states set standards for each grade level and ensured that students were meeting these standards. The No Child Left Behind Act required all teachers hold a bachelor’s degree in their major field and were proficient in the subjects they taught. This law also allowed parents to request information concerning teachers’ qualifications, and they were to be informed if a teacher was not qualified. The requirements and programs related to this law provided for teachers who were well rounded in the fundamentals of education as well as competent in a specific subject area. In this respect, parents were assured their student was being taught by a well-educated professional (McGuinn, 2006, 2016; Usher, 2012).
Ongoing revisions to education law in the United States have continued. In December 2015, President Obama signed the Every Student Succeeds Act, which was another revision of the Elementary and Secondary Education Act, replacing the widely criticized No Child Left Behind Act. The Every Student Succeeds Act was a federal law intended to support kindergarten–12 schooling. This law introduced three key changes to the kindergarten–grade 12 educational process: (a) states were given authority to establish their own performance standards and monitor performance using multiple measures, (b) schools must offer college counseling and advanced courses to all students, not just those identified as high achievers, and (c) states were given permission to use federal funds to evaluate teacher performance (Darrow, 2016). Overall, the Every Student Succeeds Act acknowledged the likelihood that students need a college education to make a living, and it attempted to prepare students to address those needs. This law represented the United States’ commitment to equal education opportunities for all students regardless of race, ethnicity, disability, English proficiency, or income (Essex, 2015).

Overall, education in the United States has been driven by law and the needs of an increasingly diverse population. The control of educational processes is shared by the federal government, states, and individual communities. Equality in education at all economic levels is emphasized throughout the system. Despite differences in history and process, education in Saudi Arabia currently has many of the same goals as education in the United States.

Education in Saudi Arabia is rooted in the spiritual practices of the country. The Holy Qur’an and the Hadith teachings consistently emphasize the importance of learning. Education in Saudi Arabia is a requirement for every Muslim, both male and
female, and all students attend grades 1 through 12. Educational processes and standards are established by the Ministry of Education and, unlike the United States, individual communities do not control the content and process of education. According to the Royal Embassy of Saudi Arabia in Washington, DC (2010), Saudi Arabia has about 30,000 kindergarten–grade 12 schools, colleges, and other educational institutions. Although the study of Islam is central in all education, the current Saudi educational system also provides education in fields within the arts and sciences so that its citizens are prepared for life in a global economy.

The development of transition services for students with disabilities in Saudi Arabia is best understood within the context of advances in education. In Saudi Arabia, the general education system consists of kindergarten followed by six years of elementary school and three years each of middle and high school. After elementary and middle school, students choose a high school with a program emphasizing either literary or scientific courses. Students who do not wish to attend high school typically progress to a vocational school. The Ministry of Education administers comprehensive exams twice a year to high school students to ensure that performance standards are met. Saudi schools offer comprehensive educational curriculums and include classes in math, the sciences, literature, history, Arabic, and Islam. Saudi Arabia is committed to improving education by offering training for all teachers, improving the process for student evaluation, and increasing the use of technology (Royal Embassy of Saudi Arabia in Washington, DC, 2010).

The development of education in Saudi Arabia is similar to the United States in the broader education of the population. According to Alquraini (2011), education in Saudi Arabia was traditionally available only to the very wealthy, but presently the
country has numerous educational institutions with modern facilities available to all citizens. The Ministry of Education in Saudi Arabia provides free, appropriate education for all students, including those with disabilities. Education for students with disabilities is provided in Saudi Arabia through offices of special education within the Ministry that provide funding and other resources to individual educational institutions. These services provide for academic instruction, but they do not include vocational training (Alothman, 2010; Alquraini, 2011). Overall, educational systems in both the United States and Saudi Arabia strive to provide equal educational opportunities for all citizens. This commitment has led to the ongoing development of more sophisticated efforts to educate students with special needs.

**Special Education System in the United States and Saudi Arabia**

The United States started directly addressing the needs of individuals with disabilities in the 1970s. At the time, the Vocational Rehabilitation Act of 1973 was a progressive law that created significant changes for people with disabilities, because it made employment opportunities for such individuals a priority. The purpose of this act was to encourage individuals with disabilities to take full advantage of employment opportunities in order to establish economic independence, self-sufficiency, and integration in society (Rehabilitation Act of 1973, 1973). At the elementary and secondary school levels, Section 504 of the act created a basic provision mandating schools to not discriminate against students with disabilities by providing supports enabling their access to education. This mandate required schools to provide for the educational needs of students with or without disabilities to the same extent. Section 504 also ensured equality of access to postsecondary education for qualified
individuals with a disability. This meant that any college or university receiving federal funding had to provide access to their services and programs to individuals with disabilities. However, this law did not automatically entitle all persons with disabilities to a college education; instead, it allowed for the creation of an enabling environment for students with disabilities to access the services and programs offered (DuChossois & Michaels, 1994; Zirkel & Brown, 2015).

A major development in the movement to address the needs of individuals with disabilities was the adoption of the 1975 Education for All Handicapped Children Act (Halpern, 1991), now the Individuals with Disabilities Education Improvement Act Amendment (2004). This law stated students with disabilities were to have access to the same educational opportunities as all other students. The Education for All Handicapped Children Act emphasized a student with disabilities should receive an education designed to meet his or her unique needs. The Education for All Handicapped Children Act established the principle of Free and Appropriate Public Education. According to this principle, all students with disabilities should receive an education designed to meet their unique needs. Thus the differential treatment of varying disabilities was required of educational institutions for the first time (Turnbull, 1993; Zigmond, 2001).

The passing of the Americans with Disabilities Act in 1990 furthered the focus on non-discrimination of individuals based on their disability. The act provided equal access to private employment, public services, public accommodations, telecommunications, and other organizations not receiving federal funding. As a result, people with disabilities can participate in all aspects of society, because the act supports their accommodation and acceptance. Under the Americans with Disabilities
Act, colleges were tasked with the responsibility of ensuring they make reasonable accommodations for students with disabilities so as to allow them to participate in postsecondary education. For persons with disabilities, this act was the equivalent of the Civil Rights Act (Gil, 2007; Rubin & Roessler, 2001).

The next piece of educationally influential legislature was the reauthorization of the Education for All Handicapped Children Act, then the Individuals with Disabilities Education Act (2004) to the Individuals with Disabilities Education Improvement Act Amendment (2004). This act was another milestone in the promotion of equality and inclusion of persons with disabilities in the education sector. The Individuals with Disabilities Education Act is a federal law that oversees and governs the school-aged special education sector in the United States. This act stressed the importance of student assessments indicating the degree of participation and progress of students with disabilities. It emphasized providing students with disabilities equal access to the same services as other students, that is, a free and appropriate public education in the least restrictive environment and supported the movement of students with disabilities to postsecondary life. The Individuals with Disabilities Education Act strongly supported students’ participation in public education from preschool through grade 12 or until they are 21 years old (Individuals with Disabilities Education Improvement Act Amendment, 2004).

Overall, education services for students with disabilities in the United States have progressed through several phases. Most efforts have been broad attempts to provide persons with disabilities equal access to community and educational services. Developments in education for students with disabilities in the United States have
increasingly acknowledged these students have varying needs, and individualized education planning is emphasized.

Special education policies in Saudi Arabia have passed through several phases to reach the current status. The Ministry of Education oversees special education for the handicapped in addition to setting overall standards. According to Al-Ajmi (2006), in 1958 the Saudi Arabia government did not provide special education services for children with disabilities; all children with disabilities relied completely on their parents for any educational support or daily support. Special education in Saudi Arabia started in 1958 as a program to teach blind students how to read braille. This special education service was provided only for adults who had blindness, so no children or adolescents were involved in the special education service despite their own blindness and visual impairments (Afeafe, 2000; Aldabas, 2015). This program was offered by a private association and was open during the evening (Afeafe, 2000; Aldabas, 2015; Al-Kheraigi, 1989).

In 1962, the Ministry of Education in Saudi Arabia established the Department of Special Learning to enhance education and rehabilitation assistance for students with the following three types of disability: blindness, deafness, and mental retardation (Afeafe, 2000). Three institutes were opened in 1964 to help students with blindness; the Ministry established this program in Mecca, Aneaza, and Alhofouf. In 1972, the Ministry established two additional institutions to provide service for students with deafness or mental retardation (Al-Mousa, 1999). As progress continued, the Ministry of Education established a General Directorate for Special Education in 1974, charged with improving special education programs throughout Saudi Arabia (Al-Ajmi, 2006).
Special education in Saudi Arabia acquired new dimensions in the late 1990s when the Ministry of Education expanded special education efforts to regular elementary schools by identifying students with targeted disabilities and providing special classes for educating them. Since then, the availability of special education classes throughout schools in Saudi Arabia has increased quickly. For example, the number of special education programs for male students increased from fewer than 50 in 1995 to 2,047 programs as of 2005 (Al-Mousa, 2010). While the increase in programs is significant, the special education system in Saudi Arabia must support students with disabilities to help them become more independent. A primary concern for researchers is the need to prepare Saudi Arabia students with disabilities for adult life after school (Aldabas, 2015).

Overall, progressive developments in special education in Saudi Arabia have continually become broader and more targeted toward integrating persons with disabilities into the larger society, and the number of elementary, middle, and high school institutions offering special education services has increased. However, the need exists to continue the efforts of preparing individuals with disabilities to live an independent life and contribute to their society. This need has concurrently produced a greater emphasis on identifying and providing effective transition services.

**Overview of Transition Services in the United States**

This section focuses on transition services in the United States. The history of the transition movement in the United States and the development of theories regarding best practices are reviewed. Research results of studies on postschool outcomes for students with intellectual disability will be recounted, along with optional transitional services as a special education model. Subsequently, a current
practice, Taxonomy for Transition Programming 2.0 (Kohler et al., 2016), is presented and broken down into components with supporting research.

**Transition Services in the United States**

The idea of transition services for students with disabilities was born in the 1960s when a work–study program was implemented for individuals with disabilities (Halpern, 1991). The work–study program was reinforced and supported by the state vocational rehabilitation programs as well as the school systems (Halpern, 1991; Kolstoe, 1996). The program employed individuals with disabilities to work part-time and provided supervision and support to allow them to learn skills of the job. The work–study program not only helped students with disabilities in transition gain employable skills, it also provided income for the vocational rehabilitation agencies, allowing that money to be used to fund other vocational rehabilitation programs (Szymanski, King, Parker, & Jenkins, 1989). The work–study program had several similarities to transition services today, such as vocational instruction, community experiences, and interagency linkages (Halpern, 1991). As a result of the work–study programs, students with disabilities experienced a curriculum much more relevant to the basic knowledge and skills needed to become employed after school and to live an active life in the community (Halpern, 1991).

In the 1970s, career education and transition services focused on what students with disabilities needed to become independent individuals after high school (Halpern, 1991; Repetto, 2003). Brolin (1983) and Halpern (1991) described career education as a lifelong process that emphasized all subjects during grade levels, which included job training, mentoring, exploring, and unpaid work experience. Throughout the 1970s
and early 1980s, career education became the dominant pre-transition program for students with disabilities. Influenced by the career education movement, professionals at this time began to embrace a life-centered approach to students with disabilities to prepare them more effectively for adult life.

Researchers began to think about transition planning in detail with the publication of Madeleine Will’s bridges model in 1984. Madeline Will, Assistant Secretary of the Office of Special Education and Rehabilitative Services, began to establish bridges from school to work life. Will suggested a model for transitioning students with disabilities from school to work life that created connections, or bridges, between the high school and employment (Halpern, 1991; Will, 1983). The bridges model first focused on employment and then expanded to include other necessary skills needed for independent living (Halpern, 1991; Lubbers et al., 2008; Will, 1983). This model identified different levels of services: no special services, time-limited services, and ongoing services to obtain desired employment outcomes for students with disabilities. The first level of the bridge was a transition without special education services, relying on available resources in the general public to obtain employment. The second bridge identified students with disabilities who required funding from the state vocational rehabilitation system to help them with job development. The third bridge was ongoing services, which was for students who needed a solid foundation of continuous services to transition from school to work life (Halpern, 1991; Will, 1983). Halpern (1985) proposed a community adjustment transition model as an alternative to the bridges model. This model extended Will’s bridges to integrate community adjustment and three related components: employment, residential environments, and social and interpersonal networks. These
three components of transition programming created a foundation for need and support services (Halpern, 1985). Halpern’s model became the basic structure to define transition services leading to community participation, living, and employment (Johnson & Rusch, 1993).

In the past 20 years, transition has become an established concept with a growing research base regarding best practices. In 1997, the idea of transition planning was mandated by the United States Congress in the Individuals with Disabilities Education Act, formerly Education for All Handicapped Children Act. This federal law oversees and governs special education in the United States (deBettencourt, 2002) and calls for schools to ensure that all children with disabilities are provided services “designed to meet their unique needs and prepare them for further education, employment, and independent living” (Individuals with Disabilities Education Improvement Act Amendment, 2004, Sec. 602). Then, in 2004, updates to the Individuals with Disabilities Education Act included additional transition requirements. The update included a set of accountability procedures involving a state performance plan and annual performance report to the United States Department of Education’s Office of Special Education Programs. It also specified vocational education should be considered a transition service, and the required age for starting transition services should be no later than 16 years old.

Ongoing changes have been made to involve students in their own transition process, though studies indicate that student participation varies from state to state (Test, 2012). The Individuals with Disabilities Education Improvement Act Amendment (2004) recognized the importance of general education access, district and state assessment of students with disabilities, along with the need for transition
services that lead to employment and independent living. Important to note is that the Individuals with Disabilities Education Improvement Act Amendment affects students participating in public education from preschool through grade 12 or until they are 21 years of age (Skinner, & Lindstrom, 2003). The Individuals with Disabilities Education Improvement Act Amendment incorporates the provision that students receiving special education should have an Individualized Education Program. Such a program should have goals for the students’ education and transition needs, ways of measuring progress on these goals, and the students’ current levels of functioning in all areas (Gaumer Erickson, Noonan, Brussow, & Gilpin, 2014).

The purpose of transition services is to help students with disabilities succeed at life skills and track their goals (Goh & Bambara, 2013; Levinson & Palmer, 2005; Lindstrom, Doren, Post, & Lombardi, 2013). These services, as defined by the Individuals with Disabilities Education Improvement Act Amendment (2004), are activities for students with disabilities designed to support movement from school to future life including postsecondary educational settings, vocational training, continuing employment, adult services, independent living, or community participation (Gaumer Erickson et al., 2014).

The National Secondary Transition Technical Assistance Center created the Indicator 13 Checklist to guide state and local education agencies with transition indicators. This checklist was approved by the Office of Special Education Programs and is now required by the Individuals with Disabilities Education Improvement Act Amendment to monitor the implementation of in-school transition services and postsecondary outcomes. The Indicator 13 Checklist includes items comprising the following areas: (a) age-appropriate transition assessments based on the student’s
skills and individual interests; (b) goals aligned to student interests; (c) transition services that include education, real community experience, and daily living skills; (d) study program; (e) annual goals supporting transition; (f) making connections for students with links to outside agencies; and (g) clear evidence of an Individualized Education Program meeting student needs (Individuals with Disabilities Education Act, 2004).

There is a plethora of research in the literature reporting on transition services, and many efforts have been made to address how to deliver and enhance the effectiveness of the transition components identified in legislation. Researchers have found that special education teachers emphasize appropriate preparation and training at an early age to permit these students to begin obtaining skills that will allow achievement of important adult life outcomes (Carter, Lane, Pierson, & Stang, 2008; Cimera et al., 2014; Cimera et al., 2013). According to Wehman (2013), educators who fully understand the importance of transition in the special education program can empower young people with disabilities. By applying certain principles, professionals can move in the right direction for students to achieve postschool outcomes. This includes listening to the student and determining what businesses and industries he or she would be interested in entering. Students with disabilities can successfully transition to adult life if they have “physical and material well-being, performance in adult roles and personal fulfillment” (Repetto, 2003, p. 78).

While students with disabilities may transition effectively to postschool life, many of them earn low wages or have no jobs (Lindstrom et al., 2014). Transition services could be successful if they are initiated early and focused on student interest as well as student self-determination. It is also important that the student’s family and
community are involved and there is strong interagency commitment to the transition. Transition skills, such as how to take care of oneself and live independently, have also been found to be necessary (Repetto, 2003). For students, the transition from secondary education to adulthood involves tremendous life changes. This issue is particularly important for students with intellectual disability as they progress through the education system.

**Transition Services and Intellectual Disability**

Despite policies and transition planning programming, many students with disabilities continue to struggle to obtain effective transition services. Ineffective or unavailable transition services also contribute to poor postschool outcomes for some students (Benitez et al., 2009; Neubert & Leconte, 2013). Among students with disabilities, students with an intellectual disability particularly struggle with transition services (Lindstrom et al., 2014; Shogren & Plotner, 2012; Simonsen, & Neubert, 2013). Students with intellectual disability require more individually targeted support from educators. Postschool outcomes of students with intellectual disability are less positive than those of other students, and studies often reflect low expectations regarding employment for these students (Grigal et al., 2011).

The diverse and intensive needs of adolescents with intellectual disability present challenges to educators and other stakeholders involved in improving their education. People invested in helping these students become independent later in life include the parents or guardians of the child, as well as the administrators and teachers of the school or alternative program. These stakeholders are tasked with the selection of interventions most likely to help a student with intellectual disability transition to
postschool life. Ideally, these interventions are replicable and concretely based on the student’s needs. Evidence suggests that where interventions are empirically validated and are then programmed to help students proactively, it is possible to enhance their future autonomy. In fact, extensive and pervasive supports in later life could be prevented if the students are trained accordingly (Courtade, Test, & Cook, 2014), and they may have a greater chance to eventually gain employment.

Many people with intellectual disability have a desire to work, but career opportunities are scarce for a variety of reasons (Lindstrom et al., 2014). Lindstrom et al. (2014) reported that students with intellectual disability are often unemployed or underemployed, and many live at or under the poverty line. Lack of income can impact the lives of students with intellectual disability, limiting basic needs such as food, housing, and medical care. These students are also less likely to live independently and less likely to engage in postsecondary education compared with students with other disabilities. Specifically, individuals with intellectual disability often develop problems with finding and maintaining jobs. Wagner and Blackorby (1996) found these students were less likely to be employed compared to their classmates. In their study, less than half (43%) of students with intellectual disability had a job after high school. They also made less than $6 per hour, which was below minimum wage. Additionally, students with intellectual disability are more likely to stay in school until special education services are no longer available to them. For adolescents with intellectual disability, having a job can support them in increasing their self-esteem and sense of self-respect as a contributing part of society.

Individuals with intellectual disability normally need lifelong support and help, so they are often at risk of being excluded from participation in society (Lindstrom et
al., 2014; Newman et al., 2011). The Office of Special Education and Rehabilitative Services provides support through transition services to better include individuals with intellectual disability. These services have helped students work toward employment, further their education, and enable community living. States that have implemented transition services have found that these services improved many aspects of student well-being. This well-being included greater participation of students with intellectual disability; improved collaboration between schools, students, and parents; and enhanced outcomes of students after high school (Madaus et al., 2013).

Lindstrom et al. (2014) reported support services are needed because it is estimated that 2.5 million people in the United States have an intellectual disability. In 2011, the United States Equal Employment Opportunity Commission reported that of all individuals with intellectual disability, only about 31% of the adult population is employed (Lindstrom et al., 2014). Furthermore, Lindstrom et al. (2014) reported that only 38% of young adults with intellectual disability are employed, and only 37% of young adults with autism were employed up to eight years after high school. Meanwhile, the percentage of employed young adults with learning disabilities (67%) was significantly higher than that of employed young adults with intellectual disability (38%) during the same time period.

Fortunately, most young adults with intellectual disability are eligible for postschool services from their state vocational rehabilitation agencies and for continuous support from their state developmental disability agency (Simonsen & Neubert, 2013). These services, which should begin as activities for students with intellectual disability, can help them make the shift from their primary student environment, such as a school, to postsecondary activities. These services increase the
educational and functional achievements of young adults with intellectual disability, and they are intended to facilitate movement to postschool activities (Grigal et al., 2011).

Many researchers in the United States from 1978 to 2012 reported the need to move from focusing on transition and education planning for students with intellectual disability to focusing on practical career education. These studies emphasized the importance of special education programs, processes, and laws, rather than vocational rehabilitation and education in supporting positive postschool outcomes for students with intellectual disability (Madaus et al., 2013). Having a job can help students with intellectual disability to find their identity, improve quality of life, and develop relationships with others, enhancing their sense of self-worth and contribution to society (Sabornie & deBettencourt, 2009). The process of moving from high school to adulthood is a critical stage for all youth; however, for students with intellectual disability this stage requires extra planning and goal setting that can be facilitated by transition options (Papay & Bambara, 2014).

**Transition Options in the United States**

Multiple employment-based transition programs currently exist in the United States for individuals with intellectual disability. School-based programs, supported employment, and sheltered workshops are implemented as transition programs for adolescents. These programs will be defined and examined in the following sections.

**School-based programs.** School-based transition programs in the United States are meant to assist students during high school to meet the transition requirement in their Individualized Education Program. These programs focus on
aspects of adulthood and teach students the basic skills required in various work settings. It is very important for youth to have early work experience during secondary school in order to foster career aspirations. The Individuals with Disabilities Education Act (2004) helps students with intellectual disability by giving them the opportunity to take part in activities that improve work-related skills and help them to develop and attain post high school goals. High school is a vital time for transition education for students with intellectual disability. The services and support provided to them during this time helps to develop a foundation for their futures and makes the transition from high school to postschool an easier one (Individuals with Disabilities Education Improvement Act Amendment, 2004; Johnson, Stodden, Emanuel, Luecking, & Mack, 2002). With regard to adulthood, an accumulation of training and experiences during and beyond school is what truly prepares students to be successful adults. Experiences obtained outside the walls of school make up more than half of adolescents’ time. This means more time and attention should be spent on developing skills outside the classroom to truly strengthen transition services for students with intellectual disability (Carter, Trainor, Ditchman, Swedeen, & Owens, 2011).

Benz, Lindstrom, and Yovanoff (2000) found that students with intellectual disability who had two or more jobs before graduation were nearly twice as likely to have a job when they left school as those who had less than two jobs prior to graduation. Other studies suggested it is important for students with intellectual disability to be exposed to some work experiences during high school to improve employment outcomes (Landmark, Ju, & Zhang, 2010). School-based programs are a crucial experience for students with intellectual disability, and the presence of a
transitional program is a strong predictor of postschool employment for youth with disabilities.

**Supported employment.** One program that helps students prepare for their future and encourages individual choice is supported employment. Through supported employment, students with intellectual disability are placed in jobs and provided with job training in community settings (Banks, Jahoda, Dagnan, Kemp, & Williams, 2010; McGaughey & Mank, 2001; Strauser, 2014). During supported employment, a job coach helps to train students at the beginning of the placement. Soon, students develop their own natural support system of co-workers and supervisors, so the coach is not needed as much. At that time, the role of the job coach becomes to monitor the student during his or her employment and offer support when needed (Banks et al., 2010; Strauser, 2014). One of the primary values of supported employment is to “emphasize the benefits of individuals with significant disabilities having opportunities for real, integrated work as a primary option” (Wehman, Revell, & Brooke, 2003, p. 164). Supported employment programs have worked towards this goal by encouraging students with disabilities to be independent, efficient, and integrated into the workforce in a supported and positive environment. In addition to the obvious financial benefits that can be obtained from having students placed in competitive jobs, there are many personal benefits that can be obtained by students. These include improved quality of life, self-esteem, and integration into society (Stephens, Collins, & Dodder, 2005; Strauser, 2014; Wehman et al., 2003).

Essentially, supported employment services are provided in traditional work sites where individuals with or without disabilities are trained in the same place to
promote inclusion. Butcher and Wilton (2008) confirmed that employment sites are beneficial to students if they can offer rich social contact as well as opportunities for students with disabilities to perform work tasks while interacting with co-workers without disabilities. Supported employment takes place in real work environments that demand people with disabilities to have the skills and the ability to work with typically developing workers.

Although the level of commitment and expectation is higher for supported employment, Stevens and Martin (1999) noted that students with intellectual disability can also utilize work skills in sheltered workshops. Sheltered workshop places are sometimes seen as negative environments for students due to segregation and lack of support for individuals with disabilities. As reported by students, these environments often hinder students with disabilities in regard to involvement in the community, variety of job availability, wages, and self-esteem. Students need a supported environment to be successful in an employment setting.

**Sheltered workshops.** Sheltered workshops are facilities in which individuals with intellectual disability or other developmental disabilities are employed at subminimum wages in segregated settings and restrictive environments (Yell, Katsiyannis, & Prince, 2017). In this case, the sheltered environment does not mean covered places; rather, it is used to describe any work environment isolating people with disabilities from their typically developing peers. Although previous research warned that inclusive situations may cause individuals with intellectual disability to compare themselves with typically developing peers and lead them to negatively perceive their abilities (Szivos, 1990), more recent research has suggested otherwise.
Sheltered workshops, known for segregating individuals with intellectual disability from their peers without disabilities, have not been proven beneficial in providing job training and foundational work experiences (Gascon, 2009). Research also supports that sheltered employment and isolated environments have undesirable effects on job satisfaction, psychological health, and social activity (Kober & Eggleton, 2005). Sheltered work settings do not promote adequate social practices for individuals with disabilities to prepare them for a realistic work environment. Conversations between workers with intellectual disability and workers without disabilities are less frequent than those observed between typical workers, and pleasant discussions occur less often; rather, conversations revolve around work (Gascon, 2009; Jiranek & Kirby, 1990; Kober & Eggleton, 2005; Nijs & Maes, 2014; Yell et al., 2017).

Moreover, a study by Jiranek and Kirby (1990) found that individuals with intellectual disability in competitive employment displayed less depression, more job satisfaction, and a greater sense of individual autonomy compared with those in sheltered employment. An additional study by Griffin, Rosenberg, Cheyney, and Greenberg (1996) supported these findings when evaluating two groups of individuals with disabilities. The authors found that between supported employment and sheltered workshop employment, those in a supported employment transition program experienced greater self-confidence and job fulfillment. In segregated settings, on the contrary, individuals with disabilities had fewer chances to interact with peers without disabilities.

Furthermore, Cimera (2011) examined worker outcomes in a matched population of employees with intellectual disability who had previously been in
sheltered workshops and supported employees with intellectual disability who had not previously been in sheltered workshops. This study found the two groups of employees had similar employment outcomes. Those who had not formerly been in sheltered workshops were equally likely to be competitively employed, make more money, and work in positions with more hours than the population who had been in sheltered workshops. Thus employees with intellectual disability who had not attended sheltered workshops were similarly successful, and they cost less for the vocational rehabilitation agency to assist in the community.

A useful model available to educators and professionals to create a fluid transition from school to adult life is the Taxonomy for Transition Programming 2.0 model (Kohler et al., 2016). This model helps students with intellectual disability gain independence and engage in the community through a student-focused interdisciplinary approach.

**Conceptual Framework: Taxonomy for Transition Programming 2.0**

The Taxonomy for Transition Programming 2.0 (see Figure 1) is currently the most comprehensive conceptual framework addressing services for transition programs for students with disabilities during high school. This taxonomy focuses on the individual student; furthermore, it incorporates family and external environmental resources. In addition, the framework goals are to ensure transitioning students receive the best possible transition services, with the focus of concentrating on positive outcomes (i.e., employment and independent living). The Taxonomy for Transition Programming 2.0 covers areas needed for a transition program to be a successful transition focused and outcome-oriented program (Beamish et al., 2012). The
transition services offered in schools should prepare students to integrate more smoothly into postschool activities, and they should target various areas such as preparation for occupation, community activities, and daily living (Davies & Beamish, 2009).

Kohler et al. (2016) updated the model to identify specific competencies for the delivery of transition services to help students with disabilities become successful after high school, increase graduation rates, and reduce dropout rates. This model proposes a framework for transition programming consisting of five categories: student-focused planning, interagency collaboration, student development, family engagement, and program structure (Kohler et al., 2016). These are discussed below.

![Figure 1. Taxonomy for Transition Programming 2.0. From Taxonomy for Transition Programming 2.0: A Model for Planning, Organizing, and Evaluating Transition Education, Services, and Programs (Effective Practices section, p. 3) by Kohler et al.](image)

Figure 1. Taxonomy for Transition Programming 2.0. From Taxonomy for Transition Programming 2.0: A Model for Planning, Organizing, and Evaluating Transition Education, Services, and Programs (Effective Practices section, p. 3) by Kohler et al.,
Student-focused planning. Planning focused on student success should directly involve students with disabilities, including them in activities like Individualized Education Program meetings, planning strategies, and participation. It is important students are actively involved in the planning of their own transition plan, because student participation will ensure the plan accurately reflects their individual strengths, goals, and motivations. By utilizing this model, students are able to adequately understand and experience the various options available and help them make decisions directly affecting their future. These experiences may include the ability to plan and take part in a work experience, school-based enterprise programs, or possibly community tours (Kohler & Field, 2003; Kohler et al., 2016; Kohler & Greene, 2004).

It is vitally important that students with disabilities are supported and taught to advocate for their own postgraduation goals. Students with disabilities should be prompted to take part in the development of their postgraduation goals and also help identify relevant areas in their lives, including their skill strengths and needs. It is important to have student-developed goals utilizing relevant assessment information as the foundation for planning, active student participation, and evaluation of their own progress in meeting goals (Kohler & Field, 2003; Kohler et al., 2016). Student-focused planning activities serve to help students in fostering and strengthening important skills, such as self-determination. Younger students may need more guidance in the process of goal development, and it should be expected that they become more
independent and proficient as they get older (Kohler & Field, 2003; Kohler et al., 2016).

Student-focused planning should be based upon a student’s individual goals, visions, and interests. Given this, it is vital that students are able to foster self-awareness so they can make more informed short- and long-term goals. One way to assist students in identifying their interests and goals is to provide them with opportunities to reflect on their life experiences and utilize this information to set goals. Based upon set goals, an appropriate Individualized Education Program is then created with the input of the student’s family and support team. The process of goal development is a continuous cycle. Students need assistance in reflecting on their experiences, direction to derive meaning from these experiences, and instruction to utilize this information for goal development and future development (Kohler & Field, 2003; Kohler et al., 2016).

In addition, Papay and Bambara (2014) conducted a study which sought to analyze the National Longitudinal Transition Study-2 data to provide best practice recommendations for transition services. The authors found that participation by students in transition service planning is crucial and promotes post high school achievements. The data further showed that those students who participated in transition planning were more likely to take part in higher education of some form, and they were also more likely to have employment and take part in social activities in their future (Papay & Bambara, 2014). The age at which transition services are offered is also an important factor to be considered, and the best age for these services has been approximated through research.
Cimera et al. (2013) investigated whether the early provision of transition services for young adults with autism spectrum disorder by age 14 promoted better vocational outcomes compared to providing such services later (i.e., age 16). Their study was conducted by analyzing outcomes achieved for two matched groups over a period of four years—from 2006 to 2009. It was concluded that students who received early services were significantly more likely to be employed than students who received later services. Cimera et al. (2014) further emphasized the value of early transition activities. The provision of transition services for students by the age of 14 can contribute to increased employment rates of students with an Individualized Education Program (Cimera et al., 2014). Furthermore, students with an Individualized Education Program who have been provided with transition services at approximately age 14 have a higher likelihood of finding employment than those who received these services at age 16. In general, researchers have found that preparation implemented earlier leads to improved educational and vocational outcomes (Cimera et al., 2014; Cimera et al., 2013).

Moreover, research has indicated that transition services need to be results-oriented. This recommendation means that transition services should focus on improving the academic and functional achievement of students to promote success and maximize autonomy after high school. Neubert and Leconte (2013) offered guidelines for special educators, transition specialists, and members of the Individualized Education Program to work with youth with disabilities, their families, and interagency personnel in providing ongoing transition assessment. Professional input from interdisciplinary sources, such as timely meetings with service agencies, postsecondary education programs, disability coordinators, job placement agencies,
adult day programs, and supported living agencies, is essential. These types of integrated efforts are important to guarantee an effective transition plan and outcome for students with intellectual disability (Hendricks & Wehman, 2009).

**Student development.** Students with disabilities need to prepare for adult life in several areas including social and emotional skills, employment and occupational skills, student support, assessment, and academic development. The taxonomy model also stresses the importance of integrated instructional contexts to include community activities, co-curricular activities, and extracurricular activities. This is accomplished through school-based experiences as well as work-based opportunities. Throughout the process of student development activities, students have the opportunity to foster and apply various skills, including job skills, career awareness, academic skills, independent living skills, and work-related behavioral characteristics commonly associated with positive postgraduation outcomes (Kohler & Field, 2003; Kohler et al., 2016). In order to assist students in achieving the most appropriate skills for postgraduation outcomes, experiences should be available in both school-based and community-based settings (Kohler & Field, 2003).

One necessary aspect of this process is the identification of specific accommodations or support systems required for students to successfully participate and achieve success in various education or occupational settings. The most efficient student development should improve students’ knowledge, develop their skills, and give them guidance for applying the skills they have developed in any opportunity they are faced with. Research has supported the importance of student development practices in the process of preparing individuals with disabilities to rise to independent
adult roles in educational and employment settings (Kohler & Field, 2003; Kohler & Greene, 2004).

With regard to planning for the transition from high school, self-determination is a vital component (Carter et al., 2013). Carter et al. (2013) reported that parents normally find self-determination to be an important character quality, but frequently do not believe that their own children possess this skill. The authors also conveyed that preparing students for adulthood should include giving them the tools to take on leadership roles and the ability to take control of their own lives and futures. A qualitative study completed by Thoma et al. (2012) supported the importance of self-determination in students becoming their own advocates. Their data further showed that providing services such as counseling can aid in the development of self-determination, which can encourage the student to become independent and self-sufficient.

Additionally, Wehmeyer (2004) described self-determination as a process during which students with disabilities take advantage of opportunities to practice control in their own lives. The process involves support from family and other professionals involved in the student’s transition. This support can help students learn how to take advantage of important opportunities that serve to reflect their values and beliefs. Frankland, Turnbull, Wehmeyer, and Blackmountain (2004) reported that self-determination is very important from age 15 and beyond. This importance is due to the fact that transition programs aid students in becoming more self-conscious as they get older and embark on post high school endeavors.

Transition programs also encourage students to be responsible and value other people and their community. They also generally possess an understanding of how
their disability influences them and their specific needs as responsible adults. Studies regarding successful adults with disabilities have shown that these adults had a comprehensive understanding of their own personal beliefs, strengths, and weaknesses. Frankland et al. (2004) reported that for many youth today, achievement in education is the most effective way to serve their community and family. Individuals with disabilities should be encouraged to develop their own plans and to execute appropriate efforts to achieve their goals (Izzo & Lamb, 2002).

One large obstacle commonly experienced by students with intellectual disability during their experience in high school education is finding their voice and self-advocating. These students need to learn to advocate for themselves, ask questions, and provide information to others regarding what they need and what accommodations they should be provided (Paiewonsky et al., 2010). It is also critically important that students with disabilities have the opportunity to take part in peer interactions, particularly during transition services. Nijs and Maes (2014) evaluated peer interactions of students with intellectual disability and found that social interactions are often limited and restricted.

**Interagency collaboration.** Transition from high school to adult life is a complex step requiring cooperation with community businesses, associations, and agencies to interdependently assist the student in maintaining connections with the community (Kohler, & Greene, 2004). Interagency agreements promote collaborative service delivery, which clearly articulates responsibilities, strategies of communication amongst stakeholders, and other collaborative procedures to enhance the transition program and service delivery. This process helps stakeholders to understand all roles and responsibilities regarding information, resources, and service coordination.
Through interagency collaboration, educational and adult service providers can address community issues that may influence opportunities and services for individual students. The purpose of collaborative actions is to help students with intellectual disability in their lifelong learning and to support them in the community (Kohler & Field, 2003; Kohler et al., 2016).

Students with intellectual disability will need ongoing support and accommodations as they enter into adult life and become involved in employment, education, and community. It is vital they have support from adult service agencies and that these agencies are involved in the transition process for these individuals. A collaborative approach should be taken in developing a transition plan, where school, family, and other agencies all come together to share knowledge and make a plan to create an easy transition for the student after high school. The collaboration occurring between school representatives and other agencies during the transition period should happen on multiple levels, including individual, school-based, community, and regional transition planning (Beamish et al., 2012; Crane, Gramlich, & Peterson, 2004).

Unfortunately, supports and services for adult life are frequently composed and put into place without appropriate input from the individual with disabilities and his or her family. It is important that the input of each student with intellectual disability is taken into account as these services are outlined, because support is crucial as adults encounter barriers with community living, education, and employment. One commonly encountered barrier is lack of social inclusion, which can be encountered when an individual moves into a living community. Services should be provided to help make this barrier less stressful, as many individuals with intellectual disability
long to have meaningful social interactions and be accepted into social situations (Abbott & McConkey, 2006).

**Program structures.** Program structures focus on options for the delivery of academic programming to increase the educational achievements and development of students with disabilities. Appropriate transition-focused education involves several factors: being flexible and adaptable in program delivery, modification of school policies to accommodate students with disabilities, and opportunities for students to experience both school and community environment learning. These are all important factors that will affect the outcomes of students with disabilities. Special education teachers are not responsible for establishing school policies, but they have the ability to influence programs by improving the curriculum and developing the student’s Individualized Education Program goals (Kohler & Field, 2003). Systematic programing, together with meaningful curriculum and Individualized Education Program goals, is required for each student to develop appropriate skills to be used towards their postschool goals. The planning of transition services should include the following: adequate academic and occupational curriculums to help successfully prepare students for educational and occupational experiences after high school, functional academic content that reflects numerous domains, and education in natural environments. Also important is resource development and allocation, policies and procedures, strategic planning, and school climate (Kohler & Field, 2003; Kohler et al., 2016).

The various aspects of an educational system are reflected in the school’s climate, which must provide the appropriate foundation for implementing transition services. School climates that encourage outcome-based education while expanding
curricular options for students have several important components, including strategic planning, sensitivity for various cultures and ethnicities, a defined mission and values, enthusiastic and qualified staff members, and good utilization of resources (Kohler & Field, 2003). Schools that incorporate transition services may also choose to focus on community involvement to improve student development of civic involvement, social skill development, and responsibility that can be transferred to various post high school opportunities. These experiences are vital for students to have a well-rounded and comprehensive educational experience, and they relate directly to their success in transition after high school (Kohler & Field, 2003; Kohler et al., 2016).

The above clearly indicates that students with intellectual disability need a functional curriculum; however, Bouck and Satsangi (2014) reported that past research directed at developing functional curricula for secondary students with mild intellectual disability has been limited. These researchers identified only eight articles published in four leading journals that examined this topic in a review of articles appearing between 1975 and 1994. Evidence demonstrated through these findings showed a functional, evidence-based curriculum could have positive implications among secondary students with mild intellectual disability. This finding not only pointed to the lack of an evidence-based functional curriculum but it also implied such a curriculum might not be effective or should not be applied in practice. Courtade et al. (2014) found similar results to Bouck and Satsangi by asserting that while scholars have made considerable progress in conducting and synthesizing research necessary to identify evidence-based practices, much needs to be done to enable evidence-based reforms to broadly improve instruction and outcomes for learners with severe intellectual disability.
Regarding best-practice, Goh and Bambara (2013) drew from research findings to offer evidence-based practices to effectively guide the transition process. According to the authors’ findings, educators who fully understand the importance of transition in the special education program can empower young people with disabilities. Mazzotti and Plotner (2013) indicated that transition faculty education must apply established student-level evidence-based practices; however, the teacher participants of their study expressed a lack of awareness of such practices. To ensure teachers are prepared to provide effective transition programs and practices, student-level evidence-based practice must be used in teacher education. In order to improve the outcomes for students with intellectual disability, teachers should be prepared with the knowledge and skills required to deliver transition services to these students (Mazzotti & Plotner, 2013).

**Family engagement.** Effective engagement of parents is an important component of high-quality transition services. Family involvement has been shown to improve school attendance, improve higher education attendance and test scores, improve self-esteem and confidence, and decrease the rate of student dropouts (Kohler & Field, 2003; Kohler et al., 2016).

Families can greatly impact the transition process for students with disabilities, and thus their future, by being actively involved empowering their children and making the necessary preparations (Kohler & Greene, 2004). For example, parents who advocate for their children may have a significant positive effect on their children’s futures (Kohler & Field, 2003). It is vital that educators work with families to enhance the success of students with disabilities in the transition period. Families can do this by remaining involved in all decisions made, maintaining necessary
arrangements needed for student success, and being flexible. Additionally, family involvement includes education for the family regarding transition services, involving planning, and providing transition education and services. These services include assessment, as well as making decisions and policies. Family-focused training on the purpose and processes of transition can serve to improve the abilities of family members to work with educators and other service providers. Empowerment strategies may include encouraging family involvement in activities and helping them understand their role in the transition process. Therefore, there are three main aspects of family involvement: participation and roles, empowerment, and training (Kohler & Field, 2003; Kohler et al., 2016; Kohler & Greene, 2004).

Successful transition into educational and employment opportunities after high school are strongly influenced by the support of family and friends of students with intellectual disability. Countless studies have shown that family involvement and contribution can strongly influence education and employment outcomes for individuals with intellectual disability. This involvement also provides the foundation for a support system for the student once he or she has transitioned into life after high school (Carter et al., 2013; Destefano, Heck, Hasazi, & Furney, 1999; Grigal et al., 2011; Newman, 2005; Papay & Bambara, 2014; Shogren & Plotner, 2012). Successful transition service implementation has been attributed to unfaltering support from family members of students with disabilities, which should ideally take place throughout the entire transition process (Destefano et al., 1999). Family support is crucial for individuals with intellectual disability so they have people who will always advocate for them and support them. In order for individuals with disabilities to adequately display self-advocacy skills and independence in their lives throughout
transition periods and in all endeavors to follow, they should be supported by their families in a way that ensures they are given the opportunity to make their own decisions and choices regarding their future. Independence should be just as important as support in the development of a successful and meaningful transition plan (Destefano et al., 1999; Lindstrom et al., 2014; Papay, & Bambara, 2014).

Parents’ expectations regarding the abilities, skills, and future educational and occupational choices of their adolescent children exercise a powerful influence on the outcomes experienced by these young adults. Doren, Gau, and Lindstrom (2012) stated that parental expectations have been linked to adolescents’ academic achievement, school engagement, college attendance, and occupational attainment. Doren et al. (2012) reported a significant predictive relationship between parental expectations and their child’s degree of autonomy, and autonomy levels demonstrated a significant predictive relationship with postschool outcomes.

Moreover, Martinez, Conroy, and Cerreto (2012) determined that parents are commonly overwhelmed and puzzled by the transition process. They often would rather not think about the transition process, as it means many unknown and possibly frightening new territories for them and their student with disabilities. Multiple parents have seen transition services as an exit activity that should not happen until graduation time. They believe they need more information and counseling to help them more fully understand the process and all that is involved in the process (Martinez et al., 2012). Parents implied communication and the building of rapport with school staff is a crucial component in the educational process that would serve to also improve the transition process for them and their student. Likewise, it is believed school districts commonly fail to engage parents in the transition process, leading parents to become
frustrated and exhausted from trying to communicate with the school (Hetherington et al., 2010). While certain parents think transition activities should be saved until just before graduation, some also believe transition services in general are lacking in their provision for students and should be improved and better implemented for their student (Martinez et al., 2012).

Overall, the five key components of the Taxonomy for Transition Programming 2.0 model (student-focused planning, interagency collaboration, student development, family engagement, and program structure) give meaningful structure for a supportive environment that provides a focused transition program. The framework addresses specific skills and individual development areas where transition students need support to achieve independence to the degree they are able. The taxonomy is a powerful model that can be used by teachers to promote the success of students with intellectual disability.

**Current Status of Transition Services for Students with Intellectual Disability in Saudi Arabia**

Although the United States has a history in transition services since 1980, this is not the case in Saudi Arabia. However, as is the case for the United States, Saudi Arabia does have special education services. Considering that transition services came out of special education in the United States, it is reasonable to believe that transition services are the next step for special education in Saudi Arabia. Currently, Saudi Arabia is pursuing overall advancements in education, and there is increased interest in broader postsecondary outcomes for students with disabilities. Therefore, an overview of the general state of special education in Saudi Arabia has implications for establishing successful transition services.
Regarding students with intellectual disability who live in Saudi Arabia, there are various opportunities for education. Of these options, many students with intellectual disability either attend institutions or mainstream schools (Al-Mousa, 2010). Within institutional schools, the students who have intellectual disability learn in specialized classrooms that are fit for their needs and disabilities. Students who learn in institutions do not learn with other students; they only associate with other students with intellectual disability. This is currently not a popular option for students with disabilities, because it isolates them from other students. This option is typically chosen for students who have severe disabilities, autism, or even students with multiple disabilities. Another option for education available for students with disabilities is to enroll them in a mainstream program. Mainstream programs are curricula for students with intellectual disability in Saudi Arabia that are delivered in regular public schools instead of special institutions (Al-Mousa, 2010). Such programs include self-contained classrooms, resource rooms, itinerant teachers, teacher-consultants, and follow-up programs. In order to enroll in mainstream programs, the completion of middle school is required. Further, to determine eligibility the student with intellectual disability must receive special approval from an acceptance committee, which takes IQ into account.

Alrusaiyes (2014) examined a transitional services program in Saudi Arabia for females with intellectual disability. The objective of the study was to identify whether the expected outcomes from the perspectives of the mothers, education teachers, and students matched those found in evidence-based research. Additionally, this research suggested best practices for a successful transition program in Saudi Arabia. The study analyzed the extent to which the program considers the needs of the
students, mothers, and special education teachers. The results of this study identified several activities and practices creating challenges to successful transition outcomes. The central themes that emerged from this research include a need for greater understanding of disability, lack of appropriate guidance, and difficulty with lines of communication.

Before the Saudi Arabia schools make adjustments, the Ministry of Education should provide proper guidance and development to give schools a good sense of direction. The most significant result of this study was the disparity between the mothers’ and teachers’ perception of family involvement. The special education teachers identified the mothers were never interested in their daughters’ education. This finding pointed out the need to create compelling and stronger relationships among the educators and family members in the program. Moreover, other factors such as improved communication throughout all stakeholders were essential to making the transitional program a success. The systems and procedures established need to be evaluated to ensure continued improvement. Additionally, the students should be involved in individualized planning to enable students and providers to make accommodations and adaptations throughout the program. The need to offer a transitional program for people with intellectual disability closely aligns with the importance of their rights and trends in the special education field. These factors will influence future efforts to develop community programs to adequately serve young adults with intellectual disability transitioning in Saudi Arabia (Alrusaiyes, 2014).

Middle and High School Programs in Saudi Arabia
Prior to 2001, students with intellectual disability had to stay home after elementary school, so there were no transition services for these students beyond that age. However transition programs that continue through high school are, understandably, important for these students if they are to seek postschool jobs and activities outside of the home. Therefore, in 2001 the Ministry of Education approved regulations for students with intellectual disability to pursue their education through the high school level (Althabet, 2002). Unfortunately, high school programs for students with intellectual disability were canceled after a few years; the Director General of the Special Education Department in the Ministry of Education stated the Ministry was responsible for only the educational aspects of all students—thus, because the academic abilities of students with intellectual disability did not exceed the level of third or fourth grade, the next step was vocational training, which is the responsibility of the Ministry of Labor and Social Development (Alothman, 2010). Currently, no changes have been made to this policy (Ministry of Labor and Social Development of Saudi Arabia, 2017), which highlights the need for significant revisions in these policies. In support of the need for revision, Almuaqel (2008) evaluated current curricula developed for middle and high school students with disabilities in Saudi Arabia. An absence was found with regard to appropriate transition services being provided for these students. The researcher determined that one of the primary challenges in these programs is it separates students with disabilities and puts them into their own self-contained classrooms in public school. Therefore, the students are unable to communicate and interact with their peers outside of the special education classroom.
Similarly, Al-Hoshan (2009) inferred the inclusiveness of school programs was a pre-determining factor for postsecondary education success, social interaction success, and overall participation in activities after high school or middle school. Middle and high school students with intellectual disability and other developmental disabilities in transition programs in Saudi Arabia are not yet required to properly equip students for life after school (Almuaqel, 2008). Alnahdi (2014a) stated that the education setting should not be solely focused on academics. The author determined that high school education is important in preparing students for their future lives, which includes preparing them to be independent and responsible in whatever they pursue after high school. Also, high school education should give students with intellectual disability the chance to continue their education for as long as needed, alongside normally developing students.

**Vocational Rehabilitation Programs**

Vocational rehabilitation programs are the only programs offering services to train and prepare persons with disabilities for the Saudi Arabia labor market. It provides work services, mostly through sheltered workshops, to individuals with disabilities who are between the ages of 15 to 45 years. Three programs offer vocational rehabilitation for adults with disabilities across Saudi Arabia, and these programs are under the direction of the General Administration for the Care and Rehabilitation of Persons with Disabilities (Ministry of Labor and Social Development of Saudi Arabia, 2017).

The Ministry of Labor and Social Development of Saudi Arabia (2017) reported one of their primary purposes was to aid individuals with physical or mental
disabilities and help in preparation for adult life. This organization offers services
designed to provide training for individuals with disabilities directly relating to certain
trades or career paths, such as carpentry or sewing. These assistance programs are
designed to prepare adults with intellectual disability to be contributing members of
society through their vocational and social skills. Although these services are
important, they are not true transition services because they do not connect school life
with adult life. For an individual with intellectual disability to be eligible for
vocational rehabilitation programs in Saudi Arabia, one must meet certain
requirements: the individual must have a physical or intellectual disability (or multiple
disabilities), score 50 or higher on an IQ test, be a citizen of Saudi Arabia, and
demonstrate the ability to improve one’s skills and independence through the
vocational rehabilitation program and training.

Specifically, two non-profit organizations in Saudi Arabia offer services for
students with disabilities—the Disabled Children Association and the Al-Nahdah
organization. The Disabled Children Association provides education to students with
disabilities along with other important services, such as occupational and physical
therapy. These services are generally not provided to students in public schools. The
Disabled Children Association also helps students with disabilities gain skills for
employment. They have primarily done this by organizing job fairs specifically for
students with disabilities (Disabled Children Association, 2013). Al-Nahdah is also a
non-profit organization that helps specific populations. Al-Nahdah offers services to
women with and without disabilities, providing support for financial needs as well as
education to help them gain employment. This association also provides education
services and other services to children with Down syndrome from birth until the age of 21 years (Al-Nahda, 2013).

**Teacher Preparation for Transition Service Delivery**

The implementation of the foregoing practices is only possible if special educators at the secondary level are properly trained in these practices and are comfortable delivering them. Research in the Unites States has established a number of core competencies for transition service specialists likely to apply to relevant teachers, even if they are not transition specialists. In research examining the perceptions of a national sample of teachers across the areas of special education, vocational education, and rehabilitation, survey results indicated seven core competency domains integral to the role of transition specialist emerged across all three practice areas. These domains included:

(a) knowledge of agencies and systems change, (b) development and management of individualized transition plans, (c) working with others in the transition process, (d) vocational assessment and job development, (e) professionalism, advocacy, and legal issues, (f) job training and support, (g) assessment (general). (Defur & Taymans, 1995, p. 5)

More recently, The Division on Career Development and Transition identified similar knowledge and skill areas as critical competencies for transition specialists: (a) managing student behavior and social interaction skills; (b) professionalism and ethical practices; (c) assessment, diagnosis, and evaluation; (d) instructional content and practice; (e) planning and managing the teaching and learning environment; (f) philosophical, historical, and legal foundations of special education; (g) communication and collaborative partnerships; and (h) characteristics of learners (Division on Career Development and Transition, 2000). Transition service provider training is challenged with addressing all of these knowledge and skill areas.
Blanchett (2001) evaluated both regular and special education teachers’ perceptions of the level of significance of 30 transition service competencies noted throughout the literature in an effort to confirm the field validity of various skills reported in research. The author discovered that social skills, teaching job seeking skills, teaching daily living skills, providing career education and exploration, involving employers, and teaching social skills were the top six transition competencies rated by teachers. With regard to teacher preparation, the majority of the teachers in the study were found to have received training related to transitional services in the following areas: teaching money management (81%), teaching daily living skills (84%), writing Individualized Education Programs (92%), participating in a multidisciplinary team (80%), assessing vocational preferences (82%), and managing maladaptive behaviors (86%).

Additional research has been carried out to investigate the perceptions of teachers about their roles and skills in transition planning. The findings suggest that teacher practice in transition planning and the transition process as a whole is at variance with best practices. Generally, teachers are aware they require more training due to the gap between practice and theory to truly help students in special education with transition (Lubbers et al., 2008; Morgan et al., 2014). Furthermore, teachers who lack confidence in their transitional skills are less likely to implement transition activities due to their limited knowledge and skills. In most cases, the secondary educators reported transition training was on the job instead of during comprehensive teacher education (Blanchett, 2001).

Furthermore, Flexer and Baer (2005) surveyed 15 transition service coordinators who completed an endorsement program provided at Kent State
University. The program consisted of five classes including planning and programming for transition, occupational aspects of disability, principles, practices of career and technical education, coordination of career and technical cooperative programs, transition programs and services for youth with disabilities, and a practicum. Survey results indicated the service coordinators felt they were adequately prepared in skill competency domains, but a large gap existed between knowledge and skills needed to actually deliver services. Nonetheless, transcripts from focus groups indicated the program did have a positive effect on participants’ roles in the transition process and the coordination of transition activities.

Currently, efforts are being made to provide transition service training to secondary education teachers. Particularly, in a study by Flannery, Lombardi, and Kato (2015), the authors attempted to determine the extent to which the quality of transition components improved after professional development, as well as how much professional development influences the inclusion of the required transition components in the Individual Education Program. The participants included 27 secondary education teachers who managed a caseload of transition-age students selected for special education services. The effect on the inclusion and quality of the study components was evaluated using 302 Individual Education Programs collected before and after professional development. All in all, the study results are promising across the transition components and give positive indications with regard to the contents and structure of professional development for special secondary education teachers who design Individual Education Program documents.

Across settings, the proficiency of transition professionals requires an understanding of the various aspects involved in the transitional process to help
students with disabilities. There is a need for transition professionals in vocational rehabilitation and the school system to develop the necessary skills, knowledge, abilities, and attitudes necessary to prepare students with disabilities to successfully transition to the adult world. Unfortunately, there is limited empirical research validating the transition-related competencies identified in other studies (Plotner, Trach, & Strauser, 2012). As a result, vocational rehabilitation professionals may not understand the needs of the students in transition. Besides, procedures to support collaboration between vocational rehabilitation and public schools have been questionable.

Despite recent progress, there is still no consensus on which of the many identified competencies should be specifically targeted for practitioners, how content is to be delivered, or how deeply competencies must be addressed (Morgan et al., 2014). Stated differently, there is consensus that all secondary special educators need to possess core knowledge and skills enabling them to effectively plan and deliver services involved in transition planning. While many of the important transition competencies have been identified, little is known about specific strategies and approaches special educators can implement to improve transition outcomes. In this regard, there is a need for better understanding of influences and critical factors of effective methods for professional development regarding transition services (Morningstar & Benitez, 2013).

In summary, significant aspects of effective transition programs include the flow of communication, coordination, and collaboration—but these areas require further development and emphasis in programming (Defur & Taymans, 1995). The results of studies regarding practitioner perceptions of preparation training for
transition service delivery generally indicate teachers are confident in general knowledge and skill areas, but lack strategies to integrate transitional skills. Considering that special education professionals perceive their planning efforts exceed their ability to coordinate and deliver transition services (Flexer & Baer, 2005; Knott & Asselin, 1999), professional development opportunities should implement specific strategies to improve transition outcomes for students with intellectual disability.

Even though efforts to reform Saudi Arabian education in general and special education specifically are in progress, special education teacher training in Saudi Arabia focuses only on working with young students in elementary schools. Furthermore, in Saudi Arabia the Ministry of Education, school administrators, teachers, and service providers have no history with the transition process, so the Saudi education system is challenged with introducing new student evaluation systems, teacher and service provider training, and new programs to assist students in making a move from school to the work environment. Until they acquire some experience with transition procedures, teachers in Saudi Arabia will require training from outside specialists as they learn to provide transition processes that lead to successful postschool outcomes for students with intellectual disability (Alnahdi, 2013).

A study carried out by Alnahdi (2013) examined the attitudes and perceptions of teachers towards transition services for Saudi Arabia students with intellectual disability. The relationship between teachers’ attitudes and teachers’ gender was also taken into account. The study was conducted using a survey of 223 male teachers and 146 female teachers. From the results, it was clearly noted the teachers had positive attitudes towards transition services without any differences found in their gender or
educational background. However, differences noted in attitudes were found to be related to having a friend or family member with a disability and also the total years of teaching experience. Those teachers with relatives with a disability or with more years of teaching experience were found to have more positive attitudes toward transition services.

An examination of special education teachers’ perceptions of their preparation in the special education program at King Saud University was carried out by Althabet (2002). This researcher surveyed 255 teachers who graduated between 1992 and 2000, 180 males and 75 females. In terms of teaching experience, most participants (72%) had one to four years’ teaching experience, and 28% of the sample reported five or more years’ experience. Overall, these teachers reported that they felt neutral about the quality of their preparation to deliver special education courses to students that was provided in the special education program at King Saud University. Results showed substantial differences between male and female teachers in that male teachers were more confident in the effectiveness of their preparation program than female teachers. No significant differences in participants’ perceptions of preparation training effectiveness emerged based on years of teaching experience. Overall, the teachers’ ratings of coursework effectiveness were close to the middle of the scale range, which indicated neutral perceptions about the effectiveness of the training. Although the study examined teacher training to deliver course material, it did not address preparation for transition services (Althabet, 2002).

Expanding beyond teachers’ perceptions of their ability to deliver special instructional material, Alnahdi (2014b) surveyed special education teachers’ perceived levels of preparedness specifically to deliver transition services in Saudi Arabia. A
survey of 350 special education teachers indicated negative perceptions regarding the level of preparation for the transition service aspect of their responsibilities. The results indicated 75% of the respondents thought there was a significant lack of preparation with respect to transition services, and 58% of the participants reported they had no exposure to transition planning for students with disabilities. The authors concluded specific transition-related instruction should be included in special education training programs.

Special education teachers can apply different teaching skills that help them improve special education and transition services for students with disabilities. However, Al-Wabli, (1982) found special education teachers felt well-prepared in only 6 out of 15 teaching skills examined in the study: (a) ability to communicate effectively with students with different levels of abilities, (b) ability to construct appropriate lessons, (c) ability to work effectively with the school system, (d) ability to use teaching materials, (e) ability to construct appropriate tests, and (f) skills to evaluate the academic progress of students with disabilities. Regarding difficult areas, teachers who participated in the study reported two specific areas in which they felt unprepared: use of general school resources and use of school library resources.

Participants reported average ratings for the following additional skill areas: (a) using audiovisual aids, (b) using Arabic effectively, (c) using a variety of teaching methods, (d) maintaining official records, (e) managing discipline in the classroom, (f) managing classroom time, and (g) motivating disinterested students.

Transitioning from childhood to adulthood is a critical junction in the life of any person, and initiating transition services for individuals with disabilities in Saudi Arabia is a complicated endeavor. Therefore, officials in this country charged with
creating and delivering transition services must consider numerous factors as they proceed (Papay & Bambara, 2014). One element that needs to be considered to provide transition services in schools is the training of teachers who will be providing these services (Alhossan & Trainor, 2017; Alothman, 2010; Alrusaiyes, 2014). This training should include special education teachers who hold bachelor’s degrees as well as counselors from vocational rehabilitation. These individuals should be provided with information regarding when transition services will start with students and what the transition services should look like for students. Also, they should acquire training on how the services can relate to the student’s abilities to prepare him or her for the future. It is necessary to provide this training for Saudi Arabia teachers to enable them to give transition services to students with intellectual disability (Alnahdi, 2013).

In conclusion, studies regarding the current ability of Saudi Arabia teachers to provide transition services to students with intellectual disability are limited, and such studies indicate a general lack of teacher preparation. This study expanded on recent research to examine the relationships among teachers’ perceptions of their preparation to provide transition services, as well as the degree to which they perceive obstacles to successful transition outcomes and value in transition services. Middle and high school transition programs for Saudi Arabia students with intellectual and developmental disabilities do not effectively prepare them for life after school, and there are, as yet, no transition services at all for students with intellectual disability who have completed middle school (Almuqael, 2008; Alnahdi, 2013).

Summary

Studies from the United States offer a number of implications for developing effective transition services in Saudi Arabia. In general, research on evidence-based
practices in the United States supports the major elements of the Taxonomy of Transition Programming 2.0 (Kohler et al., 2016). Transitioning students with intellectual disability successfully can be achieved by increasing access to academics, supporting development of self-advocacy skills, and including goals relating to further higher education or appropriate employment. All students with disabilities, including those with intellectual disability, should be adequately prepared for the transition into life after high school; they should receive comprehensive support regarding postsecondary education, competitive employment outcomes, and independent living. There is a need to determine which practices are effective or ineffective, including seeking concrete answers to questions regarding where students should learn and how much time should be spent in regular school classrooms, supplementary school-based programs, or supported employment. Currently, Saudi Arabia faces the task of moving from offering only vocational training to students with intellectual disability to adopting a broader model of education and transition services for these students.

To improve employment and postsecondary education outcomes for students with intellectual disability, it is vital that students’ post high school goals reflect an expectation for postsecondary training or education as well as integrated paid employment that is not dependent upon any disability labels attached to them. Consistent with United States studies, it is likely that early intervention (age 14 or younger) will play an important part in improving postsecondary life for students with intellectual disability. Currently, Saudi Arabia offers only one vocational training program to people with intellectual disability aged 16 to 45. Given that children aged 10 to 15 can often take on additional responsibility within their homes and schools and make some of their own decisions with regard to their lives, early intervention could
offer help with daily living skills and adjustment even for students with limited abilities for further formal education (college).

Furthermore, professional development for teachers and other transition personnel is necessary so they are better equipped with skills and abilities supporting successful postsecondary experiences for students with intellectual disability. Such personnel include transition service providers, guidance counselors, higher education teachers, and vocational training and rehabilitation practitioners who play a key role in supporting transition goals related to postsecondary education and employment. In Saudi Arabia, raising awareness about the concept and process of transition for students with intellectual disability must be at the forefront of development efforts, because many teachers are unaware of such practices.

To provide optimal transition services for students with intellectual disability, adequate teacher training is critical so teachers are prepared to identify specific student needs and coordinate with other key stakeholders to provide appropriate transition services. To attain the best possible outcomes, transition services providers need to be prepared to help students with intellectual disability acquire the skills they need for postsecondary education and gainful employment. Additionally, staff and educators should focus on increasing work and communication between institutions and agencies of higher learning in the transition process. This will allow all students with disabilities, including students with intellectual disability, to be adequately prepared and supported during the transition period from secondary education to postsecondary education and challenging employment outcomes.

The body of research in transition has confirmed the importance of teacher preparation and perceptions to their effective involvement in the transition process.
Some studies have indicated one challenge to providing effective transition services is that special education teachers often feel unprepared to provide these services. Teachers’ perceptions and attitudes also influence teachers’ involvement and commitment in providing transition services. Given these issues, research regarding teacher training and perceptions of transition services is needed to identify important areas of training needed and the current state of transition service provision. Studies of this type will be especially helpful in countries still in the process of developing transition services for adolescent students with intellectual disability. As such, this research was conducted with special education teachers in Saudi Arabia. This qualitative study focuses on the perceptions of female Saudi Arabian special education teachers regarding their preparation for providing transition services to females with intellectual disability using qualitative research methodology and procedures. The methodological details for this study are presented in Chapter III.
CHAPTER III
METHODOLOGY

The purpose of this qualitative research was to explore the feasibility of introducing transition services for females with intellectual disability in Saudi Arabia from the perspectives of their special education teachers and vocational rehabilitation providers. This type of qualitative research focuses on the lived experience of a phenomenon from the perspective of those who engage with the phenomenon (Merriam, 2009; Merriam & Tisdell, 2016). As applied here, this translates into how these participants, with backgrounds in service provision processes that do not include transition services, react and respond when provided with information on these services and a potential model for their practical implementation. Individual background questionnaires, focus group sessions and follow-up discussions, artifacts (diagrams), and individual interviews were the primary sources of data that were used to obtain rich, detailed, thick descriptions through qualitative analysis. This chapter presents the epistemology and theoretical perspectives, research designs, and methodology that guided this research.

To address the research questions, two groups of educators completed an individual background questionnaire and participated in focus group sessions about transition services where they viewed an audiovisual presentation about transition services and the Taxonomy for Transition Programming 2.0. The sessions were followed by focus group discussions, a diagram analysis, and individual participant
interviews. This chapter presents the theoretical framework and research design for this study, followed by detailed descriptions of the procedures: sampling and participants, research setting, data sources, data collection, data analysis, and trustworthiness.

**Research Questions**

The primary research questions for this study were:

**Q1** What are teachers and practitioners’ perceptions of the overall value of transition services for females with intellectual disability in Saudi Arabia?

**Q2** What influence do teachers and practitioners perceive that transition services could have on increasing desirable postschool outcomes for females with intellectual disability in Saudi Arabia?

**Q3** What are teachers and practitioners’ perceptions about the feasibility of using the five components of the Kohler et al. (2016) Taxonomy for Transition Programming 2.0 to develop transition services in Saudi Arabia (student-focused planning, student development, interagency collaboration, program structures, and family engagement)?

**Q4** What recommendations do the teachers and practitioners have for implementing a modified taxonomy for transition programming for females with intellectual disability in Saudi Arabia?

**Epistemology and Theoretical Framework**

This research was guided by social constructivism as an epistemological approach. According to Crotty (2003), epistemology is a theory of knowledge that looks into the nature of knowledge itself. Epistemology examines what constitutes knowledge, what it means to know something, what kind of knowledge can be acquired through research, and what methodologies are appropriate to use to acquire this knowledge. The theoretical framework of social constructivism asserts that all knowledge is constructed by the interactions of people with their world and with each
other (culture, language, etc.), and all of these interactions are framed within a social context. According to social constructivists, knowledge and meaning are not objective; these are socially constructed as people engage with their world and interpret their perceptions in terms of meaning (Creswell, 2013; Crotty, 2003).

A theoretical framework refers to the philosophical approach underlying a particular methodology, providing context and guiding the logic behind the methodology (Creswell, 2013; Crotty, 2003). The methodology for this qualitative research was based on an interpretivist theoretical perspective, which seeks to understand individual experiences and to uncover meanings, perceptions, and intentions they ascribe to a given phenomenon. The ultimate goal of interpretivism is to understand and explain human and social reality (Crotty, 2003).

One characteristic of interpretivism is the assumption that reality is constructed by the consciousness of humans as they interact with objects, experiences, other humans, and human phenomena such as culture and society; hence its association with social constructivist approaches. In order to determine a given reality, it is necessary to gain an understanding of this consciousness, which is constructed individually. From an interpretivist perspective, people act intentionally and construct meanings through their activities (Blumer, 1969). Similarly, people are active parts of constructing their social world (Becker, 1970). In addition, Creswell (2013) and Merriam and Tisdell (2016) advocated the use of interpretivism because individuals are unique; there are multiple potential interpretations of, and perspectives on, a single event, phenomenon, or situation; and situations are best examined through the eyes of the participants rather than a researcher. In the research reported here, this perspective was essential, in that the practitioners had longstanding histories of serving females with intellectual
disability, and they were now being exposed to service innovations that could both challenge and extend their understandings of what services could look like and what outcomes might be possible. Hence it is the interaction of their past knowledge with the novel information that provides the phenomenon of interest in this study.

Methodologically, this theoretical framework leads to research approaches that accept the diversity of individual perspectives, ask broad and open-ended questions, and give participants the opportunity to express their individual constructions of meaning (Creswell, 2013; Crotty, 2003). The role of the researcher in qualitative research is to acquire an understanding of the participants’ perspectives, then to identify common general themes as well as any unique individual views (Merriam, 2009; Merriam & Tisdell, 2016).

**Research Design and Procedures**

As noted previously, the researcher used established qualitative methodology to conduct an experimental investigation into the research questions about the potential use of transition services for females with intellectual disability in Saudi Arabia. Experiential investigation is related to participants’ personal experiences with a specific phenomenon, and it seeks to understand individuals’ perceptions, experiences, and perspectives of their real-world interactions with the phenomenon of interest. The focus in this type of inquiry is on the perspectives of the participants, not that of the researcher (Smith & Fowler, 2009).

Experiential research focuses on complex, detailed descriptions of participants’ experiences. The researcher then reviews these descriptions and searches for common categories of responses and themes. From this information, the researcher develops rich textual descriptions accurately reflecting the experiences of the participants from
their viewpoints. Finally, the researcher can develop a structural description of the phenomenon that includes the physical conditions, specific situations, and overall context of the issue. This structural description goes beyond what participants experience and provides insight into how they experience a given phenomenon (Creswell, 2013).

To answer the research questions, focus group methodology was used to gather information on participants’ thoughts and behaviors relative to the topic at hand. According to Krueger and Casey (2009), focus groups are particularly appropriate for determining the perceptions, thinking, and feelings of individuals about specific issues (phenomena). Information of this sort is accessible because focus groups yield very rich data expressed in participants’ own words and in their own context. This limits artificiality in the body of data (Stewart & Shamdasani, 1990).

According to Krueger and Casey (2009), “The focus group presents a more natural environment than that of an individual interview because participants are influencing and influenced by others—just as they are in life” (p. 7). Because of this feature, focus group data will potentially provide realistic data about the acceptability and feasibility of implementing transition services in Saudi Arabia. The overall characteristics of focus groups make them especially appropriate for initial investigations of a given issue (Fontana & Frey, 2005), and transition services as they are currently understood and applied in the United States are completely new to Saudi Arabia.

**Sampling and Participants**

The study employed purposeful sampling to select participants. Merriam and Tisdell (2016) stated, “Purposeful sampling is based on the assumption that the
investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned” (p. 96). Purposeful sampling is often the most appropriate sampling strategy when the researcher wants a sample of participants with sufficient experience in the phenomenon being studied to allow meaningful data to be obtained. Thus this sampling strategy was appropriate for use in this study because focus groups, which provide an efficient way to access information from people with shared knowledge about a given topic, was the main source of data.

There are several options within purposeful sampling, but criterion sampling offers the best match for use in experiential investigations. The use of criterion sampling requires that participants are included based on specific criteria for inclusion determined by the researcher (Creswell, 2013; Merriam, 2009; Smith & Fowler, 2009). The criterion sampling method was used to identify potential participants for this study. A minimum of six and a maximum of 12 participants are ideal for focus group data according to Vaughn, Schumm, and Sinagub, 1996. A total of six participants were recruited for each of the two groups, because this number of participants was easily accessible and provided sufficient interaction to obtain rich data from the focus group sessions.

In Saudi Arabia, the people who know the most about current practices and processes for working with females with intellectual disability are those who work directly with them, the special education teachers and vocational rehabilitation practitioners who work directly with females with intellectual disability. Therefore, participants were recruited from two target populations: (a) special education teachers for female students with intellectual disability, and (b) vocational rehabilitation practitioners for females with intellectual disability. The criteria used to select the
participants were the following: (a) special education majors currently employed as special education teachers or vocational rehabilitation practitioners working with females with intellectual disability, and (b) who had at least one year of teaching or vocational rehabilitation experience with students having intellectual disability.

**Setting**

The study was conducted in two different settings in Saudi Arabia. A university for females served as the setting for a group of six special education teachers specializing in students with intellectual disability. This university was a central location accessible to teachers from different schools. A vocational rehabilitation center for females, located in the central part of a large city in Saudi Arabia, served as the second research setting for a group of six vocational rehabilitation practitioners. This location was most appropriate because all vocational rehabilitation practitioners work at the same location. Focus groups were conducted one day apart, with the group of special educators meeting on the first day and the vocational rehabilitation practitioners meeting on the second. The research was conducted in professional conference rooms similar in size and arrangement to duplicate the experience for the groups as closely as possible. Because the researcher was the speaker for the instructional video in the focus group sessions, tables were close to the display screen so the researcher’s voice was audible to all participants. All participants watched the same presentation about transition services on a video projection screen.

**Data Collection Procedures**

First, the researcher obtained permission to conduct this study from the Ministry of Education in Saudi Arabia. Afterwards, approval for the research was
obtained from the Institutional Review Board at the University of Northern Colorado (see Appendix A). The researcher obtained permission from Kohler et al. (2016) to use images of the taxonomy for research purposes (see Appendix B).

To obtain participants for the study, the researcher arranged introductory meetings with one professor of special education at a university for females and the director of a vocational rehabilitation center to discuss the purpose of the study and confirm that each was willing to serve as a contact person for recruiting participants. At this point, the researcher addressed all questions from the contact person and completed all remaining paperwork related to permission. One contact person invited special education teachers to participate in the study and provided a list of potential participants from this group to the researcher. The second contact person invited vocational rehabilitation practitioners to participate in the study and provided a list of potential participants from this group to the researcher. Contact persons invited only potential participants meeting the established criteria. The researcher sent a second invitation with a description of the study and a consent form (see Appendix C) to confirm final participants for both groups. After participants confirmed their ability to attend, the researcher scheduled the best times and dates to complete the study. Participants were reminded of the program one week ahead, and a second reminder was sent one day ahead. On the day scheduled for their group, participants reported to a designated meeting room to sign a consent form and complete the study. Each study session took approximately two hours from start to finish.

The researcher started by introducing herself and providing a general description of the study and the process for the day. Then, the participants were invited to introduce themselves. Following introductions, the researcher delivered a
short, general presentation about transition services to the participants. Afterwards, participants watched a 20-minute video about transition services for individuals with intellectual disability. The video was narrated in Arabic by the researcher. The video presented the definition of intellectual disability and transition services and the five components of the Kohler et al. (2016) taxonomy (student-focused planning, student development, interagency collaboration, program structures, and family engagement). Examples of elements of the five components of the Kohler et al. taxonomy were included in the video. Important considerations for transition services for individuals with intellectual disability concluded the video (see Appendix D). A transcript of the video, in English, is provided in Appendix D.

Following the video, each group completed an individual questionnaire and participated in a focus group discussion facilitated by the researcher and guided by the research questions. Participants shared their perceptions about the usefulness of transition services in general for improving postschool outcomes for females with intellectual disability. They also shared their perceptions about the Kohler et al. (2016) Taxonomy of Transition Programming diagram and its feasibility for guiding the implementation of transition services and programs. The participants were able to generate transition service elements based on the Kohler et al. taxonomy areas that represented a possible structure for transition services in Saudi Arabia. After the focus group discussion and diagram analysis, each participant completed a short individual interview, wherein each shared any additional personal reflections about transition services.
Data Sources

Multiple sources were used to generate data for this qualitative study, which allowed triangulating of the data to maximize credibility of the results, as recommended by Creswell (2013), Merriam, (2009), and Yin (2003). These sources included:

- Individual background questionnaire.
- Focus group discussion transcripts from each group: special education teachers for females with intellectual disability and vocational rehabilitation practitioners for females with intellectual disability.
- Collection and analysis of the diagrams of elements related to the Kohler et al. (2016) taxonomy areas, which represent artifacts in this study.
- Individual post discussion interviews.

Each of these sources of data is discussed below:

**Individual background questionnaire.** The researcher developed a background information questionnaire to collect information about participants’ experiences working with students with intellectual disability, input about their teaching philosophies, and their attitudes about integrating students with intellectual disability into jobs and society in general (see Appendix E). For example: (a) What do you do now and how successful is it for preparing females with intellectual disability for adulthood? (b) What are your beliefs about postschool outcomes for individuals with intellectual disability? and (c) Why did you become a teacher of students with intellectual disability? The background questionnaire also collected information about job status, diploma earned, and years of experience. The researcher distributed this
questionnaire and allowed approximately 10 minutes prior to starting the focus group sessions for participants to complete the questionnaire.

**Focus group discussions and diagrams.** Focus group discussions were used to gain an understanding of participants’ perspectives regarding transition services and their suggestions for implementing transition services in Saudi Arabia. Focus group discussions were conducted in Arabic and lasted 30 minutes. Sessions were recorded and transcribed, then translated into English for the data analysis. The following questions guided the focus group discussions: (a) What influence do you think the Kohler et al. (2016) Taxonomy of Transition Programming would have on outcomes for female with intellectual disability? and (b) Do you think that transition services could contribute to increased desirable postschool outcomes for females with intellectual disability? How (see Appendix F)? These semi-structured questions provided a framework for discussion while allowing flexibility in the responses of participants (Merriam, 2009). Following these two questions, participants discussed the feasibility of using the five components of the Kohler et al. taxonomy for transition services in Saudi Arabia (student-focused planning, student development, interagency collaboration, program structures, and family engagement). During this part of the discussion, the group received a sheet of paper with the five components of the Kohler et al. taxonomy written in Arabic. They were asked collectively to draw a diagram of their own representing their ideas related to the feasibility of implementing transition services for females with intellectual disability in Saudi Arabia. They were directed as follows: Based on your experience and the video, create a drawing that shows a model
for transition services especially for Saudi Arabia. Would you add anything not included in the taxonomy?

Participants’ diagrams of their ideas for a model for transition services represent a tangible artifact, a visual communication reflecting how participants synthesized the information from the session. The researcher understands that these diagrams might have been biased, incomplete, subject to interpretation, and possibly inaccurate. However, such diagrams may also reveal issues or themes not identified via other data sources, or they may confirm substantial themes (Merriam, 2009).

**Interviews.** Each group of participants completed an individual interview following the focus group discussion. The use of interviews is the most common data collection technique in qualitative research in the educational field and in most social sciences (Merriam, 2009). Individual interviews were an appropriate data collection method for the current study because they contributed additional information to the early investigation of a specific phenomenon. According to Merriam (2009), an interview is an appropriate method for collecting data about something that cannot be observed directly. An interview can be described as a process where participants and the researcher are engaged in a focused conversation around a specific topic following questions related to this topic (deMarrais, 2004).

The researcher conducted a five-minute individual interview with each participant to provide any clarifying information that did not emerge during the group discussion. The researcher asked the following two questions: (a) Reflecting on the group discussion, what are your individual thoughts about this taxonomy? and (b) Do you think you could use this model in your work? How? (see Appendix G). The interviews were conducted using communication skills designed to establish and
extend the relationship between the researcher and the study participants (Merriam, 2009). Finally, the researcher asked participants to add any additional comments, issues, or suggestions they had about offering transition services in Saudi Arabia.

Individual interviews were tape recorded, and the recordings of the interviews were downloaded into a computer file and saved into group folders using a password-protected protocol. The researcher transcribed the interview recordings and translated them into English in written files. All materials will be saved in locked files for three years, after which all materials will be destroyed.

**Data Analysis**

The data obtained from the background questionnaire, focus group discussions, diagrams, and individual interviews were combined to create interpretable data (Merriam, 2009). The collected data provided detailed information regarding the participants’ understanding about the elements of implementing transition services. The researcher qualitatively evaluated the data by becoming immersed in the data to look for themes and similarities among the participants’ responses regarding their experiences during the session, their perceptions, and their suggestions for providing transition services and achieving positive transition outcomes for students with intellectual disability in Saudi Arabia. The objective of the thematic analysis process was for the researcher to identify prominent statements and common themes related to participants’ shared experiences, resulting in rich descriptions of their perceptions and perspectives.

Several steps guided this analysis process. First, the researcher translated the pre-focus group questionnaire, focus group discussion transcripts, diagrams, and interview transcripts from Arabic to English. A professor of special education at a
university for females in Saudi Arabia reviewed the Arabic transcripts for accuracy and understandability. This professor checked several English translations for accuracy as well. Participants reviewed their own transcripts in Arabic to ensure that they accurately reflected their thoughts and experiences. Most participants were not fluent in English and, therefore, could not review the English translations. Also, participants used slang in many responses instead of formal Arabic. However, translated transcripts were also reviewed by a bilingual professional for accuracy and understandability.

Next, the researcher read and reread the transcripts as many times as needed, making margin notations and graphics in order to begin coding ideas reflecting responses related to the research questions. “Coding involves aggregating the text or visual data into small categories of information, seeking evidence for the code from different databases being used in a study, and then assigning a label to the code” (Creswell, 2013, p. 184). The researcher coded transcript data, starting with open codes consisting of words or phrases that (a) related directly to the research questions (e. g., value, outcomes, feasibility, recommendations), (b) were repeated consistently across participants (e.g., legislation, integration, family, acceptance), and (c) words and phrases directly from the taxonomy for transition (e. g., collaboration). The researcher reviewed transcripts repeatedly until reaching saturation. Adequate saturation was determined at the point at which no new ideas emerged from any of the data sources. To complete reviews, a second research professional read the raw data and the thematic analysis generated by the researcher to determine accuracy, the level of agreement in interpreting the transcripts, and any possible new themes.
Some categories developed from the literature and research questions (e.g., feasibility of transition services and influence on postschool outcomes) were used in this stage of data analysis to provide an initial structure while remaining open to more themes that could emerge from the analysis (Creswell, 2013). Themes “are broad units of information that consist of several codes aggregated to form a common idea” (Creswell, 2013, p. 186). Through repetitive review, the researcher highlighted common words, phrases, patterns of thinking, and behavior, creating various coding symbols to represent categories representing common themes emerging. After a complete review of individual questionnaires, focus group discussions, diagrams analysis, and individual interviews, potential themes and subthemes were grouped and identified as they emerged.

**Research Trustworthiness**

The researcher conducted this study with methodological rigor to ensure adequate reliability and validity of the results. Ethical procedures for human participants were a primary objective. The researcher established confidence in the results of the study by addressing several key areas related to research trustworthiness (Merriam, 2009; Merriam & Tisdell, 2016).

**Internal Validity**

Internal validity is the degree to which research findings accurately reflect the reality of the experience (Lincoln & Guba, 1985). Internal validity is conceptually based on the assumption that reality is not a fixed, measurable, objective phenomenon awaiting discovery; reality is holistic, complex, and dynamic, and it can never be attained completely (Maxwell, 2005). The researcher used several techniques in this
study to maximize internal validity and minimize the potential influence of researcher bias. The researcher reflected and considered the potential bias that she may bring to the group sessions and made efforts to acknowledge and note any of her own behavior that may influence results. To minimize any demand effects, the researcher maintained a position of objectivity as much as possible during all phases of the research.

To further assure internal validity, the researcher created the same experience for both groups of participants to the fullest extent possible. Rather than speaking in person to translate the video to Arabic, she dubbed her voice into the video so that both groups experienced the same presentation. The researcher rehearsed the introduction, considering body language and expression as well, so her presentation was as consistent as possible. The rooms involved were furnished, lighted, and arranged the same way for both groups.

The researcher used triangulation and member checks during the data analysis phase of the research to further support internal validity. Triangulation is a primary means of establishing overall validity and reliability. Triangulation involves examining how multiple sources of data converge to identify patterns in the data addressing the research questions. These data sources were compared to determine if the categories and themes developed by the researcher were consistent across data sources (Merriam, 2009).

The researcher also conducted member checks to ensure the data recorded by the researcher matched what they intended to express and made sense to them. Any added perspectives or perceptions were included in the final data analysis process (Merriam, 2009; Merriam & Tisdell, 2016). “This is the single most important way to ruling out the possibility of misinterpreting the meaning of what participants say and
do and the perspective they have on what is going on” (Maxwell, 2005, p. 111). The researcher sent the interview transcripts to the participants by e-mail in order to verify the content.

**External Validity (Transferability)**

External validity (transferability) represents the degree to which the findings of a study apply to other settings and contexts (Merriam, 2009; Merriam & Tisdell, 2016). To strengthen the external validity of this study, the researcher collected a large amount of detailed information to create a rich, thick description of the experience. The data collected included information about the participants and their perspectives; it also included information about settings, conditions, events, and the overall context of the study. Rich, thick descriptions allowed readers to transfer information to other situations more easily because such descriptions provide ample opportunity for readers to perceive shared characteristics (Creswell, 2013). The researcher supported these descriptions with quotes from participants and detailed reflections (Merriam, 2009).

Peer debriefing also helped to establish the external validity of the study. The researcher submitted the data and analysis to an independent, credible expert to review the research process and resulting data analysis (Creswell, 2013). This expert was a doctor of special education at King Saud University. This technique confirmed the interpretations and conclusions matched the data, supporting internal validity. Further, peer review supported external validity in helping to establish methodological rigor and academic relevance to the broader body of research.

**Reliability**

Reliability relates to the consistency of the results of a study, or how likely it is the same results will be obtained under different circumstances. Strong reliability
allows other researchers to replicate a given study, determine whether they obtain similar results, and progress in establishing the overall validity of the results of interest. In qualitative research, it must be noted that human behavior is dynamic. However, this apparent challenge could be an asset in qualitative research because it addresses the dynamic nature of human behavior in a way that quantitative research does not (Merriam, 2009; Merriam & Tisdell, 2016).

As noted above, the researcher made special efforts to ensure that both groups of participants had the same experience to the degree it was possible. The physical setting, researcher behavior, and the session processes were duplicated. This effort supported reliability in that both groups of participants were generating responses to the same experience as much as possible.

To further support the reliability of this study, the researcher created an audit trail. The audit trail addressed the issue of replication, or repeatability, in that it established a log containing details of the actual study and how the researcher arrived at the results (Merriam, 2009; Merriam & Tisdell, 2016). The Log is a detailed description of the journey of the research process in the form of a diary, containing specific information about how data were collected, how categories were determined, how actual events in the study were conducted, and how decisions were made throughout the process of inquiry.

**Ethical Considerations**

The researcher addressed several ethical issues in this study, as recommended by Creswell (2014). One issue was anonymity or securing the identity of participants. The researcher created pseudonyms for all of participants and used these pseudonyms in all work with the data and research manuscripts. Actual names were used only for
initial contact and during individual interviews. Pseudonyms were assigned after individual interviews. All data will be kept in a locked file and will be destroyed three years after the study.

The issue of confidentiality is related to anonymity, which requires the researcher to be sensitive to any potential public exposure of participants as having completed the study. Because this study took place in Saudi Arabia, the researcher was vigilant regarding potential breaches of confidentiality, such as showing recognition to a participant if encountered in daily life. This effort assured participants were not inadvertently identified with respect to this research.

In research where there is significant contact and interaction with participants by the researcher, an additional ethical consideration is the manner and quality of relationships established between the participants and the researcher (Merriam, 2009; Merriam & Tisdell, 2016). The researcher took care to avoid criticisms or make value judgments in response to anything participants said or did, maintaining an open, friendly, and sensitive attitude throughout the research sessions. The researcher was also alert to setting aside personal perceptions and beliefs to focus on listening and observing during the research process.

Saudi culture and best practices dictate that a researcher place emphasis on being respectful to participants during the three critical stages of empirical research: approach, interaction, and separation. In accordance, the researcher followed Merriam’s (2009) guidelines for entry into the study and exiting the study. Merriam (2009) indicated the entry stage as the process of gaining entry to the site, generating confidence of those involved with the phenomenon being studied, and gaining permission of those responsible for approving the activity. This means the researcher
must explain the purpose of the study, the expected interaction during the study, the rationale behind the study interaction sessions, and how the researcher intends to use the findings. During data collection the researcher maintained objectivity and a professional stance. The exit stage refers to the process of gradually removing the researcher from the setting until the data collection process is complete. This gradual distancing helps to maintain relationships formed and prevents an abrupt exit which can be disturbing for participants (Merriam, 2009).

Summary

This experiential study used qualitative methodology to investigate the perceived value and feasibility of introducing transition services for females with intellectual disability in Saudi Arabia. Specifically, two groups of professionals working with females with intellectual disability in Saudi Arabia completed a research session that included an individual background questionnaire, an instructional presentation about the Kohler et al. (2016) Taxonomy for Transition Programming, a postinstructional focus group discussion, a diagram analysis, and an individual interview. The qualitative data analysis followed the procedures recommended by Creswell (2013), Crotty (2003), and Merriam (2009). Verbal data were reviewed, coded, and organized into themes representing consistent responses by participants. The multiple sources of data were triangulated to maximize the degree to which the interpretations made by the researcher accurately reflected the experiences of the participants. The researcher observed the major considerations involved in conducting qualitative research with focus group discussions and interviews, including ethics, objectivity, courtesy, and scientific rigor.
CHAPTER IV
RESULTS

This qualitative study focused on the experiences and perceptions of special education teachers and vocational rehabilitation professionals who provide care and training for females with intellectual disability at transition age in Saudi Arabia. The study was an in-depth examination of the participants’ perspectives on the overall value of transition services for students with intellectual disability. The study specifically focused on the potential use of the Kohler et al. (2016) Taxonomy of Transition Programming as a framework for transition programs designed to increase desirable postschool outcomes for females with intellectual disability in Saudi Arabia.

I used a questionnaire, focus group discussions, a diagram analysis, and individual interviews to collect information about participants’ attitudes and perceptions of the value of transition services and the taxonomy for transition after viewing an instructional video about this subject.

The research questions for study were:

Q1 What are teachers and practitioners’ perceptions of the overall value of transition services for females with intellectual disability in Saudi Arabia?

Q2 What influence do teachers and practitioners perceive that transition services could have on increasing desirable postschool outcomes for females with intellectual disability in Saudi Arabia?

Q3 What are teachers and practitioners’ perceptions about the feasibility of using the five components of the Kohler et al. (2016) Taxonomy for Transition Programming 2.0 to develop transition services in Saudi
Arabia (student-focused planning, student development, interagency collaboration, program structures, and family engagement)?

Q4 What recommendations do the teachers and practitioners have for implementing a modified taxonomy for transition programming for females with intellectual disability in Saudi Arabia?

In this chapter I will present a description of the characteristics of the participants, the research setting, and the data collection procedures. Next, the results of the thematic data analysis are presented in a narrative style, describing main themes and subthemes that emerged. The next section is a presentation of the results of the diagram analysis exercise, wherein participants completed a blank copy of the taxonomy diagram that represented their recommendations for fitting the structure of the Kohler et al. (2016) Taxonomy for Transition Programming to the Saudi Arabian context. The chapter summary follows the presentation of the diagram exercise results. Chapter V provides a discussion of the results as they relate to each research question.

Data Collection Procedures

In this study, several sources were used to generate information, allowing appropriate triangulation of the data. The researcher developed a background questionnaire (see Appendix E) to gather information about participants’ perspectives on working with females with intellectual disability, which they completed before the instructional video. After the instructional video, three data collection activities took place: (a) each group had a discussion about the Taxonomy for Transition Programming (see Appendix F), (b) each group completed the blank copy of the taxonomy diagram components to fit with the Saudi Arabian context (see Appendix H), and (c) each participant completed an individual interview for further clarification and additional thoughts (see Appendix G). The focus group discussions were guided
by the researcher with a series of semi-structured, open-ended questions. This format allowed the researcher to obtain additional explanations and understanding of professionals’ perspectives regarding the overall value of transition services for females with intellectual disability, participants’ views about the feasibility of using the Kohler et al. (2016) taxonomy to guide the development of effective transition programs, and their suggestions for implementing such a system in Saudi Arabia. The researcher generated a final diagram that represented the combination of the group diagrams as a model for transition services for Saudi Arabia.

As indicated in Table 1, a total of 11 persons participated in this study. Five of these were special education teachers and six were vocational rehabilitation practitioners (one teacher did not show up). These participants met the criteria described in Chapter III. Throughout this paper the individual special education teachers will be referred to as “Teachers,” and individual vocational rehabilitation practitioners will be referred to “Practitioners.” These individuals are also referred to by numbers in Table 1. Also, all participants were Saudi Arabian special education majors who were currently employed as special education teachers or as vocational rehabilitation practitioners working with females with intellectual disability in a major city in Saudi Arabia.

Data collection for this study occurred in two settings in Saudi Arabia. The first location was a university for females, which served as the setting for a group of five special education teachers who specialize in educating students with intellectual disability. The second location was a vocational rehabilitation center for females, which served as the setting for a group of six vocational rehabilitation practitioners. The research was conducted in large conference rooms furnished with eight round
tables and chairs. The procedure for both groups was conducted in the same order and time frame.

Table 1

*Participant Descriptions*

<table>
<thead>
<tr>
<th>Group</th>
<th>Current job</th>
<th>Education</th>
<th>Years experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special education</td>
<td>Teacher 1</td>
<td>BA special education (intellectual disability)</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Teacher 2</td>
<td>BA special education (intellectual disability)</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Teacher 3</td>
<td>BA special education (intellectual disability)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Teacher 4</td>
<td>BA special education (intellectual disability)</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Teacher 5</td>
<td>BA special education (intellectual disability)</td>
<td>8</td>
</tr>
<tr>
<td>Vocational rehabilitation</td>
<td>Practitioner 1</td>
<td>BA special education with autism and behavior diploma</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Practitioner 2</td>
<td>BA special education (intellectual disability)</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Practitioner 3</td>
<td>BA special education</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Practitioner 4</td>
<td>BA special education and Arabic diploma</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Practitioner 5</td>
<td>BA special education</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Practitioner 6</td>
<td>BA special education</td>
<td>9</td>
</tr>
</tbody>
</table>

*Note.* BA = Bachelor of Arts.
The researcher greeted participants as they arrived, introduced herself, and allowed participants to introduce themselves as well. At this point, the researcher gave participants an overview of the session process, indicating that they would complete a questionnaire, watch a video, have a group discussion, and share their ideas in an individual interview. The researcher also provided directions to the restrooms and announced that participants were free to use the restrooms when needed, but that a short break for refreshment would follow the video and group discussion.

The researcher distributed consent forms for participants to read and sign, restating that their responses would be kept confidential. After all participants gave consent, the researcher distributed the pre-session questionnaire and allowed participants 10 minutes to complete it. Before showing the video about the Taxonomy for Transition Programming, the researcher stated that participants would “view a brief video about transition services for students with intellectual disability.” The researcher did not in any other way deliver instructional information about transition services or the Taxonomy for Transition Programming. The researcher also requested participants to refrain from asking questions or starting discussions before the end of the video. Blank sheets of paper and pencils were provided to participants so they could take notes if they chose to do so.

After reviewing the overall study process and receiving paper and pencils, participants viewed the 21-minute instructional video about transition services for students with intellectual disability and the Kohler et al. (2016) Taxonomy for Transition Programming. The video presented detailed information about intellectual disability, transition services for students with intellectual disability, and the elements of the Kohler et al. (2016) Taxonomy for Transition Programming (student-focused
planning, student development, interagency collaboration, program structures, and family engagement). All participants watched the same presentation about transition services on a video projection screen. At the conclusion of the video, each group had a 30-minute discussion about the video guided by the following two questions: (a) What influence do you think the Kohler et al. (2016) Taxonomy for Transition Programming would have on outcomes for females with intellectual disability? and (b) Do you think that transition services could contribute to increased desirable postschool outcomes for females with intellectual disability? How? The discussions were audiotaped.

A 20-minute break followed the group discussion, during which the researcher provided snacks and beverages for all who attended. After the session break, each group of participants received a blank copy of the taxonomy diagram, and they filled in the components so that each component represented their ideas about a version of the taxonomy for transition programming that could be used in Saudi Arabia for females with intellectual disability. The diagrams represent participants’ recommendations for fitting the structure of the Kohler et al. (2016) Taxonomy for Transition Programming to the Saudi Arabian context. After the groups finished generating their diagrams, each participant completed a five-minute individual interview, during which they had the opportunity to provide any clarifying information that did not appear during the group discussions. The researcher asked participants to add any additional comments, issues, or suggestions about offering transition services in Saudi Arabia.

The researcher observed that participants in both groups willingly participated in the study. They watched the video attentively and participated actively in the group discussions. The vocational practitioners were notably enthusiastic about the idea of
learning about transition programming, the instructional video, and the Taxonomy for Transition Programming. Vocational practitioners made a special effort to ask the researcher for a copy of the video so that they could view it again and share it with others.

**Thematic Analysis**

To provide rich descriptions of participants’ perspectives about the value of transition services for females with intellectual disability in Saudi Arabia and the feasibility of the Taxonomy for Transition Programming in this country, the data are organized according to main themes and subthemes that represent their viewpoints as expressed in the content of the questionnaire, group discussions, and interview data. The elements of participants’ experiences, as expressed in the themes and subthemes, clearly interact across conceptual boundaries to create a complex picture of the needs that participants perceive related to developing transition services for females with intellectual disability in Saudi Arabia. The following main themes emerged from the thematic analysis:

- **Main Theme 1: System Structures**
- **Main Theme 2: Beliefs and Values**
- **Main Theme 3: Individual Characteristics and Integration**
- **Main Theme 4: Collaboration**
- **Main Theme 5: Centrality of the Family in All Efforts and Processes**

In the sections that follow, supporting comments from participants are provided along with the narrative description for each of the five main themes and related subthemes adhering to the order shown above.
Main Theme 1: System Structures

Main Theme 1 relates to the absence of system structures that are needed to establish and deliver transition services in Saudi Arabia. This theme highlights governmental and organizational needs related to supporting positive postsecondary outcomes for females with intellectual disability. Participants expressed that legal and financial support for individuals with intellectual disability are lacking, and necessary programs are not established. Comments also indicated that knowledge and skills for developing and delivering transition services are limited among educational professionals. The subthemes related to system structures were the following: (a) policies, (b) educational and professional preparation, and (c) funding.

Subtheme A: Policies. The participants consistently shared that achieving positive outcomes for students with intellectual disability in Saudi Arabia requires several changes in policies related to individuals with intellectual disability. Comments demonstrated that a system for providing effective transition services to students with intellectual disability in Saudi Arabia will require consistent support by established authorities in the government and the Ministries of Education and Labor. Participants expressed that current legislation does not mandate transition services for females with intellectual disability, and current policies are subject to differences in interpretation and practices by employers and family members who manage the resources and activities of females with intellectual disability.

The lack of appropriate legislation was directly expressed by Practitioner 3, who said, “There is no law giving individuals with intellectual disability the right to be independent.” Teacher 3 stated, “We need legislation that helps students with disability to get their social rights. The concepts of disability should be improved in
the society, and all levels of authority should be involved.” Practitioner 6 pointed out the lack of established criteria and guidelines for females with disability, saying,

The government does not provide consistent guidelines and criteria for identifying females with intellectual disability. Many individuals with intellectual disability have issues that will not allow them to integrate with society, but some are very trainable. The Ministry of Labor should also provide support to them.

The need for legislation was further established as Teacher 1 said, “For Saudi Arabia, we need the power of law to work with them [students with intellectual disability].” Similarly, Teacher 5 stated,

There must be a general and comprehensive law and legislation on all special education issues. Provisions made by the Council of Disability are not enforced. There should be a comprehensive system for all Ministries. [Transition services should start] with legislation and law. In addition, there must be a system to protect students with intellectual disability.

Related to organizational practices, participants’ comments clearly indicated that current employment laws and practices in Saudi Arabia present challenges to students with intellectual disability. Some participants raised the important issue that families and businesses use current laws to benefit themselves instead of individuals with intellectual disability. Practitioner 4 stated,

I have an important opinion, which is [the importance of] the support of the state for the project [implementing a taxonomy for transition services] and finding real jobs [jobs that really exist] for females with intellectual disability because [legally] employing an individual with a disability is valued as employing four normal persons [companies receive financial benefits from the government]. The company declares that it employs persons with disabilities, but in fact there are no individuals with disabilities acting in it. [Companies are compensated for wages and benefits at four times the going rate for each person with disabilities that they hire].

Another participant indicted a primary issue for females with intellectual disability that emerged throughout the data is that sometimes their families do not
allocate the resources that rightfully belong to them. For example, Teacher 5 expressed concerns about family control of students with intellectual disability, saying,

Why doesn’t the Ministry oblige the families to develop their children? There is no legislation to oblige families to develop their children, and the schools [or Ministry of Education] should follow-up on the students [after they leave school]. Even [in many cases] when the allowance should be in student’s account to buy his personal stuff, it is taken by father and not given to the children. This allowance is given to the father not the mother because he is the guardian. The divorced woman may have a daughter with a disability and pay for her, but the father takes the allowance and does not give it to the mother. It is the system in Saudi Arabia that the allowance is given to the guardian.

**Subtheme B: Educational and professional preparation.** Needed training for teachers, vocational rehabilitation specialists, and administrators appeared as an issue consistently across the data. Comments suggested that current teachers, administrators, and service providers lack an overall understanding about transition services, and they lack the wide range of skills that they need to provide effective services for students with varying needs. Participants agreed that training is necessary to create awareness about transition services among professionals and members of the society.

Practitioner 2 openly expressed professional training needs, saying, “We, as specialists, need intensive training on this program and how to deal with it to increase opportunities for success for females with intellectual disability.” Teacher 2 emphasized that practicum-type training is likely most appropriate, stating, “We as teachers need training on these programs, not scientifically, but practically, and on how to apply them with the students.” A member of the Teachers’ group expressed that the change will take time, saying, “We need intensive training on this program to
raise student results. This training will take time to reach the desired results because this program requires a number of parties and cooperation to be a success.” Teacher 4 stated, “I wish there was a special college course on the transition stage. If this stage is studied as a specialty, transition programming is more likely to be applied and result in positive outcomes for students with intellectual disability.” Teacher 5 noted that training needs go beyond the level of teachers and vocational rehabilitation practitioners, saying, “There should be a comprehensive training program including all the stakeholders to apply the model as required. It is not only the teachers’ role.”

Similar to the teachers, practitioners consistently emphasized their need for training. For example, Practitioner 5 said, “We need to be trained in the details of transition programming because I do not have enough information about it, and I do not know how to use it to serve females with intellectual disability.” Others also emphasized the importance of training. Practitioner 1 said, “It will take a sufficient amount of training to understand transition services and the taxonomy in detail.” Practitioner 4 concurred, stating, “We need to understand transition programming deeply to apply it to reality.” Practitioner 2 expressed the importance of establishing awareness about the rights of persons with intellectual disability, saying, “The society should understand the rights of individuals with intellectual disability.”

**Subtheme C: Funding.** Difficulty with obtaining needed funding emerged throughout the data as a third critical issue related to system structures for providing special education services to individuals with intellectual disability in Saudi Arabia. Participants expressed that, despite ongoing advances in special education, they still face issues with obtaining needed funding. Teacher 3 noted financial constraints, saying,
Things are complicated, financial support is needed, and the students are most important. So, no ideas can be successful if there is no financial support or budget. We always face problems in financial support; we get tired [of lacking materials and funds] and start to spend our own money. They [the administration] are used to us paying from our salaries, and if we continue they will get used to it forever.

Teacher 1 shared similar frustration, stating, “You pay and support from your own money, and in the end your work is attributed to someone else.” Other participants also addressed the need for systematic funding. For example, Teacher 4 said,

From my seven-years working experience, I can say that 80% of students with intellectual disability will not become independent or develop self-determination, because the schools’ financial resources for supporting students with intellectual disability are very weak.

Regarding implementing an adapted taxonomy for transition programming,
Practitioner 4 remarked, “We also need the state to support it financially.” Similarly, Practitioner 5 stated, “This taxonomy of transition programming is difficult to apply, especially with certain cases in the center. There are no budgets and many other tools we need to train females with intellectual disability.”

Participants also revealed that financial issues also extend to families, who often struggle with the cost of special care for family members with intellectual disability. Teacher 3 referred to the burden on families directly, saying, “Yes students with intellectual disability should be involved in the community, but first they have to receive preparation for the work environment because the financial burden is huge on their families.” Similarly, Practitioner 3 indicated “They [females with intellectual disability] may be integrated in the society, and the family is able to observe them, but it [transition services efforts] may need financial incentives such as [provision of] maids for personal care.”
In summary, Main Theme 1 describes participants’ perspectives regarding the need for system structures that support efforts to implement transition services for females with intellectual disability in Saudi Arabia. Comments throughout the data strongly suggest that legislation and specific polices that govern the rights of individuals with intellectual disability and the implementation of transition services are of fundamental importance to establishing successful programs. Participants also expressed that one of the most substantial needs is to provide training for all levels of educational professionals regarding progressive perspectives, instructional practices, and the taxonomy for transition. A third major issue that emerged consistently in the data was that funding for various services and programs is lacking.

Overall, the participants’ comments related to Main Theme 1 suggest that establishing needed system structures is a primary area of focus for implementing transition services in Saudi Arabia. However, beliefs and values in Saudi Arabia underlie many of the structural and legislative challenges to implementing transition services in this country. Therefore, the next main theme that emerged consistently across the data describes participants’ beliefs and values related to implementing transition services and an adapted taxonomy for transition in Saudi Arabia.

Main Theme 2: Beliefs and Values

Comments describing beliefs and values with respect to individuals with intellectual disability in Saudi Arabia were prominent throughout the data. Participants expressed that acceptance and awareness regarding a progressive perspective toward individuals with intellectual disability in Saudi Arabia is limited, and little is expected in terms of preparing females with intellectual disability for future life. Three important subthemes emerged from the data with respect to cultural issues: (a)
acceptance of females with intellectual disability into society, (b) beliefs about transition services, and (c) preparing individuals with intellectual disability for future success.

**Subtheme A: Acceptance of females with intellectual disability into society.** The data consistently included statements indicating that individuals with intellectual disability face difficulties with being accepted in the broader society. Comments from participants clearly imply that the feasibility of implementing transition services and the success of efforts to integrate individuals with intellectual disability into regular community activities (e.g., work, social events) depends on the degree to which persons with intellectual disability are accepted by the external society, meaning people outside of their family. Practitioner 5 indicated that the potential social benefits of transition services are likely to depend on shifting levels of acceptance for females with intellectual disability, saying, “I think that social involvement is a benefit that would be consistent for females with all types of disabilities, provided that the society accepts this category.”

Participants were highly aware of the challenges to social acceptance and isolation issues faced by females with intellectual disability in Saudi Arabia. A member of the Practitioners’ group stated,

> We need to change the thoughts of the society, not only train educators or specialists; we need the full participation of all categories of the society. If the family originally does not accept its child, how can transition services help the child become independent? It is the culture of the society that more time will be required to accept it [integrating females with intellectual disability].

Similarly Teacher 3 said, “I feel that the society refuses students with intellectual disability; the society needs awareness.” A member of the Teachers’ group added, “The concept of accepting students with intellectual disability should be
improved in the society, and all [strata] should be involved.” Teacher 3 shared a short story that illustrates the breadth of this issue, saying,

The transition program and the taxonomy are good ideas, and this taxonomy urges students to practice working, [but] a while ago we went out on a trip with the students to some dairy pastures, and the people in charge asked us not to let the students touch anything. The students came back without touching anything [but did not get to practice anything either]. The students have mild intellectual ability, but I realized that they were not accepted. The society needs to accept persons with disabilities as well as increase awareness. First, I feel that the society refuses persons with intellectual disability; the society needs awareness. For example; when we go out on trips to restaurants, even foreigners refuse to deal with individuals with intellectual disabilities; they fear them. People fear them; for example, a family entered the restaurant, [where this practitioner was with a group of students with disabilities] and when they saw the students with disabilities, they left. Transition services are a good idea that could help students with intellectual disability, but the environment is not promising.

Other participants shared that acceptance is potentially an issue with educational professionals as well as general members of the society. For example,

Teacher 5 shared another short story that highlights the depth of the acceptance issue:

This is one of the disadvantages; the program is good, and we hope to apply it for integration. However, integration is not being applied in reality. For example, one of our students was trained on using the bathroom, and she has good abilities, but when she applied to join a public school, the social specialist met her but didn’t accept her. Why? Had she applied any measurement or even evaluated her? Or trained her? They [public schools] don’t want to integrate students with intellectual disability in public schools. Another example [of the acceptance issue] is a time when a mother came and told me that her daughter was not accepted by her [daughter’s] teachers at an integrated school, and the teacher was not a special education teacher. She [the teacher] was a math teacher. [In society], when we go out on trips with students who have intellectual disability and walk in groups, we see that normal people do not accept them, and they look at them with pity and curiosity.

**Subtheme B: Beliefs about transition services.** Most participants appreciated the potential value of transition services for females with intellectual disability, expressing that they believed transition services could be beneficial. For example,

Practitioner 5 expressed,
Transition services could provide continuous follow-up and care, which would give positive benefits to students with intellectual disability and increase their productivity [ability to work or care for themselves]. With transition services, their [students with intellectual disability] personalities will change and their disability will decrease; the society will accept them. The families who have lost hope for their child’s improvement will see that they become productive and independent, controlling their behaviors and participating in the society, not isolated. This will raise their spirits [happiness] and their self-confidence will increase.

Other participants shared similar views. A member of the Teachers’ group said, “This program will improve the students’ independence skills, and some individuals will be able to work and serve themselves.” Teacher 1 also expressed a positive perspective, saying,

Each child has individual plans that include academic and social aspects. Most of them can benefit from a transition program. We have some students with intellectual disability who have high training abilities, and they can be trained using this program to raise their productivity.

While other participants also expressed a positive attitude, they provided suggestions for making transition services work in Saudi Arabia. A member of the Teachers’ group stated,

It [transition programming] has the effect of increasing the skills of persons with intellectual disability on all levels, whether academically, socially, or for everyday life. However, to implement these services, it [the taxonomy] needs reshaping so it is suitable to our culture and to the range of our society’s acceptance of persons with disabilities.

Similarly, Teacher 2 emphasized, “I can use [transition services] . . . to rehabilitate the younger students, who can be trained early to acquire skills such as independence and self-determination.”

**Subtheme C: Preparing individuals with intellectual disability for future success.** Participants’ statements concerning preparing females with intellectual disability in Saudi Arabia for the future indicated that both special education teachers
and vocational rehabilitation practitioners strongly support efforts to train and educate females with intellectual disability to the extent possible. For example, Teacher 1 stated, “When you prepare a child with special needs, you certainly have a goal, which is [for the child] to be independent and reach the limits of her abilities.” The same teacher added, “We have some students with intellectual disability, who have high training abilities. They could be trained using this taxonomy, and they could raise their productivity.”

Practitioner 2 also expressed that students with intellectual disability should be prepared for future success, saying, “My individual thoughts are that we have to prepare students with intellectual disability, mild, moderate, or severe, and we have to rehabilitate them to act in the society and deal with the society members in any situation.” Teacher 2 expressed that she values the progressive perspective of preparing individuals with intellectual disability for the future that was presented in the video, stating, “In Riyadh they are trying to increase recruitment of students with intellectual disability into different [work] fields, and a number of companies have opportunities for some individuals who have enough skill to be hired.” Practitioner 4 emphasized that transition services could help prepare females with intellectual disability for future success, stating, “First of all, [transition services can help] by discovering the skills and capabilities of students with intellectual disability and encouraging these skills and communicating with the employers, companies, or others in the appropriate field.”

In summary, Main Theme 2 describes participants’ views on the beliefs and values related to the process of developing and implementing transition services for females with intellectual disability in Saudi Arabia. Participants expressed that they
believed providing transition services to females with intellectual disability in Saudi Arabia is potentially of some value, but successful outcomes will largely depend on increasing the level of acceptance of females with intellectual disability into the broader society. Participants’ comments were consistent regarding a positive attitude toward transition services and belief that the services would offer benefits to females with intellectual disability. Furthermore, both special education teachers and vocational rehabilitation practitioners expressed that efforts to prepare females with intellectual disability for future success may have a positive influence on their postschool outcomes.

Main Theme 3: Individual Characteristics and Integration

The participants in this study expressed that the individual characteristics of students with intellectual disability will influence the benefits they obtain from transition services. Comments across the data also suggested that individual characteristics also affect the likelihood of these students’ integration in broader educational and community environments. The two subthemes that emerged related to this main theme are (a) individual skills and abilities and (b) integration into educational settings and the community environment.

Subtheme A: Individual skills and abilities. Participants clearly indicated that transition services would work with many, but not all, students. Participants expressed that providing useful transition services for students with intellectual disability depends on individual characteristics and situations. For example, a member of the Practitioners group said, “It [transition services] will be a great benefit for many students with intellectual disability, but not for all students with all types of
intellectual disability.” Another conditional statement was offered by Teacher 1, who said, “It depends on the case because there are students that may be educated, rehabilitated, and taught to live independently, and there are individuals that may benefit for a certain period but will require continuous training.” Similarly Teacher 4 indicated “It depends on the type of disability. If it is mild, the outcomes can be good, and the educational and training processes will be beneficial.” Regarding postschool outcomes for females with intellectual disability, Teacher 5 stated, “The outcomes depend on the capabilities [of the individual] and the extent of the disability, because some of them [students] perform in an excellent manner and some of them require ongoing education and training.” Practitioner 1 expressed some of the conditional issues, saying,

Transition programming is good and beneficial for all cases and their development, and initially I encouraged it. But my opinion is that it may apply [only] to the mild, moderate, and trainable disability cases because the severe disability cases may get benefit only from routine work [life skills training] as they cannot achieve [academically or professionally].

Subtheme B: Integration into educational settings and the community environment. Responses concerning integrating females with intellectual disability into regular classrooms were mixed. Participants’ comments were generally supportive of the value of regular classroom experience for females with intellectual disability in terms of helping to produce better postschool outcomes, but they expressed that in some cases regular classrooms may not be advisable. Comments consistently pointed to the value of classroom integration in terms of social and communication skills. However, participants also expressed potential difficulties with integrating all students and the degree to which students with intellectual disability are accepted by other students in regular classrooms.
A positive attitude about the benefits of placing students with intellectual disability in regular classrooms was expressed as Teacher 1 stated, “Integrating them [females with intellectual disability] with the general education classes has a great effect on both physiological and social abilities through [the student’s] observing and gaining awareness [through interaction] with regular students.” Regarding educating students with intellectual disability in a special classroom, the same participant said, “It is better not to dismiss them, and they should be integrated with their normal peers.” Teacher 3 mentioned social and cognitive benefits, saying, “They acquire new language and have some social life in which they know how to deal with peers.”

Teacher 2 noted that interacting in regular classrooms supports both skill development and broader integration into society, saying, “Yes, [placing students with intellectual disability in regular classrooms] allows them to be integrated in the society to gain great skills from other students.” This teacher expressed the viewpoint that separate classrooms do not offer advantages, saying, “No, of course, it [a separate classroom] has adverse effects on their social development.” Most participants agreed that separate classrooms for students with intellectual disability may not be ideal. For example, Practitioner 1 said, “[in regular classrooms] they gain social communication skills, and they develop their intellectual and thinking skills.” Referring to special classrooms this participant also said, “On the contrary, [in special classrooms] they escape and withdraw from the society, and then they suffer a lack of social awareness and social skills.” Support for placing females with intellectual disability in regular classrooms was similarly supported as Practitioner 2 stated, “The female student should gain new skills in dealing and interacting with the society, and the regular
students should accept them.” Regarding separate classrooms, this participant said, “No, it harms the female student and weakens their capabilities.”

Other responses indicated some of the challenges involved with integrating students with intellectual disability into regular classrooms. For example, Teacher 3 said, “Yes, they may gain good manners but they also may gain bad manners.” Teacher 4 indicated the important issue of acceptance, stating, “In my experience, I do not find complete acceptance of this category [of disability].” This teacher indicated that if the student is not accepted, it may be better to remove them from the regular classroom. She said, “In the case of [other students’] not accepting them, removing them is better.” Other participants indicated that students with severe disabilities may benefit from a special environment designed specifically to support their needs. For example, Teacher 5 said, “If the disability is mild, it achieves good results, but if it is severe, it is better to be involved in specialized locations.”

The participants in this study also expressed that they support the value and importance of efforts to integrate females with intellectual disability into employment that suit their abilities and the broader community. Most indicated that one of the most valuable elements of such efforts is that females with intellectual disability can improve their social and communication skills by interacting outside of the family. However, cultural restrictions create challenges in this area.

An overall positive attitude toward integrating females with intellectual disability was expressed by most participants. For example, Teacher 2 said, “Yes, they should be involved in work to act in the society and to be accepted by the society and to get benefit thereof.” Similarly, Teacher 5 stated, “They should participate in the society and they should continue [after secondary school] with their education and
Practitioners also expressed a positive overall attitude toward integrating females with intellectual disability into jobs and community settings. Practitioner 1 stated, “No, they shall not stay in their homes, and they shall share the society and participate in work and developing the society.” Practitioner 3 expressed, “They should not stay home. On the contrary, integration in the society is better for them and their families to train them to gain more experiences or to execute certain duties in the home.” Similarly, Practitioner 6 said, “Persons with disabilities may be employed by integrating and involving them with the society.”

Participants emphasized the interpersonal benefits to students with intellectual disability of efforts at work and community integration. Practitioner 1 said, “Yes, it [integrating] is a great benefit to develop their [students with intellectual disability] social communication skills.” Practitioner 3 also specified social skill learning as a benefit of efforts to integrate, saying, “Yes, they gain certain social skills that are useful for them.” Teacher 3 stated,

Their [the students’] personalities will change and their disability will decrease; the society will accept them, and the families who have lost hope in their child’s improvement will see that they become productive, independent participants in the society, not isolated.

A practitioner said, “We can begin collaborating with the companies to . . . take the students on training tours, such as to restaurants and workplaces.” Practitioner 6 provided a useful summary, saying, “Yes, it is useful to integrate them [females with intellectual disability] in the social environment . . . so they can be integrated and adapted with the external society and be accepted by the external society.” However, the issue of fitting expectations with the abilities of each student is also reflected indirectly in these comments. For example, Practitioner 2 said, “The students should
be involved in the society and they should be given a professional rehabilitation program consistent for each student.”

In Summary, Main Theme 3 demonstrates that participants are supportive of efforts to integrate females with intellectual disability into regular classrooms and the broader community, but they expressed that the individual skills and abilities of students with intellectual disability will determine the likelihood of providing successful transition services for them. Participants expressed that efforts to integrate students with intellectual disability into regular classrooms and community activities provides opportunities for them to develop cognitive, social, and communication skills. There were concerns about the degree to which students with intellectual disability will be accepted by other students and the external society (outside of the family). The thematic analysis further suggested that successfully integrating individuals with intellectual disability into educational and community settings requires coordinated efforts. The next main theme that emerged consistently across participants’ comments concerns the importance of collaboration to developing and implementing transition services for females with intellectual disability in Saudi Arabia.

**Main Theme 4: Collaboration**

The need for extensive collaboration among authorities, administrators, and professionals in efforts to implement transition services was consistently raised by the participants of this study. Comments indicated that collaborative efforts among multiple stakeholders are needed to communicate to educational professionals and the general public about students with intellectual disability and how to help them be successful. Participants expressed that collaborative efforts are also required to
provide needed professional training and transition program development. The two subthemes that emerged related to collaboration are (a) collaboration across institutions (agencies) and (b) collaboration across families and schools.

**Subtheme A: Across institutions (agencies).** Participants clearly understood and expressed that collaboration between agencies is one of the most important factors in implementing transition services and a taxonomy for transition programming in Saudi Arabia. Comments consistently suggested that collaboration between service agencies and government authorities is necessary and that efforts to collaborate will be influenced by the degree to which authorities support and promote team sharing and responsibility. Noting the need for multiple levels of collaboration, Practitioner 5 stated, “All must cooperate; specialists and the state itself and the government must provide the [necessary] budget and support to all participants.” Similarly, a member of the Teachers’ group expressed, “This program [transition services] needs a number of parties and cooperation to be a success.” In addition, Teacher 4 said, “These programs are big, so it is not individual work but collaborative work. All staff should participate as well as the society.”

Other participants expressed similar beliefs. For example, Teacher 3 stressed the need for collaboration, saying, “Most of the points of the taxonomy can be applied to transition services in Saudi Arabia . . . because these are simple and easy points to apply, but it needs cooperation between institutions to support and establish this program.” Similarly, Teacher 5 stated, “There should be a comprehensive system and collaboration between all ministries, such as health and education, so as to build a solid base for females with intellectual disability to achieve success.” Teacher 2 shared that collaboration is an ongoing issue, stating, “There are many obstacles in accepting
individuals with intellectual disabilities in work; for example, we need to improve the collaboration between ministries and other agencies to help students with intellectual disability.” Practitioner 6 said, “All must cooperate and develop the programs, not only special education teachers, but also all staff in schools.”

**Subtheme B: Across families and schools.** In addition to the importance of collaboration among institutions, comments throughout the data highlighted the need for families and schools to engage in collaborative efforts to educate students with intellectual disability and facilitate their integration into the broader community. For example, Teacher 1 stated, “To implement this service [transition services] the programs must include not only teachers, but also families and employers.”

The need for collaboration between schools and families was confirmed as Practitioner 6 stated, “The specialist must communicate with the family and explain this program . . . and they [the family] must participate and give their opinions.”

Similarly, a member of the Teachers’ group said,

> An important point should be added; it is the role of the family and its participation in planning and in training the students on transition services and the taxonomy. To improve this service, the taxonomy includes not only teachers, but also families.

Lack of family involvement was reported as a major problem for practitioners. A member of the Practitioners’ group said, “Eighty percent of our students can be trained with professional rehabilitation to become independent, but lack of participation of the families is the greatest barrier preventing the transition of the student.”

In summary, Main Theme 4 describes participants’ views about the importance of collaboration at all levels of society to developing and providing transition services for females with intellectual disability in Saudi Arabia. Collaboration among policy-
makers, administrative authorities, schools, and service agencies is needed to implement needed changes to system structures and processes. Participants also indicated that special efforts toward school–family collaboration are needed to raise awareness about students with intellectual disability and potential successful outcomes for them.

**Main Theme 5: Centrality of the Family in All Efforts and Processes**

One of the strongest themes that appeared across the data was the importance and centrality of the family to the care, education, and development of students with intellectual disability. The participants of this study consistently shared comments that illustrated the strong influence that family attitudes and actions have on the lives of individuals with intellectual disability in Saudi Arabia. The three subthemes that relate to centrality of the family include (a) family support, (b) family expectations and, (c) family empowerment.

**Subtheme A: Family support.** The dominance of family influence as either facilitator or obstacle to positive outcomes for students with intellectual disability was unanimously expressed by both groups of participants. Comments indicated that improved outcomes for females with intellectual disability in Saudi Arabia clearly depend on positive support from their families. Numerous comments illustrated the importance of family attitudes and participation. The importance of the issue of needed family support and acceptance was brought forward in a story that Teacher 5 shared:

One of our cases, his father is a doctor, and his mother is an employee. They do not let their children with intellectual disability [twins] go out to the extent that the family goes away for summer vacation and leaves their children at
home with the servants. The parents travel abroad, and the twins stay at home. This is the society that you deal with; they don’t accept these cases. They feel pity for them, but they don’t know what a transition program is and the importance of this for individuals with disabilities who could be effective individuals in the society. They either pity them or abuse them, so I’m telling you there should be a good environment, and laws, and regulations. Some cases need training, but the families do not support any changes in special education.

Additional comments clearly echo the issues highlighted by this story.

Practitioner 2 expressed that despite the efforts of professionals to provide training in self-care and work skills to students with intellectual disability, support is lacking at home, and outside help is hired to provide care for the individuals. This practitioner gave a very pertinent example, stating,

Here, we deal with the girl for four hours in class, and thereafter, the girl goes to her room or with her family. The professional trains her on the toilet, but [when she goes home,] the maid and the family help her, so how can she learn to depend on herself.

One of the teachers clarified the issue of needed family support, stating,

Sometimes early intervention is difficult because many families [of children with intellectual disability] do not expose their child, and they try to isolate them in their houses. Fear and ignorance sometimes become barriers against developing and training individuals with intellectual disability.

Specifically regarding importance of family support to the feasibility of implementing the transition services and taxonomy for transition in Saudi Arabia, Practitioner 4 shared,

First of all, [the process could help] by identifying the skills and capabilities of students with intellectual disability, training these skills, and then communicating with the employment parties, companies, or others in the proper work field. But the most important thing is the opinion and care of family and its acceptance of these processes.

**Subtheme B: Family expectations.** The participants in this study expressed that changes in expectations regarding individuals with intellectual disability are
necessary to facilitate transition programming in Saudi Arabia. Practitioner 3 summarized the issue of expectations clearly, saying, “There is a general cultural environment that shuts out people with disabilities, and people tend to be unwilling to expect persons with disabilities to work and integrate socially.” Practitioner 6 also addressed the issue of expectations for persons with intellectual disability, stating, “Professional providers need support to meet the different needs of students with intellectual disability, and providers have low expectations for these students as a rule.” Teacher 5 made a comment that suggests the need to address family expectations, stating,

We should train and educate the society and the families so they don’t isolate individuals with disability and keep them from going to school. When a child reaches age 10 and has not gone to school, [we ask,] ‘Where have you been before, and why are you coming to us now?’ The society is the starting place, because it includes the families and those who have higher authority, so we should spread awareness. If members of the society are aware, appropriate decisions will come out, and families will help prepare their children and make them qualified for work.

Subtheme C: Family empowerment. Participants clearly indicated that the family empowerment for individuals with intellectual disability is a significant factor to the success of transition services in Saudi Arabia. Comments demonstrated that family attitudes and behavior determine the quality of life, for better or worse, for many individuals with intellectual disability. For example, Teacher 1 stated, “Humans who have a special need should be protected, even from their family. You don’t know how people were raised . . . and to what extent they can abuse. I have experienced incorrect behaviors from some families.” Practitioner 2 stated,

All things depend on the family. Ninety-nine percent of them [students with intellectual disability] depend on the family, meaning that even if the government gives those with special needs the right to open accounts and obtain national cards, the individual still may not be able
to control their benefits and identity. Among the cases we have, the family is the controller, and unfortunately certain families visit the bank to open accounts for themselves.

A member of the Teachers’ group also highlighted the importance of family empowerment, saying, “This application needs reinvestigation in Saudi Arabia to involve families because they have the power to help student self-determination, not the teacher.”

In summary, Main Theme 5 illustrates participants’ perspectives about the centrality of the family in all efforts and processes related to the lives of individuals with intellectual disability in Saudi Arabia. Comments strongly indicated that postschool life for females with intellectual disability is dependent on levels of family support and empowerment. Also, participants indicated that low expectations for functional achievement on the part of individuals with intellectual disability present a challenge to implementing effective transition services.

Diagram Analysis

After each group completed the postsession discussion, they collectively generated a diagram that represented their ideas for adjusting the Kohler et al. (2016) Taxonomy for Transition Programming 2.0 to implement programs in Saudi Arabia. Figure 2 shows the diagram generated by the special education teacher group, and Figure 3 shows the diagram that was generated by the group of vocational rehabilitation practitioners. The two groups produced very similar diagrams, and they articulated their opinions without difficulty.

Both groups included all five components of the original taxonomy. However, they added details to each component that emphasized their specific needs. For example, both groups listed the issues of legislation, staff training, and the need for
community awareness in the program structures component of the taxonomy. In the family engagement component, both groups stressed the importance of developing support, positive expectations, and family training. In the student-focused planning component, both groups specified the need for student awareness, earlier services, and the involvement of multiple stakeholders. Both groups added details to the collaboration component about what organizations and professionals need to collaborate, including the need for the government, educational institutions, and employers work together.

**Figure 2.** Special education teachers’ taxonomy model.
Within student focused planning, creating student awareness of rights and possibilities was emphasized by both groups. Both groups also indicated that family members need awareness and process training at least as much as professionals do. The concept of cultivating higher expectations and support from families for students with intellectual disability was also included in both diagrams. Lastly, both groups included the need to promote community and career awareness in efforts to establish transition programming.
One of the differences between the groups was that teachers appeared to provide items that reflect a general overview and a focus on student needs assessment. Vocational rehabilitation practitioners offered more detailed input, pointing out specific needs in different parts of the model. For example, in the program structures component of the model, teachers indicated “policies and legislation,” but practitioners added specifically “organization for disability rights.” Also, in the interagency collaboration segment of the model, vocational practitioners offered specific collaborative relationships that need to be established and teachers’ input was more general.

Overall, results of the diagram analysis exercise provided information that indicates specific areas where added effort will be needed to use the Taxonomy for Transition Programming effectively in Saudi Arabia. Participants specified critical areas of needed training, legislation, collaboration, and cultural shifts that will influence efforts to establish effective transition services for females with intellectual disability in Saudi Arabia. The responses of the groups to this exercise were similar, but teachers’ diagrams were more general.

**Summary**

To address the research questions for this study, the researcher used a questionnaire, focus group discussions, individual interviews, and a diagram analysis, to collect qualitative data about the perceptions of Saudi Arabian teachers and vocational rehabilitation practitioners related to the value of transition services for females with intellectual disability and the feasibility of implementing the Kohler et al. (2016) Taxonomy for Transition Programming. The results of the thematic analysis of the data sources for this study yielded five main themes: system structures, beliefs and
values, individual characteristics and integration, collaboration, and centrality of the family in all efforts and processes. These themes and their related subthemes illustrate how structural and cultural elements of the Saudi Arabian context influence successfully implementing transition services programs for females with intellectual disability in this country.

Overall, participants’ responses indicated that system structures related to transition programming including legislation, training systems, and funding are limited in Saudi Arabia. Also, numerous comments emphasized that females with intellectual disability currently have little to no access to their own funds, and legislation mandating transition services is not established. Participants’ statements also consistently illustrated that awareness of transition processes is limited in this country, and the acceptance of integrating females with intellectual disability into educational settings, work, and society is currently low. Furthermore, participants expressed that family support and empowerment for individuals with intellectual disability are central to implementing transition services and increasing desirable postschool outcomes of any kind for these individuals. The results of this study have assisted in identifying several issues that present challenges to developing a framework for transition programming in Saudi Arabia, and broad-scale collaboration is needed to ensure the successful implementation of needed changes in systems, structures, and beliefs. Chapter V provides a discussion of the results of this study as they relate to each research question.
CHAPTER V
DISCUSSION

This study examined the perspectives of Saudi Arabian special education teachers and vocational rehabilitation professionals regarding the value of transition services programs for females with intellectual disability in Saudi Arabia and the feasibility of using the Kohler et al. (2016) Taxonomy for Transition Programming 2.0 as a framework for developing effective transition services programs for them. This chapter contains a discussion of the research findings as they relate to each research question. Additional matters for discussion include consideration of insights into the unique culture of the research context for this study, implications of the results for implementing transition programs for females with intellectual disability in Saudi Arabia, limitations of the study, and recommendations for future research.

Research Question Q1

Q1 What are teachers and practitioners’ perceptions of the overall value of transition services for females with intellectual disability in Saudi Arabia?

Research Question Q1 focused specifically on the participants’ beliefs and attitudes about the potential value of transition services for females with intellectual disability in Saudi Arabia. As indicated in Main Theme 2, Subtheme B, beliefs regarding transition services, both teachers and vocational practitioners who participated in this study expressed that they believed transition services could be beneficial to females with intellectual disability by helping them develop more
independence and self-care. In Subtheme C of Main Theme 2, participants voiced strong support for efforts to train and educate females with intellectual disability to the extent possible as part of preparing them for future success. However, a primary concern expressed by the participants in Main Theme 2, Subtheme A, was that a broader awareness and acceptance of individuals with intellectual disability in the society is needed if transition services are to provide value in helping females with intellectual disability achieve greater integration into the society.

As reflected in additional themes and subthemes, comments clearly indicated that the participants believe the success of transition programming and other efforts to integrate females with intellectual disability into broader settings depends on several additional elements. For example, in Main Theme 3, Subtheme A, participants expressed that individual skills and abilities likely determine how much benefit transition services may offer. Furthermore, as participants shared in Main Theme 1, system structures, effective authoritative support in the form of official policies (Subtheme A) will strongly determine the benefits available via transition services to females with intellectual disability.

Furthermore, Main Themes 4 and 5 suggest the potential value that transition services offer in Saudi Arabia would require the involvement and support of family members of females with intellectual disability (Main Theme 5, Subtheme A) as well as collaborative efforts among policy-makers, institutions, and families with a special focus on family–school collaboration (Main Theme 4, Subthemes A and B).

In summary, the results of this study concerning participants’ beliefs and attitudes about the potential value of transition services for females with intellectual disability in Saudi Arabia showed that both teachers and vocational practitioners who
participated in this study expressed positive regard and a desire to help females with intellectual disability integrate into work, community, and broader educational settings more successfully. However, comments clearly indicated that the success of transition programming and other efforts to integrate females with intellectual disability into broader settings depends on individual situations, effective authoritative support, and broader cultural awareness and acceptance related to individuals with intellectual disability. Furthermore, participants expressed that the value of transition services for females with intellectual disability in this country will depend on high levels of collaboration among all stakeholders as well as support and empowerment from their families.

**Research Question Q2**

Q2 What influence do teachers and practitioners perceive that transition services could have on increasing desirable postschool outcomes for females with intellectual disability in Saudi Arabia?

Research question Q2 targeted participants’ descriptions of how transition services might help females with intellectual disability in Saudi Arabia achieve postschool outcomes that include obtaining jobs, participating in community activities, and living independently. Again, most of the themes and subthemes identified in the study have implications for the quality of postschool outcomes for females with intellectual disability in Saudi Arabia if transition services were to be implemented. As suggested in Main Theme 2, Subthemes B and C, both teachers and practitioners expressed positive attitudes about helping females with intellectual disability improve their postschool outcomes and prepare for jobs, if possible. However, as noted in Subtheme A, there were concerns about the degree to which females with intellectual disability will be accepted by other individuals and the external society (outside of the
family). A supportive viewpoint was confirmed in Main Theme 3, Subtheme B, as participants consistently stated that they support the value and importance of efforts to integrate females with intellectual disability into regular classrooms, jobs that suit their abilities, and the broader community. Most indicated that one of the most valuable outcomes of such efforts could be that females with intellectual disability would improve their social and communication skills by interacting in jobs and socializing with people outside of the family. However, both teachers and practitioners noted that outcomes would be limited in relation to the type and degree of disability present in the individual student (Main Theme 3, Subtheme A).

Although participants expressed a strong desire to help females with intellectual disability achieve positive postschool outcomes, they were somewhat pessimistic about the end results of transition services, even if such services and training for students with intellectual disability could be effective if properly implemented. For example, in Main Theme 1, Subtheme A, participants expressed that basic legislation and policies are needed to support changes involved in educating, training, and employing females with intellectual disability with a view toward their achieving independent living. It was also noted that such legislative action needed to direct responsibility to families and employers in addition to educational institutions and vocational services.

Of particular concern to this research question are the perceptions of the participants regarding, Main Theme 5, Centrality of the Family in All Efforts and Processes. A fundamental issue raised by the participants is that desirable postschool outcomes for females with intellectual disability are limited because in Saudi Arabia persons with intellectual disability are completely dependent upon family members.
As noted in Subtheme A, family support, and C, family empowerment, families acquire and manage all financial resources and benefits for these individuals. Successful outcomes require commitment and responsible management of resources on the part of family members who manage these resources.

As Main Theme 5, Subthemes A and C, indicates, the centrality of the family is a critical potential obstacle to creating increased desirable postschool outcomes for females with intellectual disability in Saudi Arabia. These results indicated that some families do not allocate resources to family members with intellectual disability responsibly, and students’ needs are often neglected due to a lack of expectations for training and independence for persons with intellectual disability, as indicated in Subtheme B, family expectations. Comments included in the latter subtheme indicated that low expectations for persons with intellectual disability are a general rule in Saudi Arabian culture; it is the norm for persons with intellectual disability to receive maintenance care and not much more than life skills training. Such results indicate that until different expectations grow at a cultural level, transition programming will be challenged with regard to producing postschool outcomes of gainful employment or postsecondary education.

Overall, the data concerning the potential influence of transition services on postschool outcomes for females with intellectual disability in Saudi Arabia indicated that both special education teachers and vocational rehabilitation practitioners viewed transition services as potentially contributing to improved postschool outcomes for these students in that this practice could provide opportunities for the students to develop skills that will allow them to get jobs, more education, or independent lifestyles. However, participants identified that establishing the acceptance of females
with intellectual disability in regular classrooms, jobs, and throughout the general society is a current challenge. The centrality of the family in the lives of individuals with intellectual disability in Saudi Arabia is another potential barrier to positive postschool outcomes for females with intellectual disability in this country in that families do not always provide needed support or empowerment to family members with intellectual disability. These results imply the importance of raising awareness around the rights and needs of females with intellectual disability in Saudi Arabia as a part of any plan to increase positive postschool outcomes for them, as well as the importance of establishing relevant system structures related to transition services.

**Research Question Q3**

Q3 What are teachers and practitioners’ perceptions about the feasibility of using the five components of the Kohler et al. (2016) Taxonomy for Transition Programming 2.0 to develop transition services in Saudi Arabia (student-focused planning, student development, interagency collaboration, program structures, and family engagement)?

As shown in the diagram presented in the upcoming results for Research Question Q4, with modification, both the teacher and practitioners’ saw value in the five-component Kohler et al. (2016) model; however, they identified a number of barriers to its immediate implementation. Within Main Theme 1, System Structures, several systems-related challenges to implementing the Taxonomy for Transition Programming in Saudi Arabia emerged. In Subtheme A, the participants of this study clearly expressed that establishing legislation and organizational structures to support the rights of females with intellectual disability will be a first step in implementing transition services as proposed in the Taxonomy for Transition Programming.
Within Subtheme A, participants consistently expressed that the feasibility of implementing a similar taxonomy in Saudi Arabia clearly depends on support from authority with legislation and extensive public awareness efforts to promote the acceptance of persons with intellectual disability into jobs and the community. There is currently no definitive legal protection for persons with intellectual disability in Saudi Arabia, and these individuals are either sheltered separately from society with their families or housed in institutions (Ministry of Labor and Social Development of Saudi Arabia, 2017). Furthermore, legal mandates that define clear roles and responsibilities for special education teachers and vocational rehabilitation practitioners were noted in all data sources as being critical to developing effective transition programs for females with intellectual disability in Saudi Arabia.

In addition, within Main Theme 1, Subtheme B demonstrates participants’ perceptions that professional training related to the provision of transition services will be fundamental drivers of successful efforts to implement these services in Saudi Arabia. Both teachers and practitioners expressed they need extensive training about a program taxonomy and transition service-related skills for a wide variety of individuals with different needs. Participants strongly suggested that a modified taxonomy for transition services and added skill training should become part of the college curriculum for all special education teachers. Results also indicate that relevant training needs to extend beyond teachers and vocational rehabilitation professionals to school administrators, counselors, and staff throughout the Ministry of Education.

Lastly, relative to Main Theme 1, the results within Subtheme 3 strongly indicate that sources of funding for transition services need to be established. All of
the participants indicated that they lack the funding needed to provide more than very basic care and training for females with intellectual disability. A notable element that emerged in the data was that professionals in Saudi Arabia, particularly females, need to learn the processes for obtaining funding and support in advocating for their organizations, because the idea of pushing for money or other resources is relatively novel in this society.

Considering Main Theme 2, Beliefs and Values, the results of this study clearly imply that a broader view of persons with a disability on the part of society is needed to make it feasible to apply the components of the Taxonomy for Transition Programming 2.0 (Kohler et al., 2016) effectively. Subtheme A, acceptance in society, highlights the potential difficulty created by a lack of acceptance of individuals with intellectual disability among the general public. Participants expressed similar concerns with acceptance related to placing females with intellectual disability into regular classrooms, jobs, and in the broader community outside of their families in Main Theme 3, Subtheme B. Although these teachers and practitioners supported efforts at integration, individuals with intellectual disability are likely to face difficulties with being accepted by others in classroom, work, and social environments.

Another fundamental component of implementing an adapted taxonomy for transition programming in Saudi Arabia is highlighted in Main Theme 4, Collaboration. In Subtheme A, the participants unanimously voiced that strong collaboration across institutions and agencies is critical. Both teachers and vocational practitioners consistently indicated that needed changes in collaboration between government departments, educational institutions, employers, and social services
organizations will depend on authoritative support during early efforts. As clearly described in Subtheme B, collaboration between families and schools will be equally important to implementing a taxonomy for transition programming in Saudi Arabia in that the family unit serves as the center in the culture of this country.

In Main Theme 5, Centrality of the Family in All Efforts and Processes, participants clearly indicated that efforts to promote, support, and reward family engagement in Saudi Arabia will be absolutely fundamental to implementing transition programing prescribed by the Kohler et al. (2016) taxonomy. Family members are completely in charge of the resources and activities of individuals with intellectual disability; therefore, family support, expectations, and empowerment determine the likelihood that these individuals will get the support and encouragement that they need. Participants emphasized that legislation establishing individual rights for persons with intellectual disability and some control over their identities, financial resources, and interests is needed so that females with intellectual disability can learn to self-advocate and increase their levels of self-sufficiency.

In summary, the participants of this study appreciated the potential usefulness of each component of the Taxonomy for Transition Programming 2.0 (Kohler et al., 2016) given appropriate modification to suit the cultural context. However, regarding the feasibility of implementing a modified version of the model, they identified several challenges. First, establishing needed systems and structures, including legislation and specific policies that identify the roles and responsibilities of authorities, teachers, practitioners, and family members is required to move forward with effective transition programming. Second is the need for extensive training for policy makers, educators, and other stakeholders regarding intellectual disabilities and transition
services. Most families and many teachers are not aware of instructional and training practices to help students with intellectual disability function more independently.

Third, allocating appropriate funding to educators and service providers was raised as critical for implementing the model. Fourth, individuals with intellectual disability face difficulties being accepted in the broader educational settings, jobs, and the general society. Participants consistently expressed concerns that the feasibility of implementing a modified taxonomy is likely to be limited by the degree to which females with intellectual disability are accepted by others, even within their own families. Fifth, the results of this study clearly raise the importance of collaboration relative to the feasibility of implementing a modified taxonomy for transition programming in Saudi Arabia. Efforts to raise awareness, educate, train, and support the many stakeholders involved in this effort will require extensive collaboration between agencies and institutions. Finally, a sixth issue related to the feasibility of a modified taxonomy is that the attitude of the family toward females with intellectual disability is likely one of the strongest determinants of the feasibility of implementing a model for transition programming. Work and education opportunities may be legally mandated for individuals with disabilities, but the pursuit of such opportunities by females with intellectual disability is conditional upon the attitudes, resources, and extended relationships of the immediate family.

Research Question Q4

Q4 What recommendations do the teachers and practitioners have for implementing a modified taxonomy for transition programming for females with intellectual disability in Saudi Arabia?

The results of this study provided consistent input from professionals regarding how best to implement transition services for females with intellectual disability in
Saudi Arabia. The group diagram analyses yielded several specific recommendations. The diagrams were complete in that the participants in both groups placed items in all five parts of the model. This potentially indicates that all of the main components of the Kohler et al. (2016) model are applicable in Saudi Arabia, at least on a conceptual level. Notably, both groups added professional training for teachers, staff, and practitioners to their models, which was not specifically noted in the model nor in the instructional video. Also, both groups specifically emphasized the need for formal legislation changes to support effective transition services, and they pointed out specific areas for collaboration that are critical to future efforts. Finally, regarding Saudi Arabian cultural conditions, both groups indicated the importance of increasing awareness about the dilemma faced by young adults with intellectual disability in terms of challenges related to becoming fully a part of family life, community life, and Arabic society.

The specificity of the two diagrams indicates the participants pressed their thinking and engaged in the task to present a realistic picture of the context and the needs of students and professionals in Saudi Arabia instead of replicating the model that was in the instructional video. To streamline the information from the group diagrams, the researcher integrated the diagrams generated by the two groups to create one model that synthesized the results from both sessions. To present a clear image of a taxonomy for transition in Saudi Arabia, the researcher generated a final diagram that combines the two diagrams that the groups produced (see Figure 4).
Figure 4. Integrated taxonomy model. Starred items are directly or conceptually identified or embedded within the Kohler et al. (2016) Taxonomy for Transition Programming 2.0.

This model is similar to the original Kohler et al. (2016) taxonomy. However, paths for collaboration are specified, and the issue of awareness is emphasized in all of the components. The need for aggressive outreach and training to promote family engagement is also clear in this model. Participants supported the idea that transitioning students with intellectual disability effectively can be achieved by
increasing access to academic and vocational training, supporting the development of self-advocacy skills, and facilitating needed changes in awareness and culturally-based expectations. Participants consistently emphasized the importance of individual student-focused planning as a critical part of the taxonomy. Students’ personal awareness of their rights, abilities, and interests was also considered by both groups to be a critical element of student-focused planning. Furthermore, both groups noted the need to integrate Individualized Educational Programs with transition plans, instead of discontinuing Individualized Educational Programs after school-age.

**Implications of the Results**

The model proposed in this research about transition services in Saudi Arabia is far reaching, especially given the cultural conditions of Saudi Arabian society. The implications presented below reflect what must be changed in service provision processes in Saudi Arabia if the proposed transition model is to be implemented in a manner that accommodates Saudi culture but also reflects the components of the Kohler et al. (2016) Taxonomy for Transition Programming 2.0. As the researcher of this study, the following is my vision for what can happen in the future.

Efforts to establish effective transition programming for females with intellectual disability in Saudi Arabia are now clearly endorsed by Saudi Vision 2030, which emphasizes the importance of developing potential among all citizens. To support Saudi Vision 2030, all students with disabilities, including those with intellectual disability, should be adequately prepared for the transition into postsecondary education or training; they should also receive comprehensive support regarding employment outcomes and independent living (Kingdom of Saudi Arabia, n.d.). Given this level of authoritative advocacy, there is a need to determine which
practices are effective or ineffective, including seeking concrete answers to questions regarding where and how females with intellectual disability should learn, how much time should be spent in regular classrooms, and ways to increase their involvement in the community (Goh & Bambara, 2013; Grigal et al., 2011; Levinson & Palmer, 2005).

Currently, Saudi Arabia offers only vocational training to students with intellectual disability, and the country faces challenges to adopting transition services for these students (Alothman, 2010). The results of this study are similar to those of other research in the United States (Madaus et al., 2013) showing the importance of special education programs, laws, and broad changes in process, rather than just a focus on vocational rehabilitation. This type of broader focus is important, if positive postschool outcomes for students with intellectual disability in Saudi Arabia are to be realized.

Participants in this study clearly perceived the need to move away from a strictly vocational approach to postsecondary training for students with intellectual disability, but pointed out the gap in responsibilities between the Ministry of Education and the Ministry of Labor and Social Development, such that there is no continuity in providing further education or follow-up on Individualized Educational Programs. In this respect, efforts to increase interagency collaboration are likely to be fundamental to improvements in Saudi Arabia (Ministry of Labor and Social Development of Saudi Arabia, 2017).

The current results highlight that collaborative efforts are likely to be one of the most influential factors related to improving transition services for students with intellectual disability in Saudi Arabia. The current findings support the importance of
efforts to increase collaboration between agencies and institutions of higher learning in the transition process to ensure all students with disabilities, including those with intellectual disability, are adequately prepared and supported in their transition to employment, postsecondary education, and competitive employment outcomes (Alothman, 2010; Beamish et al., 2012; Crane et al., 2004; Ministry of Labor and Social Development of Saudi Arabia, 2017).

The results of this study suggest that a barrier related to transition services and planning for females with intellectual disability in Saudi Arabia is that females with intellectual disability in Saudi Arabia have extremely limited options in terms of postschool outcomes. Cultural expectations are low for these individuals, and families are expected to provide for their needs. Consistent with United States studies, it is likely that transition planning starting at age 16 or younger could play an important part in improving postsecondary life for students with intellectual disability (Cimera et al., 2014; Cimera et al., 2013). Currently, Saudi Arabia offers only one vocational training program to people aged 16 to 45 (Alothman, 2010). Given that children aged 10 to 15 can often take on additional responsibility within their homes and schools and make some of their own decisions with regard to their lives (Frankland et al., 2004), early transition services could offer help with daily living skills and adjustment even for students with limited abilities for further formal education (college). Both participant groups specifically added providing early transition planning to their taxonomy for transition diagrams.

Neither of the two groups included self-determination in their diagrams, and, therefore, it is not in my final model. However, as self-determination has proven to be a determining factor in postsecondary outcomes for students with intellectual
disability, this element should be introduced both conceptually and practically to students, parents, and support personnel. This issue is related to the significance of family involvement that has been demonstrated in United States studies (Carter et al., 2013; Thoma et al., 2012; Wehmeyer, 2004). The concept of self-determination for individuals with intellectual disability is very new to teachers and practitioners in Saudi Arabia. Future efforts to help Saudi Arabian students with intellectual disability develop self-determination remain uncertain because of the cultural conditions.

The study findings clearly indicate that Saudi Arabian parents need to become involved in the ongoing education and postsecondary life of children with intellectual disability and help them to self-advocate. This idea is likely to be somewhat new to Saudi Arabian students and parents, because education in Saudi Arabia is viewed as the sole responsibility of the school with content delivered primarily with traditional lectures, students with limited choices, and parents totally uninvolved and depending on the school. Better results are likely to happen when parents and students work together with schools, ask questions, and seek out help, as is happening in the United States (Al-Ajmi, 2006; Hetherington et al., 2010; Kohler et al., 2016; Martinez et al., 2012).

The development of better social skills and independent life skills was viewed by participants as an important outcome of transition services, but the existing situation of placing these students in separate classrooms where they have little opportunity to interact in realistic social situations hinders the development of these skills (Almuqael, 2008). The results of the current study are consistent with those of other studies indicating that a broader and more integrated approach to transition processes for students with intellectual disability is needed in Saudi Arabia. Transition
services must go beyond what is currently offered to people with intellectual
disability, which is mainly living at home or working at an unskilled labor job (Abbott
& McConkey, 2006; Al-Hoshan, 2009; Kohler et al., 2016; Nijs & Maes, 2014;
Paiewonsky et al., 2010; Papay & Bambara, 2014).

One of the biggest challenges to successful outcomes for students with
intellectual disability in Saudi Arabia is related to how employers are credited for
hiring persons with disabilities. The practitioner group noted that one employee with a
disability is considered equal to four employees without disabilities by the
government, so companies receive benefits and compensation from the government
that are four times the usual rate for one employee for every employee with a
disability who is on the payroll. Companies also exploit this system to work around in-
country hiring requirements or Saudification. Saudification is a country-wide mandate
to increase the numbers of Saudi Arabian native citizens in professional jobs and
reduce the number of hires from outside of the country. Companies can claim one
person with a disability as an employee, receive credit for four native employees, and
hire from outside the country within their allowances. Because of these loopholes,
companies take just the name of a person with a disability, even when they have no
job for that person in order to receive compensation or employment credit.

Finally, both groups of participants emphasized that professional development
for secondary educators and transition personnel is necessary, so that they are better
equipped with the skills and abilities to support successful postsecondary experiences
for students with intellectual disability. This includes transition personnel, guidance
counselors, higher education personnel, and rehabilitation counselors who play a key
role in supporting transition goals related to postsecondary education and employment.
Similar to other studies, the results of this study strongly suggest that in Saudi Arabia raising awareness about the concept and process of transition for students with intellectual disability must be at the forefront of development efforts (Alnahdi, 2013; Alothman, 2010; Blanchett, 2001; Morgan et al., 2014). Both groups of participants stated that teachers and other stakeholders are unaware of such practices.

**Limitations of the Study**

Five limitations were identified that could potentially influence the findings of this research. First, the concepts and framework for transition programming that served as the foundation for this study were established in the United States, so cultural differences likely affected how participants in this study perceived transition services and the practices that make sense for providing these services in Saudi Arabia. Second, this study involved substantial amounts of translation between English and Arabic, and basic concepts from the taxonomy may not translate directly to the Arabic culture and language. Third, study participants spoke slang Arabic for the most part instead of formal Arabic, which added to the difficulty of obtaining fully accurate translations. In this respect, the transcript data may contain some inaccuracies with respect to the actual experiences and perspectives of the participants, because participants may have had difficulty relating to concepts that have no direct translation or expressing ideas they wanted to express that may not have translated directly to English.

Fourth, the sample that was used in this study is another consideration with regard to limitations. The sample was limited to the female population of teachers in Saudi Arabia, because education is still segregated by gender in this country, where females work and learn primarily with other females. Also, the use of small focus
groups limits the extent to which the results are transferable to larger groups and the general population of special education teachers and vocational rehabilitation counselors.

Fifth and finally, the researcher must also consider that participants may have expressed thoughts they believe are desirable and refrained from sharing less positive information as they appeared somewhat inhibited in group discussions. Despite these limitations, this study offers helpful insight into the state of transition services in Saudi Arabia and a potential model for use in Saudi Arabia.

**Recommendations for Implementation**

The following are recommendations based on the results of this study that may help stakeholders leverage a modified taxonomy for transition programming to establish effective transition services for females with intellectual disability in Saudi Arabia. These recommendations may guide and facilitate the efforts and awareness of the key stakeholders in establishing these services, including ministers, educators, families, students, and communities in Saudi Arabia.

1. Support personnel and resources are needed that can help develop a transition service program in Saudi Arabia.

2. Regarding provision of services in Saudi Arabia, administrators and educators should pay special attention to integrated programs, when possible, and give females with intellectual disability the opportunity to interact with similar peers in different environments.

3. Participants expressed that the provision of transition services should start early, meaning when students reach the age of 13 or 14.
4. Provide more education to both special education and vocational rehabilitation providers, regarding intellectual disability, best practices, transition services, and add courses in universities throughout Saudi Arabia to train educators to play an appropriate role in providing transition services for females with intellectual disability.

5. Develop collaboration between different agencies that serve females with intellectual disability, and develop more positive expectations for persons with intellectual disability.

6. Improve communications between family members and educational/vocational institutions, including providing awareness of postschool options for families of students with disabilities.

7. Create an official policy from the Ministry of Education to authorized and mandate educational services to females with intellectual disability so they begin receiving transition services in school and work with vocational institutions to improve transition outcomes.

8. Raise awareness among community members about females with intellectual disability in Saudi Arabia, and clarify the rights of students with intellectual disability and their families by creating public awareness campaigns.

9. Make efforts to teach and support the development of self-determination among females with intellectual disability. Self-determination is very new concept in Saudi Arabia; but it is a large area of research focus for special education professionals in the United States. Although it was not included in the transition model investigated in this study, it could clearly become
important in the future. Self-determination skills allow students to be independent and successful, as they have an understanding of themselves and their own strengths as a student and employee. This aspect can be developed through instruction and activities relating to personal reflection and self-advocacy. The results of this study suggest that developing self-determination will be an important aspect of providing transition services in Saudi Arabia for females with intellectual disability because self-determination among females with intellectual disability is not traditionally accepted in the cultural context.

**Recommendations for Future Research**

Future research is needed to investigate broader issues related to providing transition services to students with intellectual disability in Saudi Arabia. For example, there is a culture of low expectations for males with intellectual disability, in most cases they are not expected to do menial tasks like laundry, sewing, cooking, or cleaning. Future research regarding providing transition services to males with intellectual disability may reveal additional issues related to integrating them into the broader community or additional education and training. An interesting comment by one teacher illustrated cultural differences related to gender in Saudi Arabia: “The transition services are given to girls more than to boys.” When the researcher asked why the teacher thought this, she responded: “Because of our social culture, as we can train female students on several crafts that could be applied in reality, such as sewing, paintings, laundry, and others.” These are practical skills that those with intellectual disability can frequently learn, but males are not expected to do these types of tasks in
traditional Saudi Arabian culture. Therefore, future research may provide additional insight into services for male students.

Another future research direction is to gain a deeper understanding of family expectations and involvement in the lives of family members with intellectual disability. It would be helpful to replicate this study in different geographical areas of the Kingdom of Saudi Arabia to investigate how cultural and functional diversity throughout the country influence perspectives on transition programming. Teacher 5 shared a comment that relates to this issue:

This taxonomy could be a success, but on the other hand, it could have advantages and disadvantages. I mean you cannot generalize a successful experience in the United States in Saudi Arabia, whether economic or political; it differs from a place to another. It could work in one place and not work in another place. Maybe it will work in Riyadh, but it may not work in Jeddah due to the nature of the society.

Future studies could also determine what legislation about transition services is currently in effect for different levels of intellectual disability in Saudi Arabia and to establish a starting point for needed changes. Also, future research directed at practices and policies that facilitate buy-in and collaboration efforts to establish processes that provide effective transition programming for students with intellectual disability in Saudi Arabia are likely to support educational change efforts. These efforts will potentially lead to the critical task of developing effective college classes for special education teachers and future practitioners.

**Summary**

In summary, bearing in mind the specific reservations that these participants had and are described in this study, the results of this investigation indicate that these special education teachers and vocational rehabilitation professionals value the idea of
providing transition services for females with intellectual disability in Saudi Arabia. Again noting that reservations were expressed, the results also indicate that these participants believe that transition services could increase desirable postschool outcomes for females with intellectual disability. Also, participants’ responses indicated that the Kohler et al. (2016) Taxonomy for Transition Programming 2.0 is potentially a feasible framework to use for establishing effective transition services in Saudi Arabia. The data collectively provided rich information from the perspectives of the participants about the value and feasibility of applying the Taxonomy for Transition Programming in Saudi Arabia. The study results indicated that the participants clearly understood the elements of the model, and the diagrams that the two groups generated incorporated the concepts from the model effectively. However, efforts will be necessary to address the critical components of the model as they relate to the substantial cultural differences between the United States and Saudi Arabia. Specifically, cultural awareness and acceptance, family involvement, and effective legal protection and advocacy for persons with intellectual disability are critical components in Saudi Arabia.

The results of this study indicated that participants appreciated the structure of the Kohler et al. (2016) Taxonomy for Transition Programming 2.0, and they felt that many students with intellectual disability could benefit from individual planning and structured transition services. However, implementing effective transition services for students with intellectual disability in Saudi Arabia will need to be part of the greater cultural shift that is currently underway in this country. Cultural and family beliefs and values potentially have the greatest influence on implementing transition services in this country. Individuals with intellectual disability are often isolated, their resources
and activities completely controlled by family members. Acceptance and inclusion, even within the family, can often be an issue.

Given the future direction of education in Saudi Arabia, previous research, and the findings from this study, it is clear that an opportunity exists to develop transition service programs for females with intellectual disability in Saudi Arabia. The teachers and practitioners in this study offered a positive perspective on how a framework similar to the Kohler et al. (2016) taxonomy could be used to establish a structure for providing these services in Saudi Arabia. Furthermore, to facilitate achieving Saudi Vision 2030, it is important for educational systems and transition services to focus on ensuring that students with intellectual disability are allowed to live (to the degree possible) as autonomous adults and that they receive adequate support.
REFERENCES


Individuals with Disabilities Education Improvement Act Amendment. (2004). Sec. 602.


APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL
DATE:        December 12, 2017
TO:          Reem Almutairi, Ph.D
FROM:        University of Northern Colorado (UNCO) IRB
PROJECT TITLE:  [1163381-3] Teachers’ Perceptions of Transition Services for Females with Intellectual Disabilities in Saudi Arabia
SUBMISSION TYPE: Amendment/Modification
ACTION:      APPROVAL/VERIFICATION OF EXEMPT STATUS
DECISION DATE: December 12, 2017
EXPIRATION DATE: December 12, 2021

Thank you for your submission of Amendment/Modification materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations.

We will retain a copy of this correspondence within our records for a duration of 4 years.

If you have any questions, please contact Sherry May at 970-351-1910 or Sherry.May@unco.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB’s records.
APPENDIX B

PERMISSION FROM DR. KOHLER
Hi Dr. Kohler,

I am Reem Almutairi, a doctoral student at the University of Northern Colorado studying and researching in the area of transition planning. I’m currently working with a Co-Chair of my committee, Dr. Lori Peterson, on starting my dissertation research. Your Taxonomy for Transition Programming 2.0 has guided my learning and research interests. I am Saudi Arabian and know that transition services for individuals with more significant disabilities are very limited in my country. The Taxonomy is the foundation of my research for my dissertation where I’m interviewing educators in Saudi Arabia to determine the possibility of using the Taxonomy or an adapted version to develop transition services in Saudi Arabia. Dr. Peterson suggested I contact you to get information on permission to reprint the 2.0 version of the Taxonomy. I would like to use it in a short video, I am developing, about transition and in my dissertation. For the video, I will need to translate the Taxonomy into Arabic. Do you provide permission to reprint or is the 2.0 version owned by a publisher?

Thank you for your support in my research.

Reem Almutairi
Ph.D student
School of Special Education
University of Northern Colorado
almu1924@bears.unco.edu
APPENDIX C

CONSENT FORM FOR HUMAN PARTICIPANTS
IN RESEARCH
CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH UNIVERSITY OF NORTHERN COLORADO

PROJECT TITLE: Teachers' Perceptions of Transition Services for Females with Intellectual Disabilities in Saudi Arabia.

RESEARCHER: Reema Almutairi
PHONE NUMBER: (970)-405-8303
EMAIL: almu1924@bears.unco.edu
RESEARCH ADVISOR: Lewis Jackson & Lori Peterson
EMAIL: Lewis.Jackson@unco.edu & lori.petersen@unco.edu

Purpose and Description: I am a student at UNC. I am interested in researching special education teachers' and vocational rehabilitation practitioners' perceptions and experiences with the use of the Taxonomy for Transition Programming as a framework for transition services for females with ID in Saudi Arabia.

As a participant in this research, you will complete a pre-questionnaire, participate in focus group discussions, draw a diagram, and complete individual interviews in a focus group session. The focus group sessions will be audio-recorded to make sure I capture your information. This study will occur at an arranged time and place that is convenient for you. This study should take no more than two hours.

The focus groups will complete focus group discussions that are guided by the research questions. Participants will share their perceptions about the usefulness of transition services in general for improving post-school outcomes for females with ID. They will also share their perceptions about Kohler et al.'s (2016) taxonomy and its feasibility for guiding the implementation, and the participants will generate diagrams based on the taxonomy that represent a possible structure for transition services in Saudi Arabia. After that, each participant will complete a short individual interview wherein they share any additional personal reflections about transition services. Only the researcher and her research advisor will examine individual responses. All identifiable data such as voice recording and consent form will be kept on a locked device or in a locked box for three years at which time they will be destroyed. Results of the study will be presented by using pseudonyms so that results cannot be linked back to you. You may request a copy of the results of the research.

There is no risk to you in this study other than what might occur naturally in an educational discussion. The questions are not about sensitive personal matters, but they still might evoke memories and thoughts that are sensitive to you. You can choose to share or skip any question in the interview that you are uncomfortable answering. While there is no direct benefit to being in the study you may actually perceive a benefit from your participation because you will have an opportunity to reflect on your experiences with transition services. Your confidentiality will be respected and individual results will not be shared with others.

Participation is voluntary. You may decide not to participate in this study, and if you begin participation, you may decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please sign below if you would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Sherry May, IRB Administrator, Office of Sponsored Programs, 25 Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.

Participant's Signature __________________________ Date ________________

Reema Almutairi

Researcher’s Signature __________________________ Date ________________
APPENDIX D

VIDEO SCRIPT, VERBATIM
VIDEO SCRIPT, VERBATIM

1. This video shows how intellectual disability is defined and what transition services are. After that, the most recent model for providing transition services is reviewed.

   **First, Intellectual disability.** “This definition for intellectual disability is accepted by law in Saudi Arabia and the United States.

   a. Intellectual disability is a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior which covers many everyday social and practical skills. This disability originated before the age of 18.”

   b. **Second, Transition Services.** Transition services are a coordinated set of activities for a child with a disability. There some important things to consider in providing good transition services.

      i. First, they need to be designed to be a results-oriented process that is focused on improving the academic and functional achievement of the child to facilitate the child’s movement from school to post-school activities. Post-school goals can be postsecondary education, vocational education, integrated employment (including supported employment). Results can also be things instruction, related services, developing employment objectives, and, if appropriate, acquisition of daily living skills.

      ii. It is important for transition services to be based on the individual child’s needs, taking into account the child’s strengths, preferences, and interests.

2. **Kohler’s Taxonomy for Transition Programming is currently accepted in the United States as an effective framework for planning and providing transition services for students with ID.** The next few slides show the Five components of Kohler’s taxonomy with examples of the main practices involved with each one.
a. **First, Student-focused planning.** This is where good transition services start! Student-focused planning uses assessment information about each child’s abilities and interests to develop useful Individual Educational Plans (IEPs) based on their plans for adult living.

i. **To build an IEP teachers take several steps.**
   - First, they determine the student’s abilities and interests. Based on this, they plan future goals, and make them specific. It’s important to include recreation and leisure goals, too. Transition specialists make sure that the goals are measurable, and involve students in choosing their goals.
   - It is important to review progress annually.

ii. **The planning strategies used with Kohler’s model start as early as possible, age 14.**
   - Good planning involves teachers, parents, administrators, special service providers and other people, or stakeholders. So, it’s important to have a team leader to help them. Also, cultural and linguistic considerations are embedded into planning. Enough time must be allowed to involve all of the related stakeholders in the planning process. Planning and meeting times and places must support student and family engagement.

iii. **Student Participation is vital to providing effective transition services.**
   - The planning team must include the student and family members, and the student must participate actively in planning as much as is possible.
• Involving students in planning so they get to express their interests, preferences, and limits helps build their self-determination.
• It is also important to make accommodations for any communication needs.

b. **The next main component of Kohler’s model is Student development.**

These practices emphasize life, employment, and occupational skill development gained through school-based and work-based learning experiences.

i. **Assessments guide plans for student development.**
   • Career interest and aptitude assessments are used for curricular and instructional decisions
   • Assessment results are shared regularly with students and used to assist in overcoming deficiencies.

ii. **Service to help develop academic skills and related behaviors are linked to assessments.**
   • Courses and curricula prepare students for college and careers
   • Academic skills development includes teaching learning strategies, study skills, test-taking skills, comprehension, computation, interpretation, and so on
   • Academic behaviors development includes teaching things like going to class, participation, organization, doing homework, studying, and so on

iii. **Kohler’s model includes attending to Life, Social, and Emotional Skills.**
   • It’s important to teach: Self-determination skills like goal setting, problem solving, or self- advocacy),
   • Independent living skills like using money, first aid, safety, or cooking,
   • Interpersonal skills,
   • Leisure skills,
   • Transportation skills, and
   • Social skills development
iv. **Employment and Occupational Skills are a main focus in this model.**
   - Service specialists also teach employment seeking skills, and Soft skills.
   - It is optimal if career awareness opportunities are provided like industry tours, guest speakers, or trips to career fairs, etc.
   - It is important to give paid work experience before school ends if possible.

v. **Student Supports include**
   - Related services are provided (e.g., OT, PT, speech therapy, transportation, assistive technology)
   - Academic support and enrichment provided to improve academic performance (e.g., test-taking skills, study skills, targeted subject area skills, etc.)
   - Counseling services provided for college and career readiness

vi. **Instructional Supplements**
   - Co-curricular activities where students work with other students include things like band, forensics, poetry, quiz bowl, writing competitions, or yearbook.
   - Extracurricular activities also support student development—things like school or intermural sports, student council, theater.
   - Community activities are another good way to encourage student development, for example, community festivals, community government, scouts, social activism, or volunteering.

c. **The next main component of Kohler’s model is Interagency collaboration:**

   These are practices that facilitate the involvement of community businesses, organizations, and other agencies in different aspects of transition services.

   i. **Adopting a Collaborative Framework involves**
      - An interagency coordination body that includes students, parents, educators, service providers, community agencies, postsecondary institutions, employers, and other relevant stakeholders with designated contact people.
      - Roles and responsibilities must be clearly articulated,
and all parties must understand policies and procedures.

- Systems barriers to collaboration must be minimized.
  
  i. **Collaborative Service Delivery is also critical.**
  - School staff, VR counselors, teachers, and community service providers must engage in planning and collaborative consultation with students with ID and families, and use coordinated collection and assessment data for IEPs.
  - Transition services specialist also link students and families with appropriate providers to assist with financial planning, health care adult disability, or mental health services.

d. **The fourth main component of Kohler’s model is Program structures:** These are the features of different programs that relate to efficient and effective delivery of transition-focused education and services, like including policy planning, evaluation, and the structures and characteristics of schools.

  i. **Program Characteristics**
  - Transition programs need to address different educational levels (preschool - high school) and related systems, like vocational rehabilitation.
  - Programs also need flexible options to meet individual student needs.
  - It is important for transition programs to reflect the community’s culture.

  ii. **Program Evaluation**
  - Transition programs need to be evaluated to see if they are working, and to make any changes that would help. It is important for students and families to be involved in this step.
  - To measure progress toward graduation we need to record
    - attendance
    - behavior
    - course completion
iii. Strategic Planning

- Transition program planning must include stakeholders from different sources, like schools and special service providers, and programs need to be based on evaluating what is needed by students with ID, teachers, and organizations that will work with students after school is over.

iv. Policies and Procedures

- Policies about transition services and the way they are delivered must follow research-based guidelines for best practices.
- Transition service must also support a positive school climate.

v. Resource Development and Allocation

- Schools need to hire people who are specially trained for transition services. And, training should be provided to help teachers and other providers learn the skills they need, be responsive to families and involve them in planning. They also need help learning how to create a pleasant school environment.

vi. School Climate

- It is important for the school to create a sense of trust and fairness. This can be done by starting programs to improve students’ behavior in class and social skills.
- Schools also need to make students, families, teachers, and other visitors feel welcome, safe, and supported.
- It is very helpful if school staff and students interact outside the classroom sometimes.
e. **The fifth main part of Kohler’s model is Family engagement:** This component can make a big difference in the lives of students with ID. Increasing family engagement means including family members in planning and delivering transition services. This can include providing training and family activities to help family members work effectively with teachers and other special service providers.

I. **Family Involvement**
   - Families should participate in the entire transition planning process including:
     - student assessment
     - evaluation of student’s program
     - IEP and other individual program planning meeting
     - decision making
   - Finally, school administrators need to ensure that parents’ viewpoints are heard.

II. **Family Empowerment means helping families get the knowledge and support that they need to help their child.**
   - Give parents information early, prior to student’s reaching age 14
   - Transition programs should help families find chances to join in youth in community experiences, as well as connecting families with adult service providers when necessary.

III. **Family Preparation**
   - Effective transition programs help families learn and prepare for transition processes. Families need to understand the transition planning process, how to help set strong, but realistic expectations. Parents also need help to build their child’s involvement in making choices and decisions for their adult life. Family’s needs to be informed about programs that help provide community experiences for students with ID (e.g., safety, transportation, social skills).
3. To conclude, we, as special education professionals, need to really focus on understanding these main points about transition programs from Kohler’s model. Attention to these points will help us improve transition services for students with ID in Saudi Arabia.

   a. It’s important to identify the student’s interests and preferences
   b. We must also identify a course of study or training that reflects the student’s desired post-school outcomes
   c. Transition service providers must encourage students with ID to make their own choices and decisions as much as possible, to help them learn self-advocacy and self-determination skills.
   d. It is important to provide accommodations and modifications that help students access education, work, housing & community
   e. Transition programs must provide for opportunities for students with ID to develop friends and relationships outside the family
   f. Transition service providers must connect families and students with needed community services or adult services.

This concludes our video session. Thank you for participating.
APPENDIX E

PRE-FOCUS GROUP QUESTIONNAIRE
PRE-FOCUS GROUP QUESTIONNAIRE

1. What is your current job’s roles and responsibilities?

2. What type of degree do you have?

3. How many years of experience do you have with teaching students with intellectual disability?

4. What do you do now and how successful is it for preparing females with intellectual disability for adulthood?

5. What are your beliefs about outcomes for individuals with intellectual disability?

6. Why did you become a teacher of students with intellectual disability?

7. Should students with intellectual disability stay at home after high school and not work in the community? Or should they be involved in the community?

8. Is there any benefit to integrating students with intellectual disability in a regular education classroom?

9. Is there any benefit to integrating students with intellectual disability in a community setting?

10. Does educating these students in a special classroom have beneficial effects on the social and emotional development of the student with intellectual disability?
APPENDIX F

FOCUS GROUP DISCUSSIONS
FOCUS GROUP DISCUSSIONS

The following questions will guide the focus group discussions:

1. What influence do you think that Kohler et al. (2016) Taxonomy of Transition Programming would have on outcomes for female with intellectual disability?

2. Do you think that transition services could contribute to increased desirable post-school outcomes for female with intellectual disability? How?
APPENDIX G

INDIVIDUAL INTERVIEWS
INDIVIDUAL INTERVIEWS

1. Reflecting on the group discussion that we had, what are your individual thoughts about this taxonomy?

2. Do you think that you could use this model in your work? How?

3. Do you have additional comments, issues, or suggestions about offering transition services in Saudi Arabia?
APPENDIX H

BLANK COPY OF TAXONOMY
Figure 5. Blank copy of taxonomy.