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Examining Preschool Teachers' Subjective Beliefs Toward Developmentally Appropriate Practices: A Saudi Arabian Perspective.

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EXAMINING PRESCHOOL TEACHERS' SUBJECTIVE BELIEFS TOWARD DEVELOPMENTALLY APPROPRIATE PRACTICES: A SAUDI ARABIAN PERSPECTIVE

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EARLY CHILDHOOD EDUCATION

ABSTRACT

The purpose of the current study was to explore preschool teachers' subjective beliefs toward developmentally appropriate practices (DAP) and developmentally inappropriate practices (DIP), as identified by the National Association of the Education of Young Children (NAEYC) in Saudi Arabia. Additionally, an investigation was conducted on what might account for cultural influences regarding teachers' beliefs toward DAPs and DIPs.

Q-methodology, as a mixed-method approach, was utilized to collect, analyze, and interpret the data in a two-phase, sequential explanatory design. In the first phase, 37 preschool teachers subjectively sorted 50 cards representing DAP and DIP items in terms of what they considered the most appropriate and the most inappropriate practices in the preschool classroom. Q-technique principal component analysis with Varimax rotation was used to analyze the numerical data. The second phase involved conducting follow-up focus-group interviews for further explanation and exploration of the cultural influences on Saudi preschool teachers' beliefs regarding DAPs.

The results of the Q-methodology suggested that there were four main perspectives regarding DAP beliefs among Saudi participants: Perspective A: a developmentally oriented approach to children's learning; Perspective B: a socially

oriented approach to children's learning; Perspective C: a holistic approach to children's learning; and Perspective D: a child-centered approach to children's learning. Six participants were associated with Perspective A, eight with Perspective B, three with Perspective C, and seven with Perspective D. All four perspectives identified in the study coincided with different aspects of DAPs.

For further explanations, 11 participants were purposefully selected to participate in follow-up focus-group interviews. The interviews provided explanations regarding participants' subjective beliefs in light of any cultural influences. Thematic analysis following the interviews revealed themes on two levels: cross-perspective themes and within-perspective themes. Although within-perspective themes varied by each perspective, cross-perspective themes included a) denying teaching preschoolers academics, b) modifying the curriculum to suit children's needs, c) promoting social activities, and d) respecting families but not involving them in classroom activities. Findings from this study contributed to the knowledge base on the applicability of different aspects of DAP in religious and conservative society. Furthermore, methodological notes, recommendations for future research, and implications for practice were addressed.

Keywords: DAP, belief and practice, preschool teacher, Q- methodology, Saudi Arabia.

DEDICATION

This work is dedicated to the loving memories of my father and my sister.

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I would like to express the deepest appreciation to my committee chair, Dr. James Ernest, for his continuous support, patience, motivation, and immense knowledge. He continually and persuasively conveyed a spirit of achievement during my journey. He was always willing to meet and discuss, always open to new ideas. Without his supervision and constant help, this dissertation would not have been possible. I cannot imagine having had a better advisor and mentor for my academic and professional growth.

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TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF FIGURES

Figure *Page*

LIST OF ABBREVIATIONS

DAP	Developmentally Appropriate Practice
DIP	Developmentally Inappropriate Practice
ECE	Early Childhood Education
KASP	King Abdullah Scholarship Program
KAAPEDP	King Abdullah bin Abdulaziz Public Education Development Project
MOE	Ministry of Education
NAEYC	National Association for the Education of Young Children
PCA	Principal Component Analysis
PST	Preschool Teacher
SELS	Saudi Early Learning Standards
GWA	Gulf Women Association

CHAPTER 1

INTRODUCTION

In 1987, the National Association of the Education of Young Children (NAEYC) published the position statement of the developmentally appropriate practices (DAP). The statement provided early childhood educators with a framework of the best practices in early childhood programs serving children from birth to age 8. DAP, as an approach, provides early childhood educators with guidelines that conclude the years of work and research of professionals in the field (Copple & Bredekamp, 2006, 2009; Copple, Bredekamp, Koralek, & Charner, 2013). The guidelines help teachers make their decisions in the classroom regarding what is considered developmentally appropriate to meet individuals' needs based on their developmental stage and learning style (Charlesworth, Hart, Burts, Thomasson, Mosley & Fleege, 1993).

Since 1987, the position statement has received several criticisms that were followed by an updated version in 1997 that gathered broad views regarding educating young children developmentally and culturally. With a growing number of immigrant families coming to the United States, several issues have emerged that led to a comprehensive revised version that includes issues such as poverty, culture, and dual language children (Hyun & Marshall, 1996).

The recent guidelines of DAPs provide responsive and improved education for children from birth to 8 years old, which relies on three core considerations: age, individual, and culture appropriateness (Copple & Bredekamp, 2009). The age

appropriateness is related to the teacher's knowledge to predict the best method for the child to allow him or her to learn and achieve based on his or her age characteristics and developmental stage. The individual appropriateness is related to viewing the children as individuals with variations in their learning abilities as well as responding to each child with varied teaching styles to adopt his or her variations. The social and culture appropriateness are related to considering the context of social and cultural backgrounds as well as the spoken language at home to ensure learning experiences that are relevant, responsive, and respectful to each child's culture (Copple & Bredekamp, 2006, 2009; Copple et al., 2013).

DAP is based on the knowledge of how young children learn. Reviewing the literature, theories, and best practices of thousands of studies supported how young children develop and learn revealed 12 principles of child development and learning (Copple & Bredekamp, 2006, 2009; Copple et al., 2013). The 12 principles inform practices for young childcare providers, teachers, families, and early childhood programs. In the same way that all the developmental aspects of the child's growth overlap and are interrelated, all 12 principles are interconnected (Copple & Bredekamp, 2006, 2009; Copple et al., 2013).

The Five Keys of Effective Teaching

Based on the knowledge of how young children develop and learn, NAEYC's guidelines for DAP are drawn from five keys aspects that outlined effective teaching (Copple & Bredekamp, 2006, p. 25). The five aspects of teachers' work are as follows:

1. *Creating a caring community of learners:*

The role of the teacher expands to create a caring, bounded, and inclusive community for young learners. As DAP puts much emphasis on a child's individuality, it also encourages building a sense of group identity. The child is a unique and special individual, and at the same time, he or she is part of a cooperative group of other children working and learning hand-to-hand (Phillips & Scrinzi, 2013; Copple & Bredekamp, 2006).

2. *Teaching to enhance development and learning:*

To reach effectiveness in teaching requires the teacher to utilize multiple teaching strategies and a variety of learning formats. Children have different levels of skills and abilities and their own methods of learning. Supporting each child's development and learning on his or her own level is a goal for DAP (Phillips & Scrinzi, 2013; Copple & Bredekamp, 2006).

3. *Planning appropriate curriculum:*

This is developmentally, individually, and culturally appropriate curriculum built on a child's learning and wellbeing. Effective teaching requires an effective curriculum that promotes children's social-emotional, physical, cognitive, and language development. A comprehensive and broad curriculum framework enables the teacher to choose what the children require to accomplish their learning outcomes (Phillips & Scrinzi, 2013; Copple & Bredekamp, 2006).

4. *Assessing children's development and learning:*

Assessing children's progress is essential to monitor their learning and development. Gathering assessment information in developmentally appropriate ways requires the teacher to use various measurements in numerous learning situations and conditions (Copple & Bredekamp, 2006). By nature, children learn in uneven ways and can be easily disturbed while they are assessed, "especially when the assessment procedures interface with their normal range of movement, talk, and expression of feelings" (Phillips & Scrinzi, 2013, p. 49).

5. *Develop reciprocal relationships with families:*

Building a solid reciprocal relationship with families is a step toward valuing children as individuals. Parents are important people in their children's lives and must know their children's learning journey. Getting to know the parents and providing them information about their children's learning and development help to facilitate the children's learning inside and outside the school (Phillips & Scrinzi, 2013; Copple & Bredekamp, 2006).

Developmentally Appropriate Practices: Cross-National Overview

The widespread NAECY guidelines of DAPs have caught international attention. In general, the individual nations vary in what they considered appropriate/inappropriate practices. Gathering broad and global perspectives regarding DAP shows the influence of culture and people's traditions that influenced education. Several empirical studies have been conducted to determine the effectiveness of DAP on the overall climate in the classroom in a diverse cultural and international learning environment. For example, the

traditional view of early education in Taiwan regarding the teacher's role is culturally influenced. According to DAP guidelines, the teacher's role is more of a facilitator that provides assistance to children based on their abilities, levels, and varied skills (Copple & Bredkamp, 2009); however, teachers in the Taiwan culture focus more on the children's intention. Children who show more desire to learn receive more attention from the teacher (Hsue & Aldridge, 1995; Yang, 1997). Another point of view on the traditional Taiwanese culture is less focus on equity in providing equal learning opportunities to all children and more focus on tolerance, benevolence, and consideration to others (Hsieh, 2004; Lin, 2004; Liu, 2007).

The DAP guidelines were first introduced to the Republic of South Korea's early education in the early 1990s and have received acceptance among Korean educators, which led to integrating DAP into the kindergarten curriculum (Kim, 2013; Kim, Kim, & Maslak, 2005; McMullen et al., 2005). Korean educators take into consideration the DAP guidelines and the child-centered approach as well as show appreciation for some traditional values toward the teacher such as respect and obedience (McMullen et al., 2005).

In the Republic of Turkey, where the education system falls under the authority of the Ministry of National Education and the General Directorate of Social Welfare and Child Protection Agency, the education was more centralized and influenced by Islamic values (McMullen et al., 2005, p. 454). With a Turkish population consisting of 98% Muslims, Islam has impacted traditions and society, yet there is strict separation between religion and education (Hefner & Qasimzaman, 2007; McMullen et al., 2005). The Turkish Educational Constitution is consistent with the philosophy of DAP, and its

teaching style tends toward more of a child-centered teaching style (Erdiller & McMullen, 2003; McMullen et al., 2005).

In India, there have been some controversy toward implementing the DAP guidelines Although the school philosophy in India is congruent with some of the DAP guidelines (Hedge & Cassidy, 2009), there are still obstacles within the cultural context regarding some aspects of the DAP implementations. As India's population has grown, there is a need to work with large group size of children and the use of worksheets which is seen as more developmentally inappropriate (Hegde & Cassidy, 2009).

As part of the divergence among nations regarding what is considered developmentally appropriate/inappropriate practices, Szente (2001) researched Hungarian teacher's and parent's perspectives and found a different set of beliefs that is consistent and varied with NAECY's standards in Hungary (Szente, 2001). What the NAEYC considered a DAP was not considered appropriate by Hungarian participants and vice versa.

The universal interest of the congruence between teachers' beliefs and practice regarding DAP has interested researchers in many geographic locations. In Greece, Syrrakou (1997) revealed a controversial finding that teachers with developmentally inappropriate beliefs equally employ developmentally appropriate and inappropriate practices. He further explained that the nature of the curriculum in Greece is endorsing DAP, but teachers don't have an "explicit philosophy guiding their decisions about practice" (Syrrakou, 1997, p. 62). In Jordan, several studies have been conducted and indicated high beliefs among Jordanian kindergarten teachers toward DAP (Abu-Jaber, Al-Shawareb, & Gheith, 2010; Haroun & Weshah, 2009; Rababah, 2012). In Lebanon, a

contrary finding regarding congruence between teachers' beliefs and Lebanese kindergarten teachers showed no consistency between their beliefs and practice, and teachers presented developmentally appropriate beliefs but followed a developmentally inappropriate practice (Faour, 2003).

Education in the Kingdom of Saudi Arabia: General Synopsis

Saudi Arabia is located in the southwest corner of Asia and makes up a majority of the Arabian Peninsula, the birthplace of Islam. It is also known as "The Land of the Two Holy Mosques" with Al-Masjid al-Haram, which is located in Mecca city, and Al-Masjid Al-Nabwi in Madinah city. The Kingdom of Saudi Arabia became a nation in 1932 when King Abdul-Aziz ibn Abdurrahman Al Saud united all of the country under the name of Saudi Arabia. The official language is Arabic, and the official religion is Islam. The total population is 30.7 million for all residents, including citizens and illegal-status immigrants (Central Department of Statistics & Education, 2014). Saudi Arabia is known as the most culturally and religiously conservative society in all Middle Eastern countries. Its cultural and social complexity is based on the diversity of Saudi tribes, families, religious affiliations, and regions in the country (Al-Alhareth, McBride, Prior, Leigh, & Flick, 2013).

The education system in Saudi Arabia consists of four primary levels of public and general education. Pre-elementary schools are designed for children 3 to 5 years old and prepare children for elementary school and formal education later on. Children are enrolled in nursery schools from ages 3 to 4, and 5-year–olds are enrolled at the preliminary level. Nowadays, the preliminary level has become a requirement for

enrolling in elementary schools. Elementary school lasts six years, and it is the start of formal education. Children are enrolled at age 6 and are expected to finish at age 11, with both boys and girls studying in separate public schools. Students who have graduated from elementary school are enrolled in intermediate school for three years. Intermediate school is open to students ages 12 to 14, so it is equivalent to grades seven, eight, and nine in United States (U.S.) schools. Students who graduate from intermediate schools have two options: to pursue general secondary education for another three years or to pursue specialized vocational education at technical training institutions (Saudi Arabian Cultural Mission, 2006).

Statement of the Problem

Spending several decades developing and revising the position statement of DAPs, NAEYC has issued the updated position to consider the demographic trends in the population. Several issues have emerged with the steady growth of immigrants to the United States such as second language learners, school culture, and home language (Copple & Bredekamp, 2009). Cultural and linguistic diversity are critical issues that early childhood professions and educators consider for high-quality education for connecting relative education to diverse children (Copple et al., 2013).

As the DAPs have caught a lot of attention from childhood professionals in the United States, many countries have shown a growing interest regarding DAP. With widespread recognition of the importance of the early year's education, the need to explore DAP in a cross-national manner has become important. Recent research studies broadly conducted in Finland, China, Taiwan, South Korea, Turkey, India, Ecuador,

Hungary, Greece, and Jordan brought worldwide perspectives regarding teachers' beliefs toward DAP, given that the varied sociocultural aspects and educational systems in different nations might make teachers and educators view DAP differently (Hoot, Parmar, Hujala-Huttunen, Cao, & Chacon, 1996; McMullen, 2005).

Concomitant with the need to expand DAP research worldwide, a few studies have been conducted in the Middle East, particularly in Jordan (e.g., Abu-Jaber et al., 2010; Haroun & Weshah, 2009; Rababah, 2012) and Lebanon (Faour, 2003). Exploring teachers' beliefs in another Middle Eastern country like Saudi Arabia, as the most conservative and religious society, would reveal remarkable findings. With the nature of education in Saudi Arabia putting more emphasis on religious values, teachers might view DAP differently. Teachers' subjectivity upon the appropriateness of a set of practices varies in the different factors that contribute to and influence their actions (Ernest, 1999; Szente, 2001). Factors such as culture, religion, traditions, shared values, and beliefs shape teachers' perceptions about what are considered appropriate or inappropriate practices in how they teach in the classroom (McMullen, 2005; Pajares, 1992; Penn, 1998; Rababah, 2012). That is, teachers from different backgrounds, cultures, and nations have multiple perspectives that reflect how they teach and interact with the students (Chisholm, 1994; Hyun & Marshall, 1996; Ingersoll, 2007).

Many studies that were conducted on the teachers' beliefs regarding DAP (e.g., Burts et al., 1992; Burts et al., 1993; McMullen et al., 2005; Liu, 2007; Hoot et al., 1996; Horn & Ramey, 2004; Jambunathan, Burts, & Pierce, 1999; McCarty, Abbott-Shim, & Lambert, 2001) were conducted using traditional instrumentations. The dominant methodology for the previous studies was using questionnaires, surveys, and checklists as

a method for collecting data. However, the challenge for this type of work is that the traditional instrumentations limited the results of understanding and describing a subjective phenomenon (Hesse-Biber, 2010). A methodological concern that must be addressed is that studying teachers' subjective beliefs by using objective instruments limits the participants' personal responses (Szente, 2001).

Pajares (1992) pointed to the complexity of studying subjective teachers' beliefs and suggested that, "Clearly, when specific beliefs are carefully operationalized, appropriate methodology chosen, and design thoughtfully constructed, their study becomes viable and rewarding" (p. 308). Therefore, this study is designed to help understand the dimensions of subjective phenomena by using a mixed method approach called Q-methodology. Q-methodology allows the researchers to maintain the subjectivity of subjects (Ellingsen, Storksen, & Stephens, 2010; Ernest, 2001, 2011; Smith, 2001). Unlike R-methodology, which revolves around clustering a group of items based on people's responses, the Q-methodology groups people based on their shared viewpoints (Stephenson, 1986, Smith, 2001).

Purpose of the Study

The purpose of this study was to explore preschool teachers' beliefs toward NAEYC's developmentally appropriate/inappropriate practices in Saudi Arabia, one of the most conservative Middle Eastern countries. Therefore, utilizing a Q-methodology design allows the researcher to incorporate various elements from the quantitative and qualitative traditions to collect and analyze the data to understand subjective phenomena such as teachers' beliefs. Followed by a subjective analysis to highlight the items that

appeared to present shared and unique viewpoints among the participants. Further, a follow up interview was conducted to explain the results of quantitative findings and to explore the cultural influence on such a phenomenon.

Significance of the Study

This study is a response to the call to extend the research on DAP in foreign countries. The findings from this study will provide educators and early childhood professionals a better understanding of teachers' beliefs toward DAPs in Middle Eastern countries. The information gained from this study will contribute to the worldwide knowledge of the NAEYC guidelines of the cultural appropriateness of children's education.

In addition to the contribution to the universal knowledge regarding DAP, the benefits gained from such studies will locally contribute to childhood education in Saudi Arabia. The findings and implications provided from this study may help policymakers, stakeholders, and curriculum developers consider NAEYC guidelines regarding DAP in designing professional developmentally appropriate programs as well as training in-service and pre-service teachers.

Furthermore, a potential contribution to the education in the United States is that, with the growing number of international children in the U.S. public schools, teachers must be aware of cultural differences. With the extension of the King Abdullah Scholarship Program (KASP), many Saudi children have enrolled each year in U.S schools. Information regarding cultural appropriateness in this study may benefit teachers

of Saudi children—or Middle Eastern children in general—to learn what to consider appropriate/inappropriate in their education.

Finally, with the limited empirical studies conducted in Middle Eastern countries that directly addressed teachers' beliefs toward DAP, this study extends DAP research using Q-methodology to examine teachers' subjective beliefs. Unlike other studies that used questionnaires and surveys as prime instrumentations, this study will combine the strength of the quantitative and qualitative research traditions (Anandarajan, Paravastu, & Simmers, 2006; Dennis & Goldberg, 1996; Ernest, 1999).

Research Questions

The following research questions guided this investigation:

1. What are the similarities and differences between the participants' beliefs regarding developmentally appropriate and developmentally inappropriate practices for preschool teachers in Saudi Arabia?
2. What are the items that teachers considered as the most developmentally appropriate practices and the most developmentally inappropriate practices?
3. What might account for cultural influences about teachers' beliefs regarding DAP?

Limitation

The findings from this study are limited to:

1. In-service preschool teachers' subjective beliefs toward DAP who are working in public kindergartens in Mecca City, Saudi Arabia
2. The data gained in this study rely on the participants' honesty and how they Q-sorted each statement of DAP to fit with their degree of appropriateness.
3. The methodology used in this current study decreases the generalizability of the overall findings because the results are only limited to the teachers who participated in this study.
4. Due to the small number of individuals required in Q-methodology, the participants in this study do not represent the entire population of Saudi teachers. That was justified by Ernest (2001): "Q-methodology is interested in discovering possibilities, only a few people or a number of 'case studies' are needed to define some of the possible belief structures that might exist about an issue" (p. 348).

Definitions of the Terms

Developmentally Appropriate Practice (DAP): Developmentally appropriate practice refers to: "teaching decisions that vary with and adopt to the age, experiences, interests, and abilities of individual children within a given age range." (Copple & Bredekamp, 2012, p.7). Additionally, the core of developmentally appropriate practice lies in this intentionality, in the "knowledge that the practitioners consider when they are

making decisions, and in their always aiming for goals that are both challenging and achievable for children." (Copple & Bredekamp, 2009, p.9).

Teachers' beliefs have been defined as: "Teachers' attitudes about education-about schooling, teaching, learning, and students-have generally been referred to as teachers' beliefs." (Pajares, 1992, p. 316).

Q-Methodology: According to Stephenson (1988) "Q-Methodology and Q-sorting is known well enough in psychological circles. Fundamentally it is a method by which an individual can model for himself what his attitude of mind is about complicated topics, issues, or situations." (p.5). Further, "Q provides a technique to study systematically qualitative aspects of human subjectivity in a way that reduces the interference of the researcher's preconceptions. Furthermore, subjectivity is of specific interest in Q, because its goal is to obtain a better understanding of the participants' subjectivity." (Ellingsen, Størksen &Stephens, 2010, p.396).

Q-sort has been defined as "The act of sorting a number of statements written on cards, that represent a selection of items (from a specified population of items defining a construct), into a quasi-normal distribution" (Ernest, 1999, p. 19)

Operant Subjectivity: According to Smith (2001) "Is a subjective behavior as it manifests itself through Q methodology" (p. 320). Further "Operant means that when individuals are given sample of statements to be sorted according to some preference or judgment or feeling about them, they operate with them in such a way as to indicate their viewpoints; and this is independent of any constructed effects (such as those of rating scales) on the part of the investigator" (Smith, 2001, p.320).

P-set: is defined as: “The P-set refers to the respondents participating in the Q study.” (Ellingsen, Størksen &Stephens, 2010, p.398)

Q-sample: is defined as “A sample of cards selected to represent the population of items that define a construct” (Ernest, 1999, p19). For this study, the Q-sample consist of 50 cards that were determined to represent the NAEYC'S conception of what may be considered DAP and DIP in the classroom.

Culture: According to Palawat and May (2012) culture generally refers to “The beliefs, attitudes, and communication trajectories that affect each individual’s thought, perception, and interaction in making judgment about events or people” (p. 58).

Theoretical Framework

In order to study kindergarten teachers’ subjectivity concerning DAP in Saudi Arabia, it was necessary to draw a theoretical perspective that underlies Q-methodology. The Play Theory of Mass Communication was originated by William Stephenson in 1967, and it is logically consistent with the nature of Q-methodology (Brown, 1993). Q-methodology is primarily concerned with how people communicate what is on their mind in terms of the way they maintain the society’s culture and individuals’ subjectivity (Stephenson, 1986). Watts (2011) defined a person’s subjectivity as:

> …. merely his own point of view. It is neither a trait nor a variable, nor is it fruitful to regard it as a tributary emanating from some subterranean stream of consciousness. It is pure behavior of the type we encounter during the normal course of the day. (p. 40)

Depending on where individuals live, they have shared cultural values, religious beliefs, traditional customs, and lifestyles that shape their culture (Stephenson, 1964, p. 2). According to the play theory of mass communication, individuals as human beings are communicable creatures; they are unconsciously developing the communicability surrounding any topic, object, or thought (Goldman, 1999). Based on their previous experiences, individuals construct their subjectivity toward a topic, situation, or issue. Stephenson (1986) explained that as:

> About any topic or event, the individual has a 'structure of assumptions, views, ideas, tastes'… [related to] our notions of what *is* (existence), what is *important* (what matters to the person), what is *right* (for society), and *what* goes with *what* within each. (p. 42)

In Q-methodology, the concourse is all that can be said or that comes to mind regarding certain topics or concepts (Brown, 1993; Davis & Michelle, 2011; Goldman, 1999). That is, there are concourses (e.g., statements and items) that are conceived from any topic representing thoughts, values, or attitudes. The Latin meaning of concourse is "'running together' as when ideas run together in thoughts" (Brown, 1993, p. 95). In this study, concourse is representative sample of statements drawn from the latest revised version of NAEYC's guidelines regarding DAP in five keys aspects of effective teaching.

Hence, teachers as individuals have their own subjectivity toward their role in the classroom. The degree to which their pedagogical practices reflect the appropriateness with their beliefs, the nature of the society, and the norm of the culture is varied. Therefore, the play theory of mass communication was chosen to study individual

subjective beliefs through communication act procedures that allow to maintain individuals' subjectivity as well as shared cultural values.

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter of the dissertation reviews the literature relating to the nature, culture, history, and current initiative of early education in the Kingdom of Saudi Arabia. It also reviews the history and the development of DAP, DAP's theoretical backgrounds, studies reported global interests in DAP, and factors shaping teachers' beliefs regarding DAP.

Education in the Kingdom of Saudi Arabia

History and the nature of Saudi education

The unique religious characteristics of Saudi society influence all aspects of life, especially education. Education started on the Arabian Peninsula in the early 18th century and was limited to some Islamic schools—called *Kuttab*—scattered in the Najd and Hejaz regions, with primarily religious content focusing on Qur'an recitation and hadith (the Prophet Muhammad's legacy and teachings) (Al-Otaibi & Suwailem, 2002). In the 1920s, a few private schools opened with a commitment to religious content as well as to providing a limited secular education for boys only. The formal education started in the 1930s with the kingdom founder King Abdul-Aziz, as his major concern was building a civilized and modern society. Starting in 1932, several major transformational changes happened to education policy that led to the building of hundreds of schools all over the country (Al-Ajmi & Al-Harthi, 2006). In 1953, the Ministry of Education (MoE)

established free education for all citizens with free supplements and health services (Al-Shaer, 2007). Formal public women's education started in the 1960s in the era of King Faisal and with the inspiration of his wife, Queen Iffat (Al-Alhareth, Al-Dighrir, & Al-Alhareth, 2015; Hamdan, 2005). After that time, girls started attending universities and colleges in Riyadh University—now known as King Saud University—King Abdul-Aziz University in Jeddah, and the Girls Education College in Mecca (Al-Alhareth, 2013).

The History of Early Childhood Education

Early childhood education has a recent history in the Kingdom of Saudi Arabia. In 1978, the Gulf Women Association (GWA) initiated a preschool teacher training program. The program trained teachers for preschool teaching through two years of a theoretical foundation and one year of field training (Hussain, 2013). King Saud University offered a bachelor's degree program for preschool teachers in Riyadh in 1986 (Abdu Al-Jawad, 2010). In the same year, the General Presidency of Girls Education (GPoGE) established several community colleges all over the kingdom that offered two-year diplomas for preschool education teachers. These two-year diplomas have since been upgraded to four-year bachelor's degrees (Hussain, 2013; Kashkary & Robinson, 2006). Nowadays, all of the universities offer early childhood programs except for the King Fahad University of Petroleum and Minerals.

As women started attending schools and universities and some of them started working outside of the home, the need to establish nurseries for children became a necessity. The first private nursery opened in 1969, and some private institutions opened their doors for this purpose, yet they were limited to some wealthy families (Al-Mogbel, 2014). In 1975, the first public kindergarten with government funding the kingdom has

ever witness was in Mecca city, with 10 classes and 200 children enrolled in it. This was followed by hundreds of kindergartens all over the country. In 2011, the total number of government-run kindergartens was just 832, which rapidly grew to 2,323 kindergartens in 2014 (Meemar, 2014).

The increasing awareness of the importance of spreading early education prior to elementary school has increased the need for qualified and well-prepared teachers. The qualifications for preschool teachers in the Kingdom of Saudi Arabia vary broadly. According to Gahwaji (2013), 56% of preschool teachers hold bachelor's degrees, and 76% of that percentage are not early childhood education holders, while 78% of private preschool teachers hold two-year diplomas. The varying levels of education between public and private preschool teachers led the MoE to acquire in-service teachers to attend professional training programs (Gahwaji, 2013).

Islamic-based Education

The policy of Saudi education primarily emanates from Islam and seeks to promote loyalty to Islam in all aspects and levels of the educational system. The comprehensive document "Educational Policy in Saudi Arabia" was written in 1970 by the Higher Committee of Educational Policy and serves as a main reference for the principals of education. The principals represented and emphasized all the characteristics of Muslims' lives as learners and stressed the religious role of Islamic-based education (Al Sunbul, Al Khateeb, Matwalli, & Abdu Al Jawad, 2008). Religious education is incorporated in all stages and serves as the essence of the curriculum, objectives, aims, and teachings. (Al Salloom, 1995). The main principles that direct education are well-defined in two sections. The first section is the key principles that serve education

statewide and draw the legislation of its system. These principles are reported in the Educational International Conference (2008) as the following:

- Believe in Allah and Islam as a religion and Muhammad as a prophet
- Compulsive Islamic vision of universe, human being and life
- Individual inures the duty to call education and the state must provide
- Muslim female right in education in such manner suitable for its innately on equal foot with males
- Correlation of education all phases to state public development plan
- Arabic language is the education language in all the phases. (The National Report on Education Development in the Kingdom of Saudi Arabia, 2008, p. 11)

The second section defines the educational objectives and goals that view Islam as a religion, identity, and culture that is integral to the individual's life system. They are as the following:

- Development of Islamic religion fidelity
- Articulate comprehensive harmony between science and religion under Islam
- Encourage and develop scientific research and through, enhance observation, contemplation and enlighten capability of Allah marks in the universe to enable individual to participate effectively in social life and also seek to direct it soundly.
- Comprehend the environment, widen the students' horizons via introducing the world various countries.

- Provide the students with other live language to supplement sciences, arts, benefit inventions and to seek transferring knowledge and sciences to other communities to participate in spreading Islam and serve humanity.
- Conformity with youth physical growth phases, aid stable growth spiritually, mentally, emotional and socially and emphasis on the Islam spiritual aspects.
- Define the individual differences of students as a step forward to better guide them and aid their grown pursuant to their capabilities, willingness and tendencies.
- Provide special education and care for mentally or physically handicapped students.
- Pay more attention to talent and gifted and provide special programs for them.
- Train human capabilities and very education with emphasis on vocational education.
- Implant work love in the students, form practical skills, and care with applicatory aspects at schools, enable students to carry out handicraft artistic works, participate in output, and carry out labs, workshops and filed experiments, study scientific bases upon which production is constituted. (The National Report on Education Development in the Kingdom of Saudi Arabia, 2008, pp. 11-12).

Religious Orientation in Early Years

An observer of educational policy in Saudi Arabia documentation issued in 1970 will notice the presence of an Islamic spirit and faith in all levels of the education system.

The seeds of Islamic education are planted as early as preschool education and continue to higher education (Al-Otaibi & Al-Swailm, 2002). Islamic teaching based on Qur'an recitations, Hadith legislation, and ideals in Islam are presented in the daily program of all preschools in the kingdom. The objectives and goals for preschool education were defined in nine main principles, three of them were purely religious orientated principles. They were:

- Nurture the instincts of children and look after their moral, mental and physical growth in a natural environment similar to that provided by their family and which complies with requirements of Islam
- Shape the child's religious inclusion according to the Islamic beliefs in the unity of God.
- Teach children good conduct and help them to acquire the virtues of Islam by giving them a positive example at school
- Familiarize children with the school atmosphere and assist their socialization into school life
- Teach children fundamental knowledge and skills that are related to their surrounding and that are suitable to their age group
- Teach children proper personal hygiene and enhance their creativity and aesthetic sense
- Encourage children's imaginative thinking and guide their development
- Care for children's needs and happiness without spoiling or burdening them
- Protect children against danger, treat early signs of bad conduct and confront childhood problems. (Al Salloom, 1995, pp. 29-30)

Religion and Culture

Religion and culture are indivisible parts of Saudi education that can be seen clearly in the way the statement of education policy was formed. The spirit of Islam is viewed as culture, heritage, and history, which shape the philosophy of education. The essence of education in Islam is viewed as *Talab Al'ilm* or the Arabic form of "*Seeking knowledge*". Seeking knowledge is a mandatory obligation for every Muslim for all ages which also phrased as "*from cradle to grave*" (Al Salloom, 1995, p.7). Seeking knowledge also refers to all forms of knowledge and it is not limited to religious teachings. Objectives that are formed based on Islamic principles of seeking knowledge are seen as foundation to achieve the purpose of education. Al Salloom (1995) has explained the heritage of Islamic education by saying that:

> Historically, education began very early in the Arabian Peninsula. Education is, in fact, "synonymous with religious teachings"…as our Prophet Muhammad (Peace be upon Him) was the first teacher, the Qur'an the first textbook, and the mosque our first school; and… is supported by the fact that the (Holy) Qur'an started off with the divine command "*Read"*. (p. 7).

Since the birth of Islam, there has been a religious base to education from the 14th century to modern Saudi Arabian Kingdom. In addition, religious Islamic beliefs and cultural beliefs related to building community with the unity and solidarity of Muslim nations have helped shape education. The Kingdom of Saudi Arabia also has a special responsibility among other Muslims nations as custodian for the sacred places of Mecca and Madinah. The unique religious character of the country is reflected in all aspect of

cultural and social contexts through promoting and maintaining Islamic spirit and identity, and reflected heavily in education (Al-Otaibi & Al-Swailem, 2002).

Current Initiative for Education in the Kingdom of Saudi Arabia

Moving toward more globalization and competition among nations put the Saudi government under pressure to reform the country's educational system. King Abdullah bin Abdul-Aziz's Public Education Development Project (KAAPEDP) known as *Tatweer*—the Arabic form of development—was initiated in 2007 with a promise to provide: 1) excellence for all, 2) commitment from everyone, 3) accountability for all, 4) professionalism from everyone, and 5) transparency and clarity by everyone (Ministry of Education, Planning and Development, General Directorate of Research, 2008). The *Tatweer* program seeks to "transform Saudi schools by creating school districts that cultivate innovation, and promote excellence and distinction" (Meemar, 2014, p.16). The program has two phases; the first phase is the Smart Model (*Tatweer* schools), which involves changing the traditional schools to a smart model with innovative environment and advanced technology. The second phase is the School Development Model (*Tatweer* schools), which involves enabling schools to move toward more independency and self-evaluation as well as to the use of their own potential for school planning (Alyami, 2014).

For early childhood education, *Tatweer* has addressed three long-term goals for preschools: 1) increasing the number of preschools by 120% from the current numbers; 2) increasing the number of children benefiting from the preschools' services by 97%; 3) and proposing that preschool education be a part of the required education (Hussain, 2013, p. 3). The *Tatweer* program also placed much emphasis on preparing professional,

capable, competent, and well-trained educators, including in-service teachers, practitioners, and administrators.

Furthermore, the most recently released documentation for Saudi Vision 2030, announced in 2016 by Prince Mohammad bin Salman Al Saud (Deputy Crown Prince), shows auspicious investment in education. The documentation expresses ambitious yet achievable long-term goals and expectations for educating young children. Special attention was given to the strength of home–school relationships through deepening parent participation in the education process of their children. In particular, a long-term goal is for 80% of Saudi parents to be engaged in school activities and the learning process of their children by 2020. The vision launched a new educational program known as '*Irtiqaa'*, the Arabic form of "upgrade," which measures how schools are engaging parents effectively in their children's education. '*Irtiqaa'* also seeks to "establish parent-led boards in schools, to open discussion forums and further engage with parents. Teachers will receive training to raise their awareness of the importance of communicating with parents and equip them with effective methods to do so successfully" (Saudi Vision 2030, 2016, p. 33).

Saudi Early Learning Standards (SELS)

In continuing to reform the Saudi educational system, the Ministry of Education and the Saudi education service *Tatweer* with NAEYC's cooperation declared the position statement of Saudi Early Learning Standards (SELS) in 2015. The position statement was developed in a period of 14 months and serves children from 3–6 years old. The SELS is one of the education projects that emanates from the developmental and educational reform of early childhood education in the Kingdom of Saudi Arabia. The

project is intended to inform teachers, educators, and care providers about learning standards based on the characteristics of children's ages and developmental stages. The statement also provides teachers with best practices for preschoolers aged 3 to 6 as well as a description of children's desired outcomes and learning expectations for these ages.

The SELS was a part of NAEYC's global vision to work with other nations to connect and strengthen international communities in the area of early childhood development. The project also was the first large-scale project by NAEYC in the Gulf Cooperation Council (GCC) and the Middle East countries, with the potential to expand to other nations in the region (Tatweer Educational Services, 2016). The position statement shows a remarkable shift to a western style of educating young children while still considering Saudi culture and tradition. The standards adapted NAEYC's position statement (2002) of early learning standards in a culturally appropriate package that is aligned with NAEYC's global vision and respected Saudi Arabian policy regarding educational philosophy. The SELS reflects the work of research, expertise, and professions in the field of early childhood education. These standards include:

- approaches to learning,
- social-emotional development,
- language and early literacy development,
- cognition and general knowledge,
- patriotism and social studies,
- Islamic education, and
- health and physical development.

The seven standards support children's comprehensive development and optimal learning in a unique cultural context. Two standards represent the main principles of the Saudi educational system that stress the religious role of Islamic-based education and the unique characteristics of Muslim society and culture; they are patriotism and Islamic education. For example, Islamic education is one of the standards that started from the preschool years and lasted through all levels of formal schooling. The standards provide a guide for children's spiritual development in two subsections: a) Islamic knowledge and b) Islamic behavior. In the statement of the SELS, Islamic education described as the following:

> Islamic Education is essential for developing the religious feelings, knowledge, and skills that will allow children to fully participate in the Islamic faith and lifestyle. This standard encompasses all aspects of the religion required by Allah, as described in the Qur'an. This includes, where appropriate, performance of religious commitment such as prayer and fasting, memorization and recitation of Qur'anic verses, conducting prayers, and developing love for the Prophet and knowledge of his life, morals, and actions. It also includes establishing Islamic behaviors, such as being courteous and respectful to others, which are considered the manifestation of the principles, values, and customs of Islam. (Saudi Early Learning Standards, 2015, p. 12)

The previous description demonstrates an Islamic faith that encompasses both religious beliefs and practices within the framework of religious-based education in the Kingdom of Saudi Arabia. Examples of pedagogical implanting for Islamic knowledge include: showing interest in the names and attributes of Allah, respecting the Prophet Muhammad

as a role model, and knowing the Five Pillars of Islam. Examples of Islamic behavior include: treating parents and other adults with respect; practicing Islam morals, such as being kind to others; and participating in performing daily prayers (Saudi Early Learning Standards, 2015).

Patriotism is another value of emotional and cultural attachment that is strongly supported throughout education in the preschool years and the later schooling years. The national loyalty in Saudi education is viewed in terms of different features of Muslim and the Saudi homeland, including religion, culture, history, and political and royal power. Patriotism standards presented in four subsections are: a) sense of belonging to society, b) culture and history, c) homeland geography, and d) economy. The following are some examples related to this standard:

- developing a sense of belonging to Muslim society,
- knowing that people are different and have different abilities and speak different languages,
- practicing the national anthem,
- showing interest in some historical events in the country, such as the story of the kingdom's unification,
- celebrating religious holidays and national days,
- valuing the traditions of Saudi costumes, food, and traditional games,
- sharing stories of Saudi heritage told by grandparents,
- recognizing the country's location in the globe,
- valuing the transformation of the desert in modern society,

- knowing the local industry and natural resources, and
- appreciating all roles, jobs, and careers in society.

As the above examples demonstrate, patriotism within the Saudi Arabian perspective encompasses complex and multiple views to include religion, culture, and history. As noted earlier, Saudi Arabia is viewed as the heart of Islam, as it hosts the two holy mosques. The great religious significance of the country has shaped the identity and culture of its citizens. Education is one example of how religion is viewed as the strongest and, for the most, the main source of individuals' learning as early as their preschool years.

The contribution of expanding NAEYC's global engagement to serve young children nationwide encourages an international exchange to improve children's early learning in different countries. A significant advantage of developing SELS based on NAEYC's core principles is increasing the possibilities of maintaining DAP within unique and rich cultural and religious contexts. The SELS project presents multiple perspectives of teaching young children that incorporate a religious and conservative approach to learning—as in Saudi education—as well as endorse a western-style learning philosophy that NAEYC endorses. The global attention to NAEYC's standards of what appropriate learning looks like evokes the claim that NAECY's guidelines of DAP are written for middle-class White children and does not apply to other ethnicities.

Developmentally Appropriate Practices (DAP): History and Development

The history of DAP started from the mid-1980s, when concerns about the education of young children were raised. A major concern among educators regarding traditional education focuses on the drills and practices of isolated academics and does not reflect the higher thinking skills needed for children of the 21st century (The National Association for the Education of Young Children, 1990). Such concerns encouraged a movement called "A Nation at Risk" in 1983 to do an urgent reform of the education system (National Commission on Excellence in Education, 1983). The universal consensus underlying DAP is the rejection of traditional education and a move toward education that supports the whole child approach (Samuels, 1994). Many early childhood educators (e.g., Aldridge, 1992; Bredekamp, 1987; Elkind, 1985) noted that children best learn when they are fully engaged and are supported through all domains of development—social, emotional, physical, and cognitive.

In 1987, the first position statement was issued based on research and theories of how young children develop and learn; its author, Sue Bredekamp, edited it (Bredekamp, 1987). The statement was based on hundreds of professional studies and research conducted in the field of early child education, and it provided guidelines for the best ways for children to develop and learn. The first position statement in its first version included two main dimensions: a) age appropriateness and b) individual appropriateness. Age appropriateness means that teachers in their practices in the classroom should consider the needs of children of a particular age based on the knowledge of children's development in all domains: physical, social, mental, and emotional. The second dimension was individual appropriateness, which means that teachers should consider

each child as an individual based on his or her interests, abilities, skills, and "family background" (Bredekamp, 1987). In this version, family background was mentioned without any reference to cultural and social contexts, which led to a lengthy debate among professionals and educators.

Although the first position statement was built upon a theoretical framework of the development of young children, it has been the subject of several criticisms. Many educators have claimed that the first position statement ignores the importance of the cultural and social backgrounds of children (Delpit, 1988; Jipson, 1991; Kessler, 1991). The most controversial point related to this criticism is that DAP is a western form for middle-class White children and does not apply to children of different ethnicities (Kessler, 1991). Kessler (1991) claimed that DAP is a rigid standard that is not applicable to all children. Jipson (1991) also criticized DAP by noting that the statement does not serve African-American children and children who are economically disadvantaged. Delpit (1988) claimed that the statement is written from one perspective, notably a Eurocentric one, and biases other children. Further, Kessler (1991) warned of the danger of using one perspective to consider the appropriateness of young children's education; rather, multiple perspectives of what are considered appropriate practices are necessary (Kessler, 1991). Fowell and Lawton (1993) also claimed that a mismatch exists between what is considered appropriate and inappropriate in NAEYC's guidelines. Wien (1995) concluded that the criticism of DAP is either for its ignorance of the cultural and social aspects of children learning or the limited possibilities to either DAP or DIP.

Another criticism related to the limitation of DAP is that it is a set of practices that are either appropriate or inappropriate based on a developmental point of view.

Spodek (1988) noted that DAP overstates the developmental aspect of children's development and that the statement focuses mainly on how to teach and ignore what to teach. He further stated that enhancing children's knowledge is as important as enhancing their development. According to Spodek (1991):

> In rethinking the criteria we use for determining what to teach kindergarten children, we need to use the intellectual value of what is taught as one of the criteria for selecting program content, along with such criteria as developmental appropriateness, utility, and consistency with the values of society. When all these criteria are used to determine what to teach young children, better early childhood programs will be developed and selected. (p.20)

Bredekamp has responded to many criticisms that DAP has received. In response to claims that DAP is overstated child development, Bredekamp provided three explanations emphasizing children's development:

- Child development is an important part of our knowledge base albeit imperfect and changing; it is what we as early childhood educators bring to the curriculum table so to speak.
- Child development is a large part (though not all) of our definition of a quality program for children, and NAEYC has assumed the responsibility for setting standards for our own practice.
- Knowledge of child development has too often been overlooked and children have suffered as a consequence. NAEYC's mission is to act on behalf of our best understanding of the needs and interests of young children. When children's needs are ignored, we cannot remain silent. (Beredekamp, 1992, p. 206-207).

Further, Bredekamp (1991) clarified that the dimension of "individually appropriate" in the first position statement included children's social and cultural aspects as part of the "family background" mentioned in 1987. And she pointed out that to meet children's individuality means to meet them as unique individuals with different backgrounds and cultures. Bredekamp (1993) stated that some of the criticism (e.g., Fowell & Lawton, 1993) of DAP is based on misinterpretations of the statement. The most positive aspect of the NAEYC's first statement of DAP is that it increases the conversation and dialogue among professions to enhance children's learning.

Ten years later, the second statement showed improvement in terms of including many criticism points. In this version, children with special needs as well as the cultural and social aspects of children and second-language learners are all addressed. In this statement, the contrast between DAP and DIP practices was still provided, which led to another debate related to this issue. Lubeck (1998) raised major criticisms about this version. Lubeck (1998) pointed to the limited possibilities presented in a set of statements and that this could lead us to a single interpretation of DAP and DIP practices. Lubeck added that learning is stopped when each one of us thinks in the same way (Lubeck, 1998). She also mentioned that if educators limit children's learning in terms of what is appropriate and what is inappropriate, that will limit our thinking of what children are capable of. Furthermore, she stated that the consensus upon what is DAP or DIP is made by a perspective of western culture that cannot be generalized and therefore discriminates against other cultures (Lubeck, 1998). On the other hand, Charlesworth (1998) responded to Lubeck by saying that Lubeck viewed this issue through a lens of the cultural and social aspects of DAP, not through the lens of a child as the center of focus and what the

child's needs. Charlesworth (1998) noted that stated DAP is a positive, and negative examples were good to encourage reflection on best practices (Charlesworth, 1998).

The third position of NAEYC's guidelines build upon fundamental principles of early childhood quality programs. The position statement for DAP of 2009 emphasized four interrelated themes: a) excellence and equity, b) intentionality and effectiveness, c) continuity and change, and d) joy and learning (Copple & Bredekamp, 2009). Many of the issues in the previous versions addressed second-language learners, diversity and cultural background, and special needs children. In addition, this statement stressed three key messages: a call to reduce the achievement gap; a comprehensive, effective curriculum; and improving teaching and learning. In this version, DAP was provided, and DIP was replaced with "in contrast" to refer to practices that are not considered developmentally appropriate. As with the previous version in 1997, the five keys of effective teaching were introduced: 1. building a caring community for learners, 2. enhancing teaching and learning, 3. planning a constructed curriculum, 4. assessing children's learning, and 5. establishing reciprocal relationships with families (Copple & Bredekamp, 2009).

In defense of DAP, Elkind (2015) provided educators with three powerful arguments for the superiority of DAP over other educational programs:

1. DAP is more solidly grounded in philosophy, theory, research, and practice than any other approach to education or any other early education programs.
2. DAP provides the most integrated curricula of socialization, individualization, work, and play than does any other approach to education.

3. DAP offers students the greatest possible combination of learning experiences (social, natural, personal, and unconscious) than any other approach to education. (Elkind,2015, p. 5)

DAP's Theoretical Backgrounds

The theoretical and philosophical backgrounds of DAP are based on the work of well-known theorists of child development (e.g., Piaget's theory of cognitive development; Vygotsky's theory of social development, Bronfenbrenner's bio-ecological model) as well as a philosophy of modern approaches to children's learning (e.g., Dewey's progressive education). NAEYC's guidelines of DAP highlighted the main features of child development and learning and provided a strong foundation for teachers to reflect and link theory to practices (Copple & Bredekamp, 2012).

The 12 principles of child development and learning that inform DAP are based on the constructive and interactive perspectives of Piaget (1952; 1962; 1978) (Copple & Bredekamp, 2009). Piaget's framework of children's development and learning has translated to applicable practices that support teachers' decisions in the early childhood classroom (Walsh, Sproule, McGuinness, Trew, & Ingram, 2010). Although Piaget has often been viewed as a psychologist, the epistemological background of his research distinguished him as an epistemologist. Epistemology is the study of the nature of knowledge (Kamii, 2000). Kamii and Ewing (1996) have noted that Piaget's theory is the only theory that provided a scientific explanation for how children form their knowledge. According to Kamii and Ewing (1996):

> To teach 3-yearolds-7-year-olds or any other age group, educators must understand how children have acquired the knowledge they already have, and how this knowledge is related to that of adolescents and adults. The only theory in existence that shows this development from birth to adolescence is Piaget's. (p. 261)

In Piaget's view, children contribute to their learning as they "construct" their knowledge within and their learning is occurring intrinsically not extrinsically. The expression "construction" has superiority over "instruction" in the Piagetian view of learning, which formed his scheme as constructivism theory (Mooney, 2000; Weissman & Hendrick, 2013). Children learn through their interactions with the environment. Piaget believed that children learn to satisfy their curiosity. As long as children are curious about something, they have a desire to explore and figure out meaning in their surroundings (Piaget, 1952). According to Piaget (1951), play is an important avenue of children's learning. Through play, children can interact with real objects around them and make sense of the world. Piaget viewed play and active exploration as a source that contributes to children's cognitive development (Piaget, 1951). In this sense, teachers are encouraging children to follow their interests and guide them through self-directed learning, play, and exploration. This philosophy of children's learning is known as the child-centered approach, which is the framework for DAP (Copple & Bredekamp, 2009).

Educational practices associated with the child-centered approach are rooted in the Piagetian view of understanding how young children think and develop their knowledge (Weissman & Hendrick, 2013). DAP is both a child-centered and play-based

learning style that assigns more weight to the appropriateness of educational practices developmentally, individually, and culturally (Copple & Bredekamp, 2009). In the developmentally appropriate classroom, teachers are encouraged to use a variety of authentic and well-planned activities that suit children's ages and developmental stages. Engaging children in well-planned educational practices contributes to their cognitive development. As Daniels and Shumow (2003) noted, "The educational practices children experience shape their developing self-perceptions as learners and potentially their ''habits of mind'' or customary ways of engaging the world" (Daniels & Shumow, 2003, p. 507).

An observer of the first and second position statements of DAP will notice that more attention was given to Piaget's constructivist point of view of children's cognitive development (Van Horn & Ramey, 2003). Meanwhile, for the latest version of the position published in 2009, notable attention was given to the social and cultural aspects of children's learning that are supported by Vygotsky as well as Piaget's cognitive constructivist perspective (Walsh, Sproule, McGuinness, Trew, & Ingram, 2010). Vygotsky was also known as a "social constructivist," as his views of children's learning overlapped with Piaget's perspective regarding the essence that children construct their knowledge by interacting with the environment (Fox & Riconscente, 2008). A major theme of Vygotsky's constructive view is the recognition of the role of the social and cultural influences in forming the child's cognitive development. Based on Vygotsky (1978), children learn best when they are in social settings where they can construct their knowledge through interaction with the environment and with others (e.g. peers, teachers, adults).

According to Vygotsky's point of view of learning, children learn from doing and also learn from talking and engaging in conversations in social settings (Vygotsky, 1933). As Piaget, Vygotsky viewed play as an important vehicle for children to learn and explore the world around them. He noted that play is not a form of activity; rather, it is a source for children's intellectual and cognitive development. According to Vygotsky (1933):

> At preschool age special needs and incentives arise that are very important for the whole of the child's development and that are spontaneously expressed in play. In essence, there arise in a child of this age many unrealizable tendencies and immediately unrealizable desires. A very young child tends to gratify his desires at once. Any delay in fulfilling them is hard for him and is acceptable only within certain narrow limits; no one has met a child under three who wanted to do something a few days hence. Ordinarily, the interval between the motive and its realization is extremely short. I think that if there were no development in preschool years of needs that cannot be realized immediately, there would be no play. Experiments show that the development of play is arrested both in intellectually underdeveloped children and in those who are affectively immature. (Vygotsky, 1933, para. 9. Translated by Mulholland, 1967)

A hallmark feature of Vygotsky's perspective of the social contribution to the child's learning is the notion of the zone of proximal development (ZPD). Vygotsky's view of child's ZPD provided a description of the complexity of a child's mental development in relation to learning in social settings. The ZPD defined as "the distance between the actual developmental level as determined by independent problem solving

and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1930, p.9). In another words, it is the distance between what a child can do in his or her own on some task and what a child can do with little help from others (e.g., teacher, peers, parent). Based on Vygotsky's point of view, teachers play an important role in children's ZPD. Teachers are encouraged to plan curricula that address children's current abilities and also challenge children's learning to stretch their abilities to reach their ZPDs. In addition, teachers have to guide and observe children through their learning and provide proper scaffolding. Scaffolding is a term used in Vygotsky's theory referring to the assistance that the teacher provides to children. Observation is a significant tool that the teacher can use to evaluate and decide what is proper assistance to provide to children or to facilitate scaffolding with other children (Danials, 2001)

Vygotsky's theoretical framework of child's social interaction is presented in the NAEYC's guidelines of DAP. Teachers within the framework of DAP are encouraged to consider the child as an independent individual and social contributor to other peers in the classroom. Children in this sense are provided with developmentally appropriate activities that engage them as individuals, peers, and groups (Copple & Bredekamp, 2009). Developmentally appropriate learning experiences recognize the nature of a child's social interaction and reinforce the work that a child can do with a teacher's guidance, or with collaboration with other peers. Through the lens of DAP, the more productive learning tasks are the tasks that challenge children's thinking to reach their ZPD rather than working independently with less challenging tasks (Copple & Bredekamp, 2009; Phillips & Scrinzi, 2013).

Another contribution to our knowledge base of child development is Bronfenbrenner's context of human development. Like Vygotsky, Bronfenbrenner viewed environment as an active force that influences children's development through a series of socializations that children possess (Bronfenbrenner & Ceci, 1993). The social contexts to which Vygotsky referred are best illustrated by Bronfenbrenner's ecological model in five layers of contexts that surround children's growth and development. The five layers of contexts are: microsystem, mesosystem, exosystem, macrosystem, and chronosystem. The five layers of contexts are comprehensive and mediate the influences on children's development directly and indirectly. Microsystem represents parents', teachers', and peers' direct influence on children. Mesosystem comprises two social settings that influence the developing child (e.g., home, school). Exosystem comprises two or more social settings where the child lives that include the child's neighborhood, school, community, etc. Macrosystem is extended broadly to include a broad culture, subculture, belief system, lifestyle, or any sort of particular social structure (Bronfenbrenner, 1994). The last layer in his model is related to changes that happen in the culture or society chronologically over a period of time. Bronfenbrenner noted that children's developmental processes might vary due to some historical event that occurred within a particular group or culture (e.g., Great Depression, war). (Bronfenbrenner, 1994; Tudge, Mokrova, Hatfield, & Karnik, 2009). Even though this model provides a wide contextual framework of the social nature of human development, it discounts the biological identity of a person. To consider the role that an individual plays in a social context, Bronfenbrenner changed the name of this model to bioecological model (Bronfenbrenner & Ceci, 1993).

According to Bronfenbrenner and Morris (2006), the relevance of parents and other adult family members in human development is conveyed in the crucial roles they play in a child's overall development. As they stated:

> To develop—intellectually, emotionally, socially, and morally—a child requires, for all of these, the same thing: participation in progressively more complex activities, on a regular basis over an extended period of time in the child's life, with one or more persons with whom the child develops a strong, mutual emotional attachment, and who are committed to the child's wellbeing and development, preferably for life… The establishment of a strong mutual emotional attachment leads to internalization of the parent's activities and expressed feelings of affection. Such mutual ties motivate the child's interest and engagement in related activities in the immediate physical, social, and—in due course—symbolic environment that invite exploration, manipulation, elaboration, and imagination. (Bronfenbrenner & Morris, 2006, p.823)

Reviewing the history and growth of DAP and its alignment with Bronfenbrenner's bioecological model, the three position statements (Bredekamp, 1987; Bredekamp & Copple, 1997; Copple & Bredekamp, 2009) presented the familial, social, and cultural considerations with different emphases. The first position statement of DAP (1987) narrowly addressed family background as a part of individual appropriateness, and it was silent about the role of cultural structure and of a child's social structure. A notable improvement was shown in the position statement (1997) that acknowledged the social and cultural contexts in which children live. The acknowledgment was extended to "ensure that learning experiences are meaningful, relevant, and respectful for the

participating children and their families" (Bredekamp & Copple, 1997, p. 9). The third and latest revision of the statement (2009), the family and culture dimensions, was continuously presented with pedagogical reflection on effective teaching. As Copple and Bredekamp (2009) stated, an effective teacher needs to know "when young children are in group setting outside the home, what makes sense to them, how they use language to interact, and how they experience this new world depend on the social and cultural contexts to which they are accustomed" (p. 10).

What is challenging educators today, Dewey pointed to nearly a century ago. Many theories concerning child development and learning in the 20th century (e.g., Piaget, Vygotsky, Montessori) have educational thoughts grounded in Dewey's philosophy of education. The general consensus among many theorists was advocating the child-centered approach to learning (Mooney, 2000), which is the core of DAP. Dewey is most associated with the theoretical base of progressive education that stands as a reaction to rigid and traditional education. He believed that children best learn by doing and becoming involved in real-life experiences and experiments. In his book *How We Think*, Dewey illustrated the richness of lifelike experiences in which children can be engaged by doing in the following example:

> Much of the extraordinary interest that children take in planting seeds and watching the stages of their growth is due to the fact that a drama is enacting before their eyes; there is something doing, each step of which is important in the destiny of the plant. (Dewey, 1910, p. 195)

Dewey further pointed to many questions that educators still ask today, such as, how can we plan an effective curriculum? How we can fully engage children in the classroom? How can we introduce children to a subject matter? In his book *The Child and the Curriculum*, Dewey blended teaching philosophy with psychology and pedagogical practices when he referred to the processing of a child's subject matter, by stating "to see it, is to psychologize it" (Dewey, 1902, p. 30). The following piece of his writing demonstrates the pedagogical concerns associated with planning a child's learning experience:

> Hence, what concerns him, as teacher, is the ways in which that subjects may become a part of experience; what there is in the child's present that is usable with reference to it; how such elements are to be used; how his own knowledge of the subject-matter may assist in interpreting the child's needs and doings, and determine the medium in which the child should be placed in order that his growth may be properly directed. (Dewey, 1902, p. 30)

Dewey's pedagogic creed informed DAP to promote learning experiences that are meaningful, enjoyable, and relevant to children's lives. A hallmark of DAP that aligns with Dewey's philosophy of the role of the teacher is teacher's intentionality. DAP teachers are aware and intentional in everything they do. They make thoughtful and purposeful decisions to make meaningful connections in curriculum planning (Copple & Bredekamp, 2009).

DAP in Different Cultures and Countries

A review of the research literature on early childhood education in Saudi Arabia revealed a lack of studies that examined preschool teachers' beliefs and practices. Since the first position statement of NAEYC's guidelines in the United States, DAP has received local and global attention. Many studies have been conducted to examine teachers' beliefs and practice regarding DAP in different cultures and countries. Yet, the knowledge of DAP among Saudi Arabian preschool teachers is still limited. The recent SELS initiated based on NAEYC's core principles of children's learning show the promising potential of maintaining DAP in the Saudi educational system in the near future.

Many studies have been conducted to investigate teachers' beliefs and practices regarding developmentally appropriate and inappropriate practices in different parts of the world. Many researchers found that conventional instruments, such as surveys and questionnaires, are sufficient for collecting appropriate data, while others relied on the richness of qualitative descriptions of the phenomena. Some of the instruments that have been used nationwide among educators to investigate teachers' beliefs and practices are the Teacher Questionnaire that Charlesworth and colleagues (1991) developed based on NAEYC's guidelines for DAP (Bredekamp, 1987). The questionnaire consisted of two scales: The Teachers' Beliefs Scale and the Instructional Activities Scale.

Using the Teacher Questionnaire, Charlesworth et al. (1991) examined the instrument's utility by studying the beliefs and practices of 113 kindergarten teachers from four different Southern states. The results from this study showed moderate positive relationships between developmentally appropriate beliefs and DAP, as well as moderate

positive relationships between developmentally inappropriate beliefs and DIP. This study showed the Teacher Questionnaire as being a promising instrument for studying developmentally appropriate beliefs and practices from teachers' perceptions (Charlesworth et al., 1991). In 1993, the Teacher Questionnaire was slightly revised by Charlesworth and colleagues and used with 204 kindergarten teachers. An observation instrument was also developed and used in this study to rate areas of classroom practice and procedure. Findings from this study are consistent with those of a previous study (Charlesworth et al., 1991) featuring a moderate, positive, and statistically significant correlation between teachers' self-reported beliefs and their practices. Also, the results of the observation checklist supported the results from the questionnaire. The authors indicated that the developed instrument used in this study holds promise for future research concerning kindergarten teachers' beliefs and practices.

With the same instrument, McMullen and colleagues in 2005 conducted a multi-national comparative study that included the US, China, Taiwan, Korea, and Turkey. This study aimed to examine the commonalities across the five countries regarding the philosophy of DAP beliefs and practices using self-reported beliefs and self-reported practices. The caregivers and teachers included in this study were from the US (n = 412), China (n = 244), Taiwan (n = 222), Korea (n = 574), and Turkey (n = 214). Three major instrumentations used for collecting data were the Teacher Beliefs Scale (TBS) and the Instructional Activities Scale (IAS) adopted from Charlesworth, Hart, Burts, and Hernandez (1991), as well as a demographic questionnaire. One-way analysis of variance (ANOVA) was used to analyze the data. The findings from this study revealed that the self-reported beliefs of DAP philosophy were found to be positively related to self-

reported practices in all five countries. Showing that the US differed significantly from the other four countries in TBS and IAS, China distinctively had the lowest mean score among the other three countries for both TBS and IAS. Taiwan, Korea, and Turkey did not differ significantly from one another in TBS. However, Taiwan's teachers scored higher than Turkey's teachers in IAS, and they also scored higher than Korean teachers did. Commonalities found among the five countries related to the importance of content integration across the curriculum, the promotion of social/emotional development, the support of hands-on activities, and the allowing of play choices.

In 2007, Liu conducted a similar study to examine any similarities or differences between U.S. and Taiwanese public kindergarten teachers. The teachers who participated in this study included full-time kindergarten teachers from Taiwanese public kindergarten (n=119) and Taiwanese private kindergartens (n=114). The US included full-time public kindergarten teachers (n=55) and private kindergarten teachers (n=53). Burts et al. (2000) designed the Teachers Beliefs and Practice Survey: 3–5 year olds that was used. The findings from this study revealed that both kindergarten teachers in the US and Taiwan endorsed DAP beliefs and reported that DAP practices occurred in their classrooms regularly. Contrary to previous studies, this study reported that Taiwanese teachers had higher DAP beliefs and lower DIP beliefs than did U.S. teachers, whereas U.S. kindergarten teachers reported higher DAP and DIP activities. Both groups showed recognition of the values of family, culture, and social inclusion, yet U.S. teachers scored higher in family culture inclusion (FCI) than did Taiwanese teachers. The researcher explained this finding with the emphasis of multicultural education in the US due to the more diverse ethnic backgrounds in U.S. schools than in Taiwanese schools. For future

research, the researcher recommended including other techniques in classroom observation that help to justify the inconsistencies between teachers' beliefs and practices (Liu, 2007).

Erdiller Akın (2013) presented another Turkish advocate for the appropriateness of DAP for young children. The study sought to understand Turkish preservice early childhood teachers' pedagogical beliefs toward developmentally appropriate practices. Participants in this study included 507 preservice teachers enrolled in 4-year early childhood education programs. The programs represented four public universities and one private university in Ankara, the capital of Turkey. Data collection involved the TBS and the demographic and background information questionnaire. The teachers' background information included characteristics such as grade level, type of high school, family's income and educational level, occupation, home-living information, and teachers' financial support. The collected data were analyzed using one-way ANOVA. Results from this study revealed that preservice Turkish teachers' beliefs are closer to the child-centered approach to teaching young children. The study also reported that as teacher students receive formal training in the field of early childhood education, they tend to favor DAP more (Erdiller Akın, 2013).

Fauor (2003) conducted a study to examine the relationship between teachers' beliefs and practices regarding DAP in Lebanon. The study also attempted to determine the relationship between teachers' beliefs and practices and a school's socioeconomic status, teachers' education, and the classroom experience. An instrument used for this study was the Teacher Questionnaire including TBS, IAS, and the CPI, which Charlesworth, Hart, and Burts (1991) developed, as well as interviews and classroom

observations. Teachers participating in this study (n=135) were early childhood teachers at the levels of preschool and kindergarten. The teachers were selected from 21 schools in Lebanon that were representative for religious diversity and socioeconomic status. Findings from this study indicated that moderate associations existed between DAP beliefs and practices and teachers' characteristics (level of education and salary) and school characteristics (socioeconomics and class size). Teachers who specialized in education followed more appropriate practices than other teachers. Additionally, salary had an influence on teachers' beliefs and practices, as well as the socioeconomic status of the school. The findings also showed that teachers had more developmentally appropriate beliefs than DAP.

Hoot and colleagues (1996) explored what constitute DAP for children ages 3–5. Administrators' programs, preschool teachers, and parents of preschoolers from four countries (US, Finland, China, and Ecuador) were selected to explore their views regarding DAP. A survey was created for the purpose of this study and included 26 items, two items for the 13 categories that NAEYC's document of DAP identified. The central finding from this study was that Finland was the highest country among the others in terms of consistency with DAP philosophy, beliefs, and practices, followed by the US. Both China and Ecuador showed more emphasis on academic skills supporting later success, such as literacy and math, which was contrary to what was found in Finland.

Burts et al. (1992) explored teachers' beliefs and practices in relation to children's stress behaviors. The study consisted of 204 kindergarten children; 103 children in a developmentally appropriate classroom and 101 in developmentally inappropriate classroom. Data were collected using the Teacher Questionnaire and Classroom Child

Stress Behavior Instrument. Repeated-measure MANOVA was used to analyze the data. Findings from this study indicated that children in the developmentally inappropriate classroom exhibited more stress than did children in the developmentally appropriate classroom. The greatest level of stress was shown during the times of whole-group work, waiting, transition, and worksheets in the developmentally inappropriate classroom versus the developmentally appropriate classroom.

Seeking a narrative investigation into humans' problems, some researchers sought for it to be the primary data collection instrument for approaching and interacting with purposefully selected individuals to answer the research questions. According to Creswell (2014), qualitative research is:

> An approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. The process of research involves emerging questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data. (p.32)

The dilemma of meeting children's developmental needs in all areas and teaching the standards was investigated by Goldstein (2007). This qualitative study addressed the tension between teaching the standards and keeping up with DAP beliefs for two kindergarten teachers from Texas. This study attempted to provide a vivid narrative of the two teachers' efforts to sustain teaching practices that were responsive to children's needs and the requirements of the state. A case study design was used to ensure detailed and specific information, rich description, and narrative vignettes for the two participants.

Data was collected through school visitations, interviews, and observations over a period of 12 weeks in total. Each participant's data set was reviewed and analyzed individually, then cross-case analysis was used for both cases. Findings from this study indicated that both teachers showed a commitment to developmentally appropriate kindergarten practices that matched their understanding of the state requirements. Three approaches (integration, demarcation, and acquiescence) were further discussed in light of teachers' narrative vignettes to enrich current understandings, expectations, potentials, and solutions to challenges facing kindergarten (Goldstein, 2007).

To understand teachers' beliefs and the practices in India, Hedge and Cassidy (2009) examined kindergarten teachers' beliefs regarding DAP in the city of Mumbai, India. The purpose of the study was to explore Indian teachers' beliefs about the applicability of DAP guidelines within Indian settings. Twelve female kindergarten teachers were selected from four different zones of Mumbai; three teachers from each zone represented middle income and higher middle income. The participants did interviews with open-ended questions ranging from very general questions to more specific ones. The study used the constant comparative method to analyze the qualitative data including a cross-case analysis of the 12 interviews. The analysis revealed six themes from teachers' responses to the interview questions. These themes were a) play way versus talk and chalk, b) worksheets as important and essential, c) group activities as a socializing agent, d) constraints on play, e) need for change, f) and struggle between belief and practice. The researchers noted that this study gave insight regarding how some aspects of DAP are reinterpreted within the cultural contexts (Hedge & Cassidy, 2009).

In Turkey, Caner and Subaşı (2010) conducted a study to examine the teaching beliefs and practices of two Turkish teachers. This study focused on the beliefs and practices of teaching English to young children in the early phases of primary education (kindergarten and first grade in state Turkish schools). They looked at the teaching experiences of two English teachers (Teacher A, 6 years, and Teacher B, 12 years), both of whom graduated from an English language training department. The data gathered included various procedures and elements in this qualitative study. The two teachers completed a questionnaire adopted from Charlesworth et al. (1993), and they conducted a semi-structured interview. Additionally, the researchers randomly selected lessons of the participants to observe and video record. The participants' views of their beliefs and practices of teaching a foreign language were gathered and analyzed separately. Teacher A stressed the importance of providing various activities that satisfied children's interests and curiosity, such as listening to records and compact discs (CDs), playing games, doing puzzles, singing, and listening to music. Teacher B emphasized the children's individual differences when planning daily lessons. She also pointed out considering children's levels of interest, likes, dislikes, and preferences in teaching. The two teachers agreed on the importance of considering children's ages and levels of interest when choosing activities and materials for teaching foreign languages to young learners. Similarly, both teachers agreed that the crowdedness in their classes might lead to using inadequate and inappropriate developmental practices.

To understand the relationship between beliefs and practices in terms of culture, Zeng and Zeng (2005) sought to examine the status quo of the developmentally and culturally inappropriate beliefs and practices of teachers and administrators. In addition,

this study investigated the qualification of school teachers and administrators. Instruments used to collect data were the Kindergarten Teacher Questionnaire and the School Administrator Questionnaire. A national probability sample of 3,047 teachers and 866 administrators by the Early Childhood Longitudinal Study (1998–1999) was used. To analyze the data, the researchers used a range of analytical approaches to achieve the purpose of the study, which included the standard error of estimates, correlation analysis, confirmatory factor analysis, hierarchical linear modeling, and outcome and predictor measures. For the results, teachers and administrators reported some developmentally inappropriate practices and beliefs. The analysis showed that a large portion of teachers (about 77.7%) believed it to be very important for children to follow directions, and (about 60.3%) considered it important for children to sit still and pay attention. The analysis also showed that nearly half of the teachers (about 52.4%) believed in the importance of standardized testing when evaluating children's achievement. The findings from this study also reported that the majority of administrators (about 77.2%) have never taught in kindergarten, which meant they have limited knowledge of educational kindergarten experiences and kindergarten teachers' work. This study further noted that due to the limited items of the cultural aspects of the teachers' survey, the role of culture in the teacher's pedagogical practices and beliefs was not well defined.

Rababah (2012) conducted a multiple-case study aimed at exploring developmentally appropriate beliefs and practices among Jordanian and American kindergarten teachers. The qualitative study was designed to answer the question of how kindergarten teachers reflected developmentally appropriate beliefs in their teaching practices in the kindergarten classroom. The study involved 10 kindergarten teachers; 5

teachers from urban public schools in the northern part of Jordan and five teachers from different schools in Central Alabama. The data collection process involved teacher interviews, classroom observations, and reviewing documentary materials, followed by qualitative data analysis procedures at two levels: within cases and across cases. Five common themes revealed from both cases included: a) Beliefs guided practice; b) enhanced learning and development; c) established a caring community; d) ensured success; and e) reflected upon obstacles to DAP (Rababah, 2012).

Similarly, with a single-case study, McCaslin (2004) studied the professional development of a certified elementary teacher as she studied DAP and pursued her add-on certification for pre-kindergarten through kindergarten. The study aimed to teach the teacher's changes that occurred in her teaching, beliefs, and practices. Data collection involved the use of multiple methods of qualitative data resources to allow for rich and in-depth descriptions, including: researcher and supervisor observations, interviews with the teacher and his or her supervisors, journal witting, and the teacher's self-reported teaching beliefs and practices. The researcher followed an open-coded and a content analysis to create four descriptors that the research questions mainly guided. The content analysis resulted in major changes for the teacher's practice in the preschool classroom from mostly DIP to mostly DAP. The results also revealed four main sources that supported DAP professional advancement as the following: a) concrete knowledge of DAP, b) experience in the use of DAP, c) support and molding by others, d) and teacher's personal attributes. On the other hand, four main obstacles that stand as barriers for the teachers to implement DAP were: a) a teacher's personal attributes, b) a lack of concrete

knowledge, c) a lack of hands-on practice, and d) lack of support of DAP by others (McCaslin, 2004).

Factors Shaping Teachers' DAP Beliefs

Some factors play an important role in shaping teachers' beliefs. Teachers' characteristics, such as age, years of experience, specialization, and level of education, shape teachers' beliefs and practices in the classroom.

The association between education level and developmentally appropriate practices has been a concern for many researchers. McKenzie (2013) conducted a study to investigate the relationship between the National Board Certification and perceived used of developmentally appropriate practices. Data was collected from 246 non-National Board-certified early childhood teachers and 135 National Board-certified early childhood teachers. Collected data also included reporting of teachers' ages, years of teaching experience, grade levels currently being taught, ethnicities, degree types, certification types, and degree levels. Instrumentation used was the early childhood teachers' inventory of practices (E-TIP) developed for the purposes of this study. The instrument validity and reliability was addressed. To analyze the data, one-way multivariate analysis of variance (MANOVA) was run to determine the effect of the National Board Certification on the teachers' perceived use of DAP. The reported results from the study indicated that National Board-certified teachers perceive they incorporate a broad range of developmentally appropriate practice in their teaching compared to non-National Board-certified teachers. The researcher of the study further recommended a follow-up study to compare teachers' perceptions of classroom teaching to their actual practices (McKenzie, 2013).

Abu-Jaber et al. (2010) conducted a study aimed at exploring kindergarten teachers' beliefs and practices toward DAP as it relates to teachers' age, years of experience, specialization, and level of education. The randomly selected teachers (n=285) were working in 40 kindergarten classrooms in the governorate of Amman, Jordan. The researchers created a questionnaire with two sections to gather the data. The first section was about teachers' demographic information, age, years of experience, specialization, and level of education. The second section consisted of 44 items and was constructed based on the five keys of effective teaching that NAEYC had reported. The findings from this study indicated that there were high beliefs among Jordanian teachers toward DAP in all five domains except for establishing relationships with families. The results also showed a mix between DAP and DIP in their teaching practices. Differences were found between teachers holding bachelor's degrees and teachers who held associate's degrees regarding the teachers' academic knowledge of early childhood education; for specialized teachers, DAP became more meaningful. Likewise, teachers who completed education programs that specialized in education had higher mean scores for their beliefs toward DAP than did teachers who did not major in education. Differences were also found among teachers with different years of experience, and as teachers gained more experience, their belief in DAP became stronger. Similarly, older teachers showed more developmentally appropriate beliefs than did younger teachers.

Another study conducted in Jordan by Haroun and Weshah (2009) aimed to investigate kindergarten teachers' beliefs regarding developmentally appropriate practice in relation to level of education, the school type, and years of experience. The study used the primary teacher questionnaire (PTO) developed by Smith (1993) to collect

appropriate data from 181 female teachers. Analytical statistics included calculating means and standard deviations, one-way ANOVA, *t* test, and Scheffe test for post hoc comparisons. Findings from this study indicated that Jordanian kindergarten teachers tended to believe in DAP in general. The study also noted that teachers with high education levels and holding master's degrees in ECE tended to score statistically more significant than other teachers. The results also showed that there were no statistically significant differences in the mean scores of the kindergarten teachers' DAP beliefs in term of years of experience and school type. Further, the researchers of the study recommended incorporating developmentally appropriate practices in the kindergarten teacher preparation programs (Haroun & Weshah, 2009).

Parker and Neuharth-Pritchett in 2006 conducted a study aimed at examining the beliefs of kindergarten teachers in relation to developmentally appropriate instruction. Data in this study were collected from 34 kindergarten teachers selected from seven schools located in a rural and southeastern area of the US. The data collection also involved surveys, interviews, and observations. Participants were questioned regarding their instructional beliefs and practices. Based on the teachers' responses on how they would characterize their teachings, three categories emerged from the analysis. Nine teachers of the 34 characterized themselves as teacher directed, 16 teachers as both teacher directed and child centered, and nine classified as child centered. The analysis also identified four external factors that affected teachers' beliefs and practices: 1) the shift to a more academic kindergarten, 2) the pressure for student preparation, 3) curricular and instructional control, 4) and the perceptions of teacher-directed instruction.

The findings from this study illustrated the complexity of DAP for early childhood educators (Parker & Neuharth-Pritchett, 2006).

Another study that Han and Neuharth-Pritchett conducted in 2010 aimed to investigate the relationship between early childhood teachers' educational levels and their beliefs about appropriate and inappropriate practices. The sample consisted of 35 lead teachers and 27 teacher assistants. The data were collected through two types of instruments: 1) Teacher Attitude Inventory, 2) individual items (26 items) pulled from a TBS and the Teacher Practices Scale. These scales have been used in a number of research studies conducted mostly on investigating DAP. One-way ANOVA was used to examine the differences between the lead teachers and teacher assistants regarding their DAP beliefs. The results revealed that the teacher assistants were more likely to endorse developmentally inappropriate beliefs than were lead teachers. Analysis of the individual items revealed that the lead teachers were less likely to support inappropriate practices, whereas the teacher assistants reported having more developmentally inappropriate beliefs (Han & Neuharth-Pritchett, 2010).

An Alternative Approach to Study Teachers' Beliefs

Exploring DAP's beliefs through the lens of the teachers' subjectivity has been a concern for some researchers (Ernest, 1999, 2001, 2011; Szente, 2001, Szente, Hoot, & Ernest, 2002). Q methodology as an approach for research comprises the strength of the objective and subjective methods used in the social sciences (Brown, 1999). The technique used in Q-method research displays many of the characteristics of the mixed-methods approach, which allows one to identify commonality and diversity among a number of participants. Although the Q method has attracted a lot of attention as a cross-

disciplinary approach to subjectivity, few research studies have been conducted to explore teachers' DAP beliefs in early childhood education. In the following section is a review of some studies that used Q methodology to explore teachers' subjective beliefs regarding DAP.

To understand the subjective beliefs of teachers and parents regarding DAP and DIP practice, Ernest (1999) explored the unique or shared viewpoints existing among teachers and family members. The study also sought to investigate the relationship between the viewpoints and the participants' demographic information from 15 teachers and 15 family members. The sample was selected from three Head Start programs in Buffalo, New York. The researcher utilized Q methodology to collect, analyze, and interpret the data. Data collection involved participants' sorting 60 cards based on their subjective points of view regarding the appropriateness of the practices in the early childhood classroom. The cards presented a broad range of early childhood setting practices in six different categories: 1) creating a caring community of learners, 2) teaching to enhance development and learning, 3) constructing an appropriate curriculum, 4) assessing children's learning and development, 5) reciprocal relationships with parents, and 6) program policies. For the purpose of the study, three analytical methods used to analyze the data were Q-technique principal component analysis, descriptive statistics, and independent t-tests. The findings revealed from this study resulted in two contrasting viewpoints regarding children's learning. The first viewpoint advocated for the practices that are naturally motivating, problem-solving activities, the exploration of diversity issues, and open communication among all of the stakeholders as the most appropriate practices in ECE settings. The second viewpoint was bipolar, where family members

believed in a more teacher-controlled classroom environment, while teachers advocated for a more child-centered teaching style (Ernest, 1999).

Using the same approach of investigating DAP, Szente (2001) explored the teachers' and parents' subjective beliefs about children learning in preschool and grade one in Hungary. A total of 28 participants were selected in the study, 14 teachers (seven in preschool and seven in grade one) and another 14 parents (seven in preschool and seven in grade one). Using the same instrument of the q-sample that Ernest (1999) developed, the participants sorted 60 cards in a continuum of most developmentally appropriate to most DIP. Data were analyzed using principal component analysis (PCA) with Varimax rotation. Three main viewpoints resulted from the analysis regarding the Hungarian perspective of children's early education; they were: a) individual children's development and learning, b) traditional teaching methods, and c) respecting diversity in schools. For further explanation, six participants were invited for interviews, which resulted in common themes among the three viewpoints as well as themes whining each viewpoint (Szente, 2001).

A similar study that Ernest (2011) conducted aimed to explore subjective beliefs about DAP in Southwest of England. The sample comprised 23 teachers, 15 parents, and 15 teacher education candidates. There were sixty cards used for the Q-sorting process and represented the six categories of DAP, five cards for DAP, and another five cards for DIP in each category. Using the PQMethod program, a PCA was performed to analyze the collected data. Data analysis resulted in three main components or unique viewpoints among the participants' beliefs regarding DAP. The viewpoints were the following: a) cultural responsivity (defined by 11 participants), b) social cohesiveness through

communication (defined by seven participants), and c) the teacher as the change agent (defined by 10 participants). Moreover, methodological concerns of studying beliefs regarding DAP were discussed (Ernest, 2011).

La Paro, Siepak, and Scott-Little (2009) conducted a study to assess the beliefs of teacher students in different points of their education enrolled in a birth-to-kindergarten teacher preparation program. The sample comprised 34 student teachers enrolled in the course *Introduction to Birth through Kindergarten Education* (group1), and 26 student teachers enrolled in a *Student Teaching* course. The two groups completed Q sort two times—once in the beginning and once at the end of the course—with a 16-week period in between. Eight full-time B-K faculty members were also included in the sample and sorted the same set of cards as the students did. Data collection included demographic information and the Teacher Beliefs Q-Sort measure (TBQ) that Rimm-Kaufman (2004) developed. The TBQ consisted of 60 statements divided into three sub Q sorts: a) Beliefs About Behavior Management (QS1), b) Beliefs About Teaching Practices (QS2), and c) Beliefs About Children (QS3). Compression between student teachers' sorting and faculty members' sorting indicated specific differences in the prioritization of beliefs in relation to teaching practices and behavior management. Results also indicated similarities between student teachers' beliefs in the beginning and at the end of their program (La Paro, Siepak, & Scott-Little, 2009).

Summary

The studies reviewed above examined teachers' beliefs and practices regarding developmentally appropriate practices with different purposes and in different cultures

and countries. Based on the findings of the research reported here, many issues have emerged and contributed to our knowledge base regarding DAP. From the previous literature review, it can be concluded that there is a variation among teachers regarding DAP beliefs, DAP endorsement, and DAP actual implementation in the classroom (e.g., McMullen et al., 2005; Liu, 2007; Hoot et al., 1996; Parker & Neuharth-Pritchett, 2006). Due to varied perceptions of educating young children in varied countries, DAP might have been viewed differently in terms of social and cultural contexts (e.g., Zeng & Zeng, 2005; Hedge & Cassidy, 2009; Rababah, 2012). Teachers' educational levels were also found to be major indicators of their endorsing DAP beliefs (e.g., Erdiller Akın, 2013; Caner and Subaşı, 2010; McCaslin, 2004; Han & Neuharth-Pritchett, 2010). In addition, there are some factors that contribute to shaping teachers' beliefs regarding DAP that include teachers' characteristics, like age, SES, years of experience, specialization, and type of school (e.g., Abu-Jaber et al., 2010; Fauor, 2003). Some researchers also have pointed out some methodological concerns of studying developmentally appropriate practices with conventional instruments and advocate for an alternative approach (e.g., Ernest, 1999, 2001, 2011; Szente, 2001) that was chosen to be used in the current research.

Although DAP has been introduced to different countries worldwide and has been examined in various cultures, research regarding DAP in Middle Eastern countries is still limited. The studies most relevant to the culture and the social structure of Saudi society are the studies conducted in Jordan and Lebanon (Abu-Jaber et al., 2010; Haroun & Weshah, 2009; Rababah, 2012; Fauor, 2003) as the both countries belong to the Middle Eastern region and share a common culture, language, and belief system to certain

degree. However, due to the unique religious characteristics of Saudi education, teachers' beliefs and practices regarding DAP might perceive it differently. Moreover, besides the lack of studies that addressed DAP beliefs in Saudi Arabia, studies that examined teachers' subjective beliefs using Q-methodology are notably limited. Thus, there is critical need to initiate research studies that examine preschool teachers' subjectivity in light of developmentally appropriate beliefs and practices.

CHAPTER 3

METHODOLOGY

This chapter describes the methodology that was employed in this current study. The purpose of this study was to explore teachers' beliefs toward NAEYC's guidelines of developmentally appropriate practices (DAP) in the Kingdom of Saudi Arabia. To answer the research questions, Q methodology was used to collect and analyze the data regarding teachers' subjectivity toward DAP. For further investigation, interviews followed to obtain participants' subjective viewpoints. For the nature of Q methodology, the sample was divided into two sections: Q-sample and P-sample. The rationale for Q methodology, the data collection and analysis, and the interview procedure are further discussed.

Restatement of Research Questions

The following research questions guided this investigation:

1. What are the similarities and differences between the participants' beliefs regarding developmentally appropriate and developmentally inappropriate practices for preschool teachers in Saudi Arabia?
2. What are the items that teachers considered as the most developmentally appropriate practices and the most developmentally inappropriate practices?
3. What might account for cultural influences about teachers' beliefs regarding DAP?

Rationale for Q Methodology as Mixed Method Approach

The evolution of Q methodology began in the mid-1930s when it was originated by British psychologist William Stephenson. It is known as a scientific measurement for aspects of human subjectivity such as beliefs, opinions, thoughts, and feelings. The strength of Q methodology is that it is considered complementary and supplementary to both the qualitative and quantitative traditions in human sciences (Ellingsen, Størksen & Stephens, 2009). Thus, it fits well into the mixed method approach as an appropriate methodological research design for human subjects. Teddlie and Tashakkori (2010) advocate that Q methodology is not a statistical procedure for analyzing data, but further is a whole methodology that combines theory, philosophy, procedure, and statistical analysis.

Q methodology is a mixed method approach that incorporates various elements from the quantitative and qualitative strands. The philosophical orientation often associated with a mixed method research foundation is pragmatism. Teddlie and Tashakkori (2009) defined pragmatism, saying that it is a:

> Deconstructive paradigm that debunks concepts such as "truth" and "reality" and focuses instead on "what works" as the truth regarding the research questions under investigation. Pragmatism rejects the either/or choices associated with paradigm wars, advocates for the use of mixed methods in research, and acknowledges that the values of the researcher play large role in interpretation of results. (pp. 7–8)

Based on the pragmatism worldview, the prime importance in the research is the question asked rather than the method used to answer the question. In this sense, multiple methods could be applied to answer a question using "what works" that includes objective and subjective knowledge resources (Creswell & Plano Clark, 2011). Q methodology provides a measurement technique that best fits exploring and obtaining subjective opinions. The statistical analysis applied in Q methodology allows finding a correlation between persons and exploring the similarities and differences in their viewpoints (Coogan & Herrington, 2011).

In parallel fashion, Q methodology, as a mixed method approach, collects and interprets data in both numerical and narrative forms. Based on the purpose of the research, the research question, and the instruments used, the researcher identifies the study design (Creswell & Plano Clark, 2011). Two typologies are well-known in the realm of mixed methods research: a) parallel mixed design and b) sequential mixed design. Both designs are involved with the timing of conducting the study. If both the qualitative and quantitative data are gathered simultaneously or with some time lapse between them, the design is parallel mixed. If both the qualitative and quantitative data are gathered in chronological order or if one strand depends on the previous strand, the design is sequential (Teddlie & Tashakkori, 2009).

To conduct a Q study, there are operational rules conducted in a sequential manner. The nature of conducting research using a Q methodology approach is gathering the numerical data by conducting Q sort. The Q sort is the act of each participant ranking a set of statements (written on cards) in a quasi-normal distribution range from −5 to +5, where is −5 is the greatest disagree of "not like me" and +5 is "mostly agree" or "more

like me." The 0 point in the middle is the neutral area where the participants place the statements that they are not sure about. The statements are representative of people's opinions toward a particular topic. This act is reflective of what is called in a Q study "operant subjectivity." Operant subjectivity is drawn from traditional behaviorism in that people can express their subjectivity operantly through their behaviors (Watts, 2011). It is also referred to as operant behavior that "is a subjective behavior as it manifests itself through Q methodology" (Smith, 2001, p. 320).

Gathering numerical data through placing cards (Q-sorting) on a quasi-naturalistic distribution may not be informative enough to answer the research questions sufficiently. Therefore, qualitative data collected through interviews about participants' perspectives toward a particular topic provide a narrative for their phenomenological experiences. An interview as defined in Merriam (2009) is "a process in which a researcher and participant engage in a conversation focused on questions related to a research study" (p. 87). Based on qualitative inquiry in human sciences, interview has been discussed from numerous philosophical perspectives. One of those philosophical orientations underlying interviewing is postmodern. Merriam (2009) noted that:

> Congruent with postmodern theory, the aim of the interview is not to come up with a single perception of the self, since there is no essential self; rather, there are "various non-unitary performances of selves" and the presentations of these data are via creative performances. (p. 92)

The qualitative aspect of Q study consists of the features of the phenomenology approach of qualitative inquiry. Creswell (2013) stated that the exploration of the

phenomenon under study with a heterogeneous group of individuals who have lived the same experiences is the core of the phenomenology approach. Creswell (2013) further stated that phenomenology in the continuum between qualitative and quantitative is concerned with "the lived experiences of individuals and how they have both subjective experiences of the phenomenon and objective experiences of something in common with other people" (p.78).

Eighty years after the emergence of Q methodology, it is well-known in some disciplines, most notably in the fields of psychology, communication, political science, and public health. Yet, research in early childhood education utilizing Q methodology is still limited. Several studies conducted on developmentally appropriate practices (e.g., Burts et al., 1992; Burts et al., 1993; Gerdes, 2012; Horn & Ramey, 2004; Jambunathan, Burts, & Pierce, 1999; McCarty, Abbott-Shim, & Lambert, 2001), used conventional instrumentation limited to surveys, checklists, and questionnaires. The limitation of these types of measurements in studying a subjective phenomenon such as teachers' beliefs is that they limit the participants' responses. Another type of limitation using conventional instrumentation arose with the trend of online surveys. Over two decades and with the popularity of Internet access, many researchers from different disciplines rely on using online surveys for collecting their data (Van Selm & Jankowski, 2006). There are several advantages of this method, such as saving time and money and the ease of reaching a unique population sharing the same interests or beliefs, yet there are some disadvantages related to issues of the sample not being representative of the targeted population. In other words, people surveyed online may or may not be representative of the population

for the problem under study (Andrews, Nonnecke & Preece, 2003; Flaherty, Pearce & Rubin, 1998; Wright, 2006).

To avoid any potential limitations, combining a quantitative strand (survey, questionnaire) and a qualitative strand (e.g., interviews, focus groups) is recommended in studying subjective phenomena (Bryman, 2006; Venkatesh, Brown, & Bala, 2013). The strength of Q methodology is the combination of the quantitative and qualitative inquiries in the way that obtained participants' subjectivity. Therefore, the Q methodology has been chosen in this study as the most appropriate way to answer the research questions. According to Davis and Michelle (2011), "Q Methodology provides insight into audience subjectivities in a much richer way than that provided by conventional surveys, while providing more structure and better replicability than purely qualitative approaches such as focus groups or ethnographic observation" (p. 527).

Mixed Method Design

This study applied Q-Methodology techniques and procedures in two-phase sequential design known as explanatory design (see Appendix A). Within a mixed method approach, the explanatory sequential design was conducted in two distinct phases. The first phase started with collecting and analyzing the quantitative data as it has much emphasis in addressing the research questions, followed by subsequent phase to explain the quantitative results. (Creswell & Plano Clark, 2011). Based on the results of the first phase, the researcher identified significant findings that answered research question one and two "what are the similarities and differences between the participants' beliefs regarding developmentally appropriate and developmentally inappropriate

practices for preschool teachers in Saudi Arabia?, what are the items that teachers considered as the most developmentally appropriate practices and the most developmentally inappropriate practices". The researcher then collected a qualitative data from purposefully selected participants who can help in explaining quantitative results and answer the research question three "what might account for cultural influences about teachers' beliefs regarding DAP."

Samples

Within a Q study, there are two samples involved in gathering the data: Q-sample and P-sample. Q-sample refers to a collection of statements that are present along a spectrum of what can be thought of within a particular topic. The statements should be from various perspectives such that the participants can agree with some statements and disagree with others. Q-samples are not limited to words; they might include pictures, paintings, or even pieces of music (Brown, 1993). P-sample, on the other hand, refers to a few people who are participating in the study. The participants are not randomly selected; rather, they are purposefully selected according to their relevance to the study. For the purposes of statistical analysis, the number of statements in the Q-sample should be twice the number of participants in the P-sample (Brown, 1993; Smith, 2001).

Q-Sample

According to Stephenson (1986), the Q-sample is a set of items or statements known as concourse. Concourse can be generated in different ways; it can be generated from interviews with real people who are relevant to the topic called a "naturalistic Q-sample," or ready-made Q-sample adapted from previous conventional surveys of

questionnaire statements from previous studies, or it could be generated from the relevant literature. In this current study, the concourse was generated from the literature. The concourse statements were adopted from NAEYC's book *Developmentally Appropriate Practice: Focus on Preschoolers* written by Copple, Bredekamp, Koralek, and Charner (2013). Fifty statements were selected to represent developmentally appropriate/inappropriate practices where 25 statements represent developmentally appropriate practices and the other 25 represent developmentally inappropriate practices (see Appendix D).

Concourse Development

According to Coogan and Herrington (2011), "The statements should be compiled from various standpoints and cover as many sub-issues within the topic as possible so that the participants can truly express their views" (p. 25). Therefore, the generated statements for Q-sample were divided based on the five keys of effective teaching by NAEYC's guidelines. The five keys are 1) creating a caring community of learners; 2) teaching to enhance development and learning; 3) planning curriculum to achieve important goals; 4) assessing children's development and learning; and 5) establishing reciprocal relationships with families. According to Anandarajan, Paravastu, and Simmers (2006), "The goal of the Q-sample is to provide precisely and comprehensively, the latent characteristics of the phenomenon that is being studied" (p. 327). Therefore, each key aspect of effective teaching was divided by subheadings that comprehensively exhibit several practices (Table 1). Five statement were selected to represent developmentally appropriate practices (DAP), and another five statements represent developmentally inappropriate practices (DIP). The statements were matters of opinion

and do not address facts that are wrong or right. The act of Q-sorting (ranking) the statements based on their point of view of appropriateness of DAP will bring out individuals' subjectivity (Brown, 1993).

Some of the statements were non-representative to the characteristics of the targeted population (preschool Saudi teachers), who are considered only Arabic speakers as Arabic is the official language for teachers and children in preschools settings. Therefore, statements that stand for dual language children were excluded. Additionally, due to the homogeneity of Saudi society that reflected in its social and cultural structure, any statements that stand for diversity or cultural backgrounds were excluded from the selection.

Table 1

Statements Selection for Q-Sample

Keys of effective teaching	**Subheadings**	**Examples**
Creating a caring community of learners	-Fostering positive relationship -Building classroom community	**DAP**: Teachers help children learn how to establish positive, constructive relationship with others. They support children's forming of friendships and provide opportunities for children to play and work together. **DIP**: It is good for children to spend time in whole-groups doing workbooks even if it means children have less opportunities to work and play together.
Teaching to enhance developme nt and learning	-Environment and schedule -Teaching methods -Communication and language use -Motivation and positive approaches to learning -Guidance	**DAP**: To help children acquire new skills and understandings, teachers employ a range of strategies, choosing from and combining them to suite the goal, the child, and the situation. **DIP**: Teachers should cover as much of the curriculum as possible even if it means covering topics once where some children will have to catch up later.
Planning curriculum to achieve important goals	-Curriculum essential -Physical development -Language and literacy -Mathematics/Science -Technology -Social competence -Social studies -Creative art	**DAP**: In planning and implementing learning experiences, teachers draw on their knowledge of the content of that age, and understanding of the cultural and social contexts of children's lives. **DIP**: It is better to teach children content (math, science, etc.) separately without trying to integrate everything together.
Assessing children's developme nt and learning	-Strategic and purposeful -Systemic and ongoing -Integrated with teaching and curriculum -Valid and reliable -Communicated and shared	**DAP**: Teachers look at what each child can do independently but also assess collaborative work with peers and adults as well as child's participation in groups. **DIP**: Assessment need only focus on the most important areas of children's learning (e.g., math and literacy) rather been comprehensive.
		DAP: Parents' work schedules are accommodated in the planning of

Establishing reciprocal relationships with families		participation opportunities as well as teacher-parent conferences and family activities. **DIP**: Directors of programs and teachers should be responsive to the parent's wishes even if those wishes go against the teacher's beliefs.

P-Sample

As the focus in a Q study is on quality rather than quantity, the number of the participants in the P-sample was fewer than the number of the statements in the Q-sample. According to Brown (1993), in social research, the large number of participants is fundamental, and generalizability can be generated, but with a small number, the focus will be more on the significance of the study. Anandarajan et al. (2006) have addressed that "this small sample technique provides depth rather than generalizability and is particularly appropriate for sensitive topic research." (pp. 326–327).

Therefore, the P-sample consisted of 35-40 preschool teachers who worked in public preschools located in different parts of Mecca city, Saudi Arabia. The participants were all female, as only female teachers can serve in preschools in Saudi Arabia. The researcher contacted the principal first to seek permission to conduct the study with the teachers. Then the teachers were given the recruitment letter to invite them to voluntary participate in the study. As well as consent form indicating the purpose of the study, the procedures, and issues of confidentiality, as well as their right to withdraw from the study any time they want without any penalty.

Data Collection

Procedures for Quantitative Data

After the consent forms were given to the participants and their agreement to participate in the study obtained, appointments were scheduled to meet with each teacher to Q-sort the cards. For the nature of Q methodology, the numerical data was collected through Q-sorting ranking statements written on cards. Du Plessis (2005) defined Q-sorting as "the process of sorting selected statements about the concourse in the participant's preferred order of preference." (p. 141). The statements were translated into Arabic and written on 3x5-inch cards. The researcher asked each participant to read through all the statements carefully. Then, each participant was asked to order the cards in a quasi-normal distribution diagram (Figure 1). The diagram was designed to allow forced-choice quasi-distribution of the cards. Du Plessis (2005) further explained:

> When given a forced-choice condition of instruction, the participant needs to place the Q sort cards on a preset enlarged Q sort diagram with a space for each card. He or she is forced to place each card on the Q sort diagram in terms of, for instance, agreement and disagreement. The participant could be asked to sort the statements according to those with which he or she most agrees to those with which he or she most disagrees. (p. 154)

According to the participants' personal viewpoint on DAP appropriateness, the diagram was ranged on a continuum from most appropriate or agree to most inappropriate or disagree. The order of the forced quasi-normal distribution was in the

following order on both sides of the line: 2 cards, 3 cards, 3 cards, 5 cards, 7 cards, and 10 cards in the middle of the line. The following diagram represents the order:

Most Inappropriate Most Appropriate

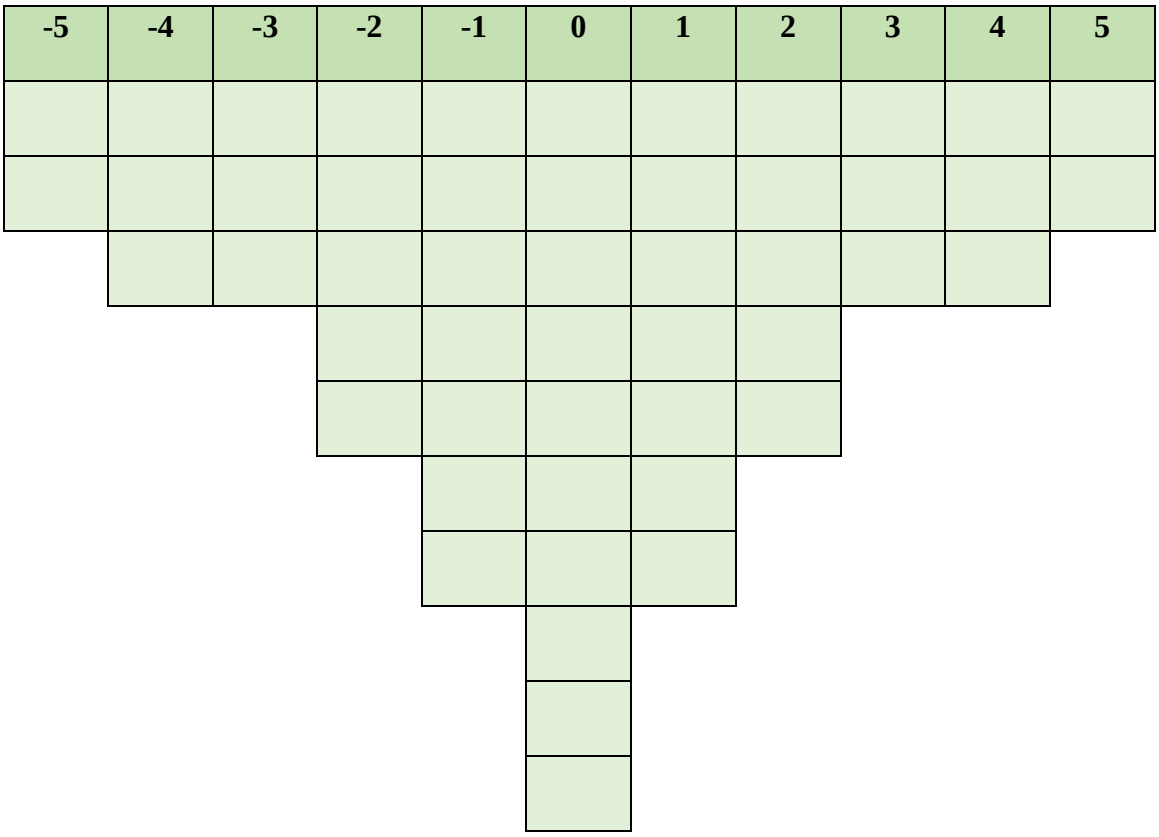

Figure 1. Forced quasi-normal distribution of Q-cards

Prior to sorting the cards, the researcher provided some directions for the participants to guide them through the Q-sorting process and make it more manageable. After reading each statement on the fifty cards, the participants were asked to divide the cards into three piles first. In the first pile, participants grouped all the cards that they considered as appropriate practices. In the second pile, the participants grouped all the cards that they considered as inappropriate practices. In the third pile, participants grouped all the cards that they are neutral or undecided about. The fact that the fifty cards

were divided into three groups first made the Q-sorting process less distractive and more controllable.

The researcher then asked the participant to arrange the cards of the first pile that are considered as most appropriate based on their personal viewpoint. There were 2 cards under column 5, 3 cards under column 4, 3 cards under column 3, etc., until no cards were left in the first pile. Following the same process, participants were asked to arrange the second pile. After they finished sorting all the cards in the first and second piles, they were asked to place the cards in the third pile that they are neutral about. The participants had the chance to re-arrange and re-order the cards if they wish.

When each participant finished sorting all the cards into the Q-sort diagram, their sorting responses were transferred to a small score sheet (Figure 2), that is "a small version of the Q sort diagram on which the number of the placement of each Q sort card of each participant is recorded for factor analysis" (Du Plessis, 2005, p. 142). Then, the demographic information form was given to each participant to fill out (Appendix E).

After you sorted all the cards, please write the numbers on each card to the appropriate place on the score record sheet

بعد الانتهاء من ترتيب جميع البطاقات، الرجاء كتابة الارقام الخاصة بكل بطاقة في المكان المناسب على شبكة التوزيع

Most Inappropriate Practice **Most Appropriate Practices**
الاكثر غير ملائمة **الاكثر ملائمة**

5-	4-	3-	2-	1-	0	1+	2+	3+	4+	5+
#-----	#-----	#-----	#-----	#-----	#-----	#-----	#-----	#-----	#-----	#-----
#-----	#-----	#-----	#-----	#-----	#-----	#-----	#-----	#-----	#-----	
	#-----	#-----	#-----	#-----	#-----	#-----	#-----			
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Figure 2. Q-sorts Score Record Sheet

Quantitative Data Analysis

The numerical data gathered from the participants through the Q-sorting process was analyzed by using a Q methodology software package. To answer research question one "what are the similarities and differences between the participants' beliefs regarding developmentally appropriate and developmentally inappropriate practices for preschool teachers in Saudi Arabia?", and research question two " what are the items that teachers considered as the most developmentally appropriate practices and the most developmentally inappropriate practices?", through objective procedures comprised calculating Z-score and principal component analysis. To allow the determination of a group of people who share similar viewpoints and sort the cards in similar way, each card in the Q-sample has a number range from 1 to 50, and assigned numerical value between -5 to +5. That is the cards that were sorted as most appropriate worth +5, and the cards that sorted as the most inappropriate worth -5. After each participant has sorted all the statements in the quasi-normal distribution, the responses were transferred to score sheets which is a small version of Q-sort diagram. The score sheet allowed placing the numbers of the cards in the way the cards were sorted in order to enter them to the software program for analysis. Van Exel and de Graaf (2005) explained the technical, objective procedure in two phases as follows:

> First, the correlation matrix of all Q sorts is calculated. This represents the level of (dis)agreement between the individual sorts, that is, the degree of (dis)similarity in points of view between the individual Q sorters. Next, this correlation matrix is subject to factor analysis, with the objective to identify the number of natural

groupings of Q sorts by virtue of being similar or dissimilar to one another, that is, to examine how many basically different Q sorts are in evidence. (p. 8)

The factor analytic used in the Q technique is principal component analysis, which allows reducing the dimensionality of the phenomenon into a set of components that can be interpreted in a meaningful way (Ernest, 1999). That is, people with similar viewpoints will group together as they share the same factors. Ernest further noted, "In Q-technique analysis, each person component has one component score calculated for each variable. The component scores provide information as to which items identify and differentiate the component clusters of people" (Ernest, 1999, p. 106).

To weigh the statements in the Q grid, the Z-scores were mathematically calculated. The statements positioned in both the far ends of the Q grid were weighed as the large positive and large negative Z-scores based on the respondents (Newman & Ramlo, 2010; Watts & Stenner, 2012). The highest positive Z-score represent the most appropriate practices, and the highest negative Z-score represent the most inappropriate practices (Van Exel & de Graaf, 2005).

Follow-up Interview Procedures

Person Sample Selection

As the purpose of this study was investigating teachers' beliefs toward developmentally appropriate practices; follow-up interviews were conducted to explain the results of quantitative findings and to explore cultural influence on the phenomenon. According to Teddlie and Tashakkori (2009), the sample decisions are crucial to answer the research questions. Within the realm of human sciences, sampling procedure

techniques divided into two main groups: probability sampling and purposive sampling. Teddli and Tashakkori (2009) defined them as:

> A purposive sample is typically designed to pick a small number of cases that will yield the most information about particular phenomenon, whereas a probability sample is planned to select a large number of cases that are collectively representative of the population of interest. (p. 178)

Therefore, sampling was purposive and based on resemblances of participants' viewpoints. The purposive sampling techniques allowed the investigator to identify the participants who show a similar pattern through Q-sorting process and select them for further interview.

Based on the results of quantitative data analysis, for each shared viewpoint, the researcher selected teachers who sort the cards in similar fashion. Time with the selected participants was scheduled to conduct a multiple focus group interview. The advantage of focus group interview is further discussed by William & Katz (2001) as: "Promote a comfortable atmosphere of disclosure in which people can share their ideas, experiences, and attitudes about a topic. Participants "influence and are influenced," while researchers play various roles, including that of moderator, listener, observer, and eventually inductive analyst" (p. 3). The target sample size for each focus group was 3-4 participants depending on the point of saturation when more informants don't necessarily lead to new information (Mason, 2010). The interviews were semi-structured and took place outside the classroom and at the teachers' convenience. It lasted from 1-2 hours and were audio-recorded and transcribed by the primary investigator.

Interview Questions

Based on the results of quantitative data analysis, for each shared viewpoint, the researcher selected teachers who sort the cards in similar fashion. The following questions represent all the possibilities of sorting cards based on the participants' point of view:

If the teachers sorted items that related to encouraging children to work and play in groups too high, then the questions asked related to cooperative learning. Examples for the questions were: What kind of activities do you do for cooperative work group?, How groups should be formed?, What is your plan to ease children's transition between groups?.

If the teachers sorted items that are related to managing and controlling the classroom environment too high, then the questions asked related to classroom management. Examples for the questions were: What is your plan/style for managing your classroom?, What are the techniques that you are using for challenging discipline problems?, How would describe you philosophy for children's behaviors discipline?.

If the teachers sorted items related to teaching style and strategies too high, then the questions asked related to teacher's teaching. Examples for the questions were: How would you describe your teaching style?, What kind of teaching strategies do you use in your classroom? And how?, How would you address individual differences in your teaching style?.

If teachers sorted items related to the importance of the assessment as an indicator of children's progress and achievements, then the questions asked related to assessment

strategies. Examples for the questions were: Do you follow a specific plan/strategy for children's assessment?, Do you collect assessment information at regular intervals throughout the year?, How do you assess a children's performance as individual and as group member?

If teachers sorted items that related to the importance of planning a meaningful learning experiences for children too high, then the questions asked related to planning technique. Examples for the questions were: How do you assess a children's performance as individual and as group member?. Examples for the questions would be like: How do you plan for daily lessons? And how closely you follow your plan?, Which of the following do you believe you have to consider in your planning: cognitive, social, emotional, or physical development? And why?, What are the resources you are using for planning?.

Qualitative Data Analysis

According to Teddlie and Tashakkori (2009) the dominant feature of analyzing qualitative data is understanding the meaning of individuals' lived experiences and produce a narrative evolve all the information that helps to understand the phenomenon under study. Keeping with the purpose of the qualitative strand in this study as explaining the quantitative findings, the researcher used coding strategy and thematic analysis. During each focus group interview, all that was discussed with the participants was transcribed including the investigator's memos and notes in the margins of the transcript. The narrative was then reduced to generate concise codes and meaningful themes. According to Green, Willis, Hughes, Small, Welch, Gibbs & Daly (2007), apply a specific and organized analytic techniques help to reduce the collected data to coherent

account of what is found. The analysis process involved "immersion in the data, coding, creating categories, and the identification of themes." (Green et al., 2007, p.546). Coding and sorting the information into categories allowed identifying divergence and convergence patterns emerged among the participants regarding DAP beliefs.

Therefore, two main steps took place in this analysis: *horizonalization*, by highlighting "significant statements that provide understanding of how the individual experienced the phenomenon" (Creswell, 2013, p.82), then develop *clusters of meaning* that categorize these significant meaning into themes. (Creswell, 2013). The analysis yielded detailed descriptions that summarize two elements: what are the cultural influences on the participants' beliefs regarding developmentally appropriate/ inappropriate practices, and how the participants applied it in the pedagogical setting.

Within the qualitative research, more emphasis is placed in data validation than reliability (Creswell & Plano Clark, 2011). Therefore, a member-checking procedure was used for qualitative data to insure the validity of collected information. With the aim of assuring the truthfulness and transparency, all the interviews were transcribed and returned to the participants to check whether the information obtained through the interview was accurate and caught their meaning. Another technique to strength qualitative findings was triangulation the data through draw the information from several sources or individuals. The great advantage of triangulation is the contribution to the quality of the findings and improves the credibility through collecting data with varied perspectives (Rossman & Rallis, 2003; Creswell & Plano Clark, 2011).

A peer review was also utilized when translate obtained data to English. As the primary investigator is not a native English speaker, an assistant (e.g., graduate students or faculty) who is fluent in Arabic and English languages was asked to examine the data. The final approach to test the data reliability and validity was conducting *intercoder agreement*. That is comparing the results with other peer reviewers to see whether their codes aligned with the prime investigator codes (Creswell & Plano Clark, 2011).

Trustworthiness and Ethical Considerations

The participants were informed that their participation in the study was completely voluntary and they have right to withdraw from the study with no penalty. The participants were also provided with a letter of consent (Appendix C) that communicate the researcher's contact information, purpose, benefits, statement of voluntary participation, and intended use of data. To maintain the confidentiality of the data, the anonymity of the participants was preserved. The participants' names were coded and entered to the software program as codes in the way that they could not be identified to anybody except the primary investigator. All the collected information was kept in a locked file.

CHAPTER 4

RESULTS

The purpose of this study was to explore preschool teachers' beliefs toward NAEYC's developmentally appropriate practices (DAP) and developmentally inappropriate practices (DIP) in Saudi Arabia. Q-methodology design allowed the researcher to incorporate various elements from the quantitative and qualitative traditions when collecting and analyzing the data to understand such a subjective phenomenon. Data sources included a) a card-sorting process to collect numerical data followed by a subjective analysis to highlight the items that appeared to present shared and unique viewpoints among the participants and b) interviews with teachers to explain the results of the quantitative findings and to explore each identified viewpoint. This chapter of the dissertation provides information on 1) how many unique or shared viewpoints were identified among the Saudi preschool teachers' beliefs regarding DAP and DIP, 2) which items Saudi preschool teachers considered the most developmentally appropriate practices and the most developmentally inappropriate practices, and 3) what might account for cultural influences on teachers' beliefs regarding DAP and DIP.

Research Questions

The following research questions guided this investigation:

1. What are the similarities and differences between the participants' beliefs regarding developmentally appropriate practices DAP and developmentally inappropriate practices DIP for preschool teachers in Saudi Arabia?
2. What are the items that teachers considered as the most developmentally appropriate practices and the most developmentally inappropriate practices?
3. What might account for cultural influences about teachers' beliefs regarding DAP and DIP?

Research Question One

The first research question was to establish whether there were similarities and differences among Saudi preschool teachers' beliefs regarding developmentally appropriate and developmentally inappropriate practices. To answer this question, the PQMethod program version 2.35 (Schmolck, 2014) and Ken-Q Analysis version 0.4.0 (Banasick, 2016) were used. Each of the 37 sorts was entered into Ken-Q Analysis to create a DAT file, then they were exported to the PQMethod program to run the analysis. First, a 37x37 inter-correlation matrix was created (see Appendix F). This matrix was subjected to principal component analysis (PCA) with Varimax rotation. The choice to retain the final number of components was made based on the following criteria: 1) having an eigenvalue greater than 1.00, and 2) having at least 4 individuals with a .40 or higher association with the factor (Sexton, Snyder, Wadsworth, Jardine, & Ernest, 1998).

A cut-off point of eigenvalue greater than 1.0 is taken as the factor's statistical strength and explanatory power. According to Watts and Stenner (2012), "this cut-off point is used because an extracted factor with an EV [eigenvalue] of less than 1.00 actually accounts for less study variance than a single Q sort" (p.106).

Seven principal components had an eigenvalue greater than 1. The eigenvalues for each of the seven components were 19.07, 2.47, 1.89, 1.34, 1.28, 1.11, and 1.08, respectively. However, only the first four components were selected for rotation. The reason behind this selection was that 1) the first four components accounted for 67% of total variance, and 2) there was only one participant who loaded on each of the other three factors.

The inspection of the principal components analysis suggested that there were four main factors regarding the beliefs of Saudi preschool teachers as they relate to NAEYC's developmentally appropriate/inappropriate practices. Each component represents a unique perspective (viewpoint) on how Saudi preschool teachers view DAP and DIP. Six participants had a pure association with the first component (component association greater than .40), eight participants had a pure association with the second component, three participants had a pure association with the third component, and seven participants had a pure association with the fourth component. Table 2 represents the structure of coefficients (the associations) between the participants and the four components. These participants did not cross-load to a statistically significant degree with other components. Thirteen participants did not associate purely with any of the four components. However, of these thirteen participants, eight associated with more than one

component to a statistically significant degree. Thus, the four perspectives are representative of all participants to a certain degree.

Table 2

Postrotation Structure for the Four Principal Components Loadings

QSORT	1	2	3	4
1 PST1	0.6603X	0.0939	0.2469	0.3824
2 PST2	0.4015	0.3760	-0.0213	0.5855X
3 PST3	0.4196	0.1765	0.2753	0.6395X
4 PST4	0.2577	0.2710	0.1148	0.7287X
5 PST5	0.3704	0.2019	0.6952X	0.3441
6 PST6	0.7725X	0.0112	0.2273	0.0673
7 PST7	0.4706	0.1848	0.2252	0.4412
8 PST8	0.4161	0.3569	0.0767	0.4459
9 PST9	0.5529X	0.1379	0.1673	0.4020
10 PST10	0.5462	0.3793	0.1880	0.3797
11 PST11	0.2141	0.6630X	0.0297	0.3607
12 PST12	-0.1747	0.3343	0.5623X	-0.0644
13 PST13	0.3592	0.4833	0.2787	0.3383
14 PST14	0.1684	0.7252X	0.2535	0.3376
15 PST15	0.2437	0.7757X	0.3488	0.1063
16 PST16	0.3877	0.6981X	0.4012	0.2011
17 PST17	0.1070	0.8015X	0.0147	0.3330
18 PST18	0.6890X	0.4992	-0.0654	0.3350
19 PST19	0.7025X	0.2093	-0.0089	0.2313
20 PST20	0.0404	0.0416	0.5663X	0.3754
21 PST21	0.4206	0.2153	0.1648	0.3249
22 PST22	0.3382	0.2314	0.3338	0.0965

23 PST23	0.5882	0.2255	0.0801	0.5453
24 PST24	0.3544	0.2484	0.3591	0.4277
25 PST25	0.0693	0.7584X	0.0138	0.3257
26 PST26	0.2596	0.7246X	0.4234	-0.0170
27 PST27	0.7160X	0.4728	-0.0943	0.3151
28 PST28	0.4219	0.6850X	0.3330	0.2429
29 PST29	0.4511	0.2033	0.6589	0.4549
30 PST30	0.3809	0.1327	0.6449	0.5311
31 PST31	0.5788	0.4976	0.2859	0.2406
32 PST32	0.5276	0.2570	0.3680	0.4919
33 PST33	0.2477	0.4125	0.2215	0.6620X
34 PST34	0.1613	0.3765	0.2928	0.7350X
35 PST35	0.2871	0.2268	0.3815	0.6731X
36 PST36	0.3853	0.2509	0.1900	0.6886X
37 PST37	0.5683	0.2912	0.2319	0.5484
% Expl.Var.	**19**	**19**	**10**	**19**

Note: An X indicates a person who contributes to defining a viewpoint.

The total number of participants targeted in this study was 40 preschool teachers. The actual number of participants was 37 preschool teachers, which is still in the range of 35-40. One participant did not complete the sorting process, and two participants were excluded from the analysis due to some errors while transferring the numbers of the statement to the Q-grid sheet. As Table 2 indicates, six preschool teachers (PST1, PST6, PST9, PST18, PST19, and PST27) were associated purely with component A, eight preschool teachers (PST11, PST14, PST15, PST16, PST17, PST25, PST26, and PST28) had pure associations with component B, three preschool teachers (PST5, PST12, and PST20) had pure associations with component C, and seven preschool teachers (PST2,

PST3, PST4, PST33, PST34, PST35, and PST36) had pure associations with component D.

Before rotation, the eigenvalues for the four principal components were 19.07, 2.47, 1.89, and 1.34, which accounted for 52%, 7%, 5%, and 4% of the variance, respectively. After rotation, the components accounted for 19%, 19%, 10%, and 19% of the variance, respectively. Thus the total variance accounted for by the four components was 67%. According to Stephen (1985), "the data which result from a forced-choice q-sort will have a specified mean and variance" (p.198). Because of the forced-choice quasi-normal distribution of q-sort cards, the mean was 0 and the standard deviation was 2.491 for each participant. Stephen further explained, "It should be noted that with a forced-choice q-sort the mean and variance of each subject's data is always the same. In fact, they are known before any data are collected because they are properties of the distribution rather than of a subject's responses" (Stephen, 1985, p.199).

The correlations among component arrays are presented in Table 3. Kline (1994) defined a correlation coefficient as "a numerical measure of the degree of agreement between two sets of scores. It runs from + 1 to -1: + 1 indicates full agreement, 0 no relationship and -1 complete disagreement" (p.3). There were positive low, moderate, and high correlations between viewpoints. Components 1 and 2 had a high correlation of .60, components 1 and 3 had a low correlation of .44, components 1 and 4 had a high correlation of .70, components 2 and 3 had a moderate correlation of .54, components 2 and 4 had a high correlation of .69, and components 3 and 4 had a high correlation of .60 coefficients.

Table 3

Correlations Between Factor Scores

	1	**2**	**3**	**4**
1	1.0000	0.6045	0.4415	0.7076
2	0.6045	1.0000	0.5474	0.6909
3	0.4415	0.5474	1.0000	0.6021
4	0.7076	0.6909	0.6021	1.0000

Participants' Demographic Information

Descriptive demographic information was also collected from the participants. They were all female preschool teachers working in public preschools in Mecca city. Table 4 summarizes the professional background of the preschool teacher participants.

Table 4

Demographic Information of Preschool Teacher Participants

Code	Age	Specialization	Degree	Years of Experience	Levels	In-service Training Courses
PST1	30-39	ECE	Bachelor's	3 Years	Preliminary 3 Years	5 courses
PST2	30-39	ECE	Bachelor's	16 Years	Preliminary 12 Years Level one 2 Years Level two 1 Year	10 courses
PST3	Above 40	ECE	Associate's	22 Years	Preliminary 5 Years Level one 10 Years Level two 7 Years	More than 10 courses
PST4	30-39	ECE	Bachelor's	17 Years	Preliminary 17 Years	7 courses
PST5	30-39	ECE	Bachelor's	6 Years	Preliminary 6 Years	3 courses
PST6	Above 40	ECE	Associate's	23 Years	Preliminary 12 Years Level two 11 Years	More than 10 courses
PST7	30-39	ECE	Bachelor's	4 Years	Preliminary 3 Years Level one 1 Year	2 courses
PST8	30-39	ECE	Bachelor's	10 Years	Preliminary 6 Years Level two 4 Years	3 courses
PST9	Above 40	ECE	Bachelor's	18 Years	Elementary 5 Years Preliminary 13 Years	More than 10 courses
PST10	Above 40	ECE	Associate's	19 Years	Elementary 3 Years Level two 7 Years Level one 9 Years	5 courses
PST11	Above 40	ECE	Associate's	22 Years	Elementary 4 Years Preliminary 18 Years	7 courses

Code	Age	Specialization	Degree	Years of Experience	Levels	In-service Training Courses
PST12	30-39	ECE	Bachelor's	16 Years	Preliminary 7 Years Level two 7 Years Level one 2 Years	More than 20 courses
PST13	Above 40	Psychology	Bachelor's	22 Years	Preliminary	More than 25 courses
PST14	30-39	ECE	Bachelor's	6 Years	Elementary 1 Year Level two 5 Years Special Education (Autism) 3 Months	7 courses
PST15	Above 40	Psychology	Bachelor's	22 Years	Elementary 5 Years Preliminary 17 Years	12 courses
PST16	30-39	ECE	Associate's	20 Years	Elementary 2 Years Preliminary 18 Years	7 courses
PST17	30-39	ECE	Bachelor's	4 Years	Level two 4 Years	2 courses
PST18	30-39	ECE	Bachelor's	6 Years	Level two 2 Years Preliminary 4 Years	8 courses
PST19	Above 40	ECE	Bachelor's	7 Years	Preliminary 7 Years	6 courses
PST20	Above 40	ECE	Associate's	20 Years	Preliminary 10 Years Level one 10 Years	4 courses
PST21	30-39	ECE	Bachelor's	6 Years	Preliminary 3 Years Level two 3 Years	5 courses
PST22	30-39	ECE	Associate's	15 Years	Preliminary 10 Years Level two 5 Yes	3 courses
PST23	Above 40	ECE	Bachelor's	15	Elementary 9 Years Preliminary 6 Years	10 courses
PST24	30-39	ECE	Associate's	20 Years	Level two 5 Years Preliminary 15 Years	6 courses
PST25	Above 40	ECE	Associate's	18 Years	Elementary 4 Years	5 courses

Code	Age	Specialization	Degree	Years of Experience	Levels	In-service Training Courses
					Preliminary 14 Years	
PST26	30-39	ECE	Associate's	20 Years	Preliminary 20 Years	4 courses
PST27	Above 40	ECE	Associate's	23 Years	Elementary 5 Years Level two 18 Years	More than 10 courses
PST28	30-39	ECE	Bachelor's	4 Years	Preliminary 4 Years	2 courses
PST29	Above 40	ECE	Bachelor's	10 Years	Preliminary 8 Years Level two 2 Years	4 courses
PST30	Above 40	ECE	Associate's	20 Years	Elementary 8 Years Preliminary 12 Years	More than 10 courses
PST31	30-39	ECE	Bachelor's	6 Years	Preliminary 6 Years	4 courses
PST32	Above 40	ECE	Bachelor's	11 Years	Preliminary 10 Years Level two 2 Years	9 courses
PST33	30-39	ECE	Bachelor's	6 Years	Preliminary 5 Years Level one 1 Year	5 courses
PST34	Above 40	ECE	Bachelor's	16 Years	Preliminary 9 Years Level two 7 Years	More than 15 courses
PST35	Above 40	ECE	Associate's	23 Years	Preliminary 10 Years Level two 10 Years Level one 3 Years	6 courses
PST36	Above 40	ECE	Bachelor's	5 Years	Level one 5 Years	2 courses
PST37	Above 40	ECE	Associate's	20 Years	Elementary 3 Years Preliminary 17 Years	6 courses

Table 4 indicates that 23 preschool teachers (62%) possessed a bachelor's degree from an early childhood education program. Two teachers (5%) out of the 23 bachelor's holders had a degree in psychology. Fourteen preschool teachers (37%) possessed a two-year associate's degree from an early childhood educational program. Eighteen preschool teachers (48%) were aged 30-39 years old, and nineteen preschool teachers (51%) were above 40 years old or older. The participants ranged from 3 to 23 years of experience. They ranged from having 2 to 25 in-service training courses in their careers. Each course had lasted from 10 to 15 hours and had been offered by the Ministry of Education, and the teachers were encouraged to enroll in them. It is important to note that preschool in the education system of the Kingdom of Saudi Arabia is called "kindergarten," and it serves 3- to 4-year-old children under the name level one, 4- to 5-year-old children under the name level two, and 6-year-old children under the name "preliminary" or level three.

The comparison of the information in Table 2 and Table 4 resulted in descriptive information regarding the selected participants in the four components (perspectives). The six participants associating with Perspective A represented a range of 30 to above 40 years of age. Four participants possessed a bachelor's degree, and two had an associate's degree in an early childhood program. The six preschool teacher participants represented a range of 3 to 23 years of teaching experience and had attended a range of 5 to more than 10 in-service training courses.

The eight participants associating with Perspective B represented a range of 30 to above 40 years of age. Half of them (four preschool teachers) had a bachelor's degree, and the other half had an associate's degree in an early childhood program. The preschool

teachers further represented a range of 4 to 22 years of teaching experience and had attended 2 to 12 in-service training courses.

The three participants associating with Perspective C represented a range of 30 to above 40 years of age. Two preschool teachers possessed a bachelor's degree, and one preschool teacher had an associate's degree from an early childhood program. The participants further represented a range of 6 to 20 years of teaching experience and had attended 3 to more than 20 in-service training courses.

The seven participants associating with Perspective D represented a range of 30 to 40 years of age. Two preschool teachers (2 out of 7) had an associate's degree, and the rest of them (5 teachers) had a bachelor's degree in an early childhood program. Further, these participants represented a range of 5 to 23 years of teaching experience and had attended 2 to more than 10 in-service training courses ranged from 2 to more than 10 courses.

Research Question Two

The second research question sought to determine which items were considered the most developmentally appropriate and most developmentally inappropriate based on the preschool teachers' subjective beliefs regarding DAP. Within the four perspectives that resulted from the analysis, the teachers shared similar and different beliefs regarding children's learning. Each factor represented a unique perspective defined by a group of teachers based on their card sorting of developmentally appropriate/inappropriate practices. Then, each factor was weighted by calculating the Z-score for the sorted statements for each participant. These scores determined the factor arrays. Watts and

Stenner (2012) defined a factor array as “no more or less than a single Q sort configured to represent the viewpoint of a particular factor” (p.140). Du Plessis (2005) further noted that:

> The factor array indicates where each statement was placed on the Q sort diagram with regard to the subjective perceptions of the separate group, known as factor A. However, it does not indicate the placing of the statements as members of the specific group because it is possible that the participants do not necessarily feel the same as the factor indicates (p.171).

Perspective A

The normalized factor scores for each item are listed in (Appendix G). Figure 3 shows the item array for Perspective A.

Most Inappropriate Most Appropriate

-5	-4	-3	-2	-1	0	1	2	3	4	5
6	28	36	47	16	25	42	23	13	5	2
20	26	27	15	49	18	12	22	11	1	14
	7	48	40	45	41	4	31	29	24	
			10	38	35	21	32			
			17	8	34	39	43			
				44	30	46				
				9	3	37				
					33					
					50					
					19					

Figure 3. Item Array for Perspective A

Figure 3 represents the common beliefs structure of the six participants who were associated with Perspective A. Item #2, "Teachers help children learn how to establish positive, constructive relationship with others. They support children's forming of friendships and provide opportunities for children to play and work together," was considered to be the most appropriate item in perspective A and had a z-score of 2.05. The other seven most appropriate items in this perspective had z-scores above 1.0. In contrast, Item #20, "It is more important to cover the curriculum than focus on children's interests," was considered to be the most inappropriate item in perspective A and had a z-score of -2.07. The other seven most inappropriate items had z-scores below -1.0.

Table 5

The Eight Most Appropriate Statements that Define Perspective A

Item No.	**Array Score**	**Statements**
DAP 2	5	Teachers help children learn how to establish positive, constructive relationship with others. They support children's forming of friendships and provide opportunities for children to play and work together.
DAP 14	5	When children are talking, teachers take into account preschoolers' capabilities as speakers, giving children time to express themselves and responding attentively to their speech.
DAP 5	4	Teachers provide many opportunities for children to play and work together, both in groups they form themselves and in small teacher created group.
DAP 1	4	Teachers are warm, caring, and responsive. They make it a priority to know every child and family well and build a relationship with each of them.
DAP 24	4	Teachers recognize children's interest in making sense of their world to promote academic concepts of mathematics, science, reading, writing, social studies, and art through various activities such as building blocks, play with games, intentional play, manipulatives, movement activities, and computer time.
DAP 13	3	Teachers frequently engage children in planning or in reflecting on their experiences, discussing past experiences, and working to represent it (e.g., drawing, writing and dictating, making pictures)
DAP 11	3	Teachers create a learning environment that fosters children's initiative, active exploration of materials, and sustained engagement with other children, adults, and activities.
DIP 29	3	In planning learning experiences, teachers aim to ensure children's later success by focusing mostly on math and literacy skills.

Seven of the eight statements considered most appropriate that define Perspective A were also considered to be appropriate by NAEYC standards. One statement, item #29, was considered appropriate by this group of participants and not appropriate by NAEYC. The first two statements in Table 5 represent the two most appropriate items with an array score of +5. Participants associated with this perspective support children's forming friendships and providing opportunities for children to play and work together (item #2),

and they encourage children to express themselves and respond to them attentively (item #14).

The next three items in the table were the items with array score of +4. All three items were developmentally appropriate practices for this group of participants but not as appropriate as the first two items with array scores of +5. Teachers in this group encourage children to work together in both small and large groups (Item #5), make it a priority to know every child and family and build a relationship with them (Item #1), and promote academic concepts through various activities that match children's interests (Item #24).

The last three items in the table were the items with array score of +3. The three items were considered developmentally appropriate but not as appropriate as the items with an array score of +4 or +5. Two items were considered to be appropriate by NAEYC, and one item (Item #29) was viewed as appropriate by the participants but not appropriate by NAEYC. The participants with this perspective frequently engage children in planning and reflecting on their own experiences (Item #13) and create a learning environment that fosters children's initiative and active exploration (Item # 11). At the same time, teachers with this perspective believed it to be appropriate to ensure children's later success by focusing mostly on math and literacy skills (Item #29).

Table 6

The Eight Most Inappropriate Statements that Define Perspective A

Item No.	**Array Score**	**Statements**
DIP 20	-5	It is more important to cover the curriculum than focus on children's interests.
DIP 6	-5	It is more important to the teacher to focus on keeping classroom control more than focus on children as individuals.
DIP 7	-4	It is more important to keep with administrative policies like keeping all class sizes equal than keep all children together in a group to maintain friendships
DIP 26	-4	It is better to teach children content (math, science, etc.) separately without trying to integrate everything together.
DIP 28	-4	Teachers devote a majority of teaching time on developing children's academic skills more than meeting children's needs as physically active learners.
DIP 48	-3	Directors of programs and teachers should be responsive to the parent's wishes even if those wishes go against the teacher's beliefs.
DIP 27	-3	Teachers should follow a prescribed curriculum without attention to individual children's interests, needs, prior knowledge, emerging circumstances, or current events.
DIP 36	-3	Assessment need only focus on the most important areas of children's learning (e.g., math and literacy) rather been comprehensive.

All of the eight most inappropriate statements that define Perspective A were also considered to be inappropriate by NAEYC. Table 6 shows which items were considered to be the two most inappropriate items by participants who associated with Perspective A. These two items were given an array score of -5. Covering the curriculum more than focusing on children's interests (Item #20) and keeping classroom control more than focusing on individual children (Item #6) were considered to be inappropriate by the participants.

The next three items in the table had array scores of -4. These items were also considered inappropriate, but not as inappropriate as the items with array scores of -5. It was considered inappropriate to attend to administrative policies rather than children's

needs (Item #7) and to teach children academics separately without integration with other content (Item #26). It was also considered developmentally inappropriate for the participants with this perspective to develop children's academic skills rather than meeting their physical needs as active learners (Item #28).

The last three items in the table with array scores of -3 were also inappropriate, but they were not considered to be as inappropriate as the items with array scores of -4 or -5. It was considered developmentally inappropriate that the program's director and the teachers should be responsive to the parents' wishes even if those wishes go against the teacher's beliefs (Item #48). Following a prescribed curriculum without attention to individual children or emerging circumstances (Item #27) and focusing on the most important areas of children's learning "math & literacy" when assessing children (Item #36) were considered to be developmentally inappropriate by the participants with Perspective A.

Perspective B

The normalized factor scores for each item are listed in (Appendix G). Figure 4 shows the item array for perspective B.

Most Inappropriate Most Appropriate

-5	-4	-3	-2	-1	0	1	2	3	4	5
20	26	36	24	45	43	14	17	1	2	22
6	46	28	47	49	35	25	15	5	50	33
	19	48	18	30	16	32	3	23	4	
			40	7	13	21	12			
			9	37	42	34	10			
				27	41	11				
				38	29	8				
					44					
					31					
					39					

Figure 4. Item Array for Perspective B

Figure 4 represents the common belief structure of the eight participants who were associated with Perspective B. Item #22, "In planning and implementing learning experiences, teachers draw on their knowledge of the content of that age, and understanding of the cultural and social contexts of children's lives," was considered to be the most appropriate item in Perspective B and had a z-score of 1.54. The other seven most appropriate items in this perspective had z-scores above 1.0. In contrast, Item #6, "It is more important to the teacher to focus on keeping classroom control more than focus on children as individuals," was considered to be the most inappropriate item in Perspective B and had a z-score of -2.31. The other seven most inappropriate items had z-scores below -1.0.

Table 7

The Eight Most Appropriate Statements that Define Perspective B

Item No.	**Array Score**	**Statements**
DAP 22	5	In planning and implementing learning experiences, teachers draw on their knowledge of the content of that age, and understanding of the cultural and social contexts of children's lives.
DAP 33	5	Teachers and families regularly share information in ways that are clear, respectful, and constructive. Both teachers and families make decisions together regarding learning goals and approaches to learning that are suitable for the individual child.
DAP 2	4	Teachers help children learn how to establish positive, constructive relationship with others. They support children's forming of friendships and provide opportunities for children to play and work together.
DIP 50	4	Opportunities for parent participation, teacher-parent conferences, meetings, and other event for families should occur when convenient to the teacher.
DAP 4	4	Teachers recognize community-building opportunities in various parts of the day, such as mealtime, cleanup, and whole-group times.
DAP 1	3	Teachers are warm, caring, and responsive. They make it a priority to know every child and family well and build a relationship with each of them.
DAP 5	3	Teachers provide many opportunities for children to play and work together, both in groups they form themselves and in small teacher created group.
DAP 23	3	Teachers make sure that children have plenty of opportunities to use large muscles in balancing, running, jumping, climbing, and other vigorous movements, both in play and in planned movement activities. Children can play outdoors every day except when weather is extremely inclement.

Seven of the eight items that were considered to be developmentally appropriate by the participants with Perspective B were also appropriate by NAEYC standards. One item (Item #50) was considered appropriate by the participants, yet it was considered developmentally inappropriate by NAEYC. The first two items in Table 7 were considered the most developmentally appropriate items, with array scores of +5. Participants with this perspective believed that content of children's age and

understanding the cultural and social contexts are important in planning and implementing children's learning experiences (Item #22). They also believed it to be appropriate that both teachers and families share information and make decisions together (Item #33).

As Table 7 shows, three items were given an array score of +4 and were considered developmentally appropriate but not as appropriate as the items with an array score of +5. It was considered to be developmentally appropriate for teachers to support children's constructive relationships with others, including forming friendships and working with peers (Item #2). Participants further believed it is developmentally appropriate to promote community-building opportunities in various parts of the day, such as mealtime and whole-group times (Item #4). Interestingly, it was believed to be appropriate to schedule teacher-parent conferences and other meeting events for families when convenient for the teacher (Item #50).

The last three items in the table were given an array score of +3. These items were considered appropriate by the participants but not as appropriate as the items with an array score of +4 or +5. It was considered to be developmentally appropriate for the teachers to know every child and his/her family and build a relationship with each of them (Item #1), as well as to provide opportunities for children to play and work together in large and small groups (Item #5). It was also believed to be developmentally appropriate to ensure outdoor play and children's activities that used large muscles like balancing, running, jumping, and climbing (Item #23).

Table 8

The Eight Most Inappropriate Statements that Define Perspective B

Item No.	**Array score**	**Statements**
DIP 6	-5	It is more important to the teacher to focus on keeping classroom control more than focus on children as individuals.
DIP 20	-5	It is more important to cover the curriculum than focus on children's interests.
DIP 19	-4	Education is more effective if teachers tell children what they need to know. Lots of teacher-child conversations slow down the class.
DIP 46	-4	Teachers communicate with parents when problems or conflicts arise, thus there are little reasons for the parents to be involved in their child's experiences at school.
DIP 26	-4	It is better to teach children content (math, science, etc.) separately without trying to integrate everything together.
DIP 48	-3	Directors of programs and teachers should be responsive to the parent's wishes even if those wishes go against the teacher's beliefs.
DIP 28	-3	Teachers devote a majority of teaching time on developing children's academic skills more than meeting children's needs as physically active learners.
DIP 36	-3	Assessment need only focus on the most important areas of children's learning (e.g., math and literacy) rather been comprehensive.

All the items in Table 8 were considered to be developmentally inappropriate by the participants who were associated with Perspective B and by NAEYC standards. The first two items in the table were given an array score of -5. The participants with this perspective believed that it is developmentally inappropriate to focus on keeping classroom control more than focusing on individual children (Item #6), and it is developmentally inappropriate to cover curriculum rather than focusing on children's interests (Item #20).

The next three items in the table were given an array score of -4. These items were considered to be developmentally inappropriate, but not as inappropriate as the

items with array scores of -5. In this group of participants associated with Perspective 2, it was believed to be developmentally inappropriate for the teacher to tell children what they need to know and have less teacher-child conversation (Item #19). Communicating with parents only when problems of conflicts arise, which limits parents' involvement in children's learning (Item #46), was believed to be developmentally inappropriate. Teaching children academics separately without integration with other content (Item #26) was also believed to be developmentally inappropriate from this perspective.

The last three items in the table were given an array score of -3. These items were considered to be developmentally inappropriate, but not as inappropriate as the items with an array score of -4 or -5. It was considered to be developmentally inappropriate for the program's director and the teachers to be responsive to the parents' wishes, even if those wishes go against the teacher's beliefs (Item #48). It was also considered to be developmentally inappropriate for the participants with this perspective to develop children's academic skills rather than meeting their physical needs as active learners (Item #28). Focusing on the most important areas of children's learning "math & literacy" when assessing children (Item #36) was considered to be developmentally inappropriate by the participants with Perspective B.

Perspective C

The normalized factor scores for each item are listed in (Appendix G). Figure 5 shows the item array for Perspective C.

Most Inappropriate Most Appropriate

-5	-4	-3	-2	-1	0	1	2	3	4	5
18	36	46	41	43	12	33	14	32	15	2
27	17	19	48	37	26	13	23	5	22	21
	20	10	40	45	50	47	16	31	34	
			35	28	44	4	9			
			24	39	38	8	3			
				6	11	25				
				1	30	7				
					49					
					29					
					42					

Figure 5. Item Array for Perspective C

Figure 5 represents the common belief structure of the three participants who were associated with Perspective C. Item #2, "Teachers help children learn how to establish positive, constructive relationship with others. They support children's forming of friendships and provide opportunities for children to play and work together," was considered to be the most appropriate item in Perspective C and had a z-score of 1.76. The other seven most appropriate items in this perspective had z-scores above 1.0. In contrast, Item #27, "Teachers should follow a prescribed curriculum without attention to individual children's interests, needs, prior knowledge, emerging circumstances, or current events," was considered to be the most inappropriate item in Perspective C and had a z-score of -2.08. The other seven most inappropriate items had z-scores below -1.0.

Table 9

The Eight Most Appropriate Statements that Define Perspective C

Item No.	**Array score**	**Statements**
DAP 2	5	Teachers help children learn how to establish positive, constructive relationship with others. They support children's forming of friendships and provide opportunities for children to play and work together.
DAP 21	5	Teachers integrate ideas and content from multiple domains and disciplines, through themes, projects, play opportunities, and other learning experiences so that children are able to develop an understanding of concepts and make connections across content areas.
DAP 15	4	Teachers set clear limits regarding unacceptable behaviors and enforce these limits with explanations in a climate of mutual respect and caring.
DAP 22	4	In planning and implementing learning experiences, teachers draw on their knowledge of the content of that age, and understanding of the cultural and social contexts of children's lives.
DAP 34	4	Teachers assess children on an ongoing basis during daily activities and play time; they document children's learning and development in various ways including written notes, photographs, audio recordings, and work sample. The information therefore used for later planning and enhance teaching.
DAP 32	3	Teachers look at what each child can do independently but also assess collaborative work with peers and adults as well as child's participation in groups.
DAP 5	3	Teachers provide many opportunities for children to play and work together, both in groups they form themselves and in small teacher created group.
DAP 31	3	Preschool assessments address key goals in all development domains (physical, social, emotional, cognitive) and in the areas of physical education and health, language and literacy, mathematics, science, social competence, and creative arts.

All eight of the items presented in Table 9 were considered to be developmentally appropriate by the participants and by NAEYC standards. The first two items in the table

were considered as the most developmentally appropriate items, with an array score of +5. Participants associated with this perspective believed it to be developmentally appropriate to support children's forming friendships and to provide opportunities for children to play and work together (Item #2). It was also believed to be developmentally appropriate to integrate content from multiple domains so that children are able to develop an understanding of concepts and make connections across content areas (Item #21).

The next three items in the table had an array score of +4. All three items were considered to be developmentally appropriate practices for this group of participants, but not as appropriate as the first two items with array scores of +5. Participants associated with this perspective believed it to be developmentally appropriate to set clear limits regarding unacceptable behaviors and enforce these limits with explanations in a climate of mutual respect and caring (Item #15). It was also believed to be developmentally appropriate that content of children's age and understanding as well as cultural and social contexts are important in planning and implementing children's learning experiences (Item #22). Assessing children on an ongoing basis and in various ways to use information to enhance teaching (Item #34) was considered developmentally appropriate by the participants.

The last three items in the table were the items with an array score of +3. The three items were considered developmentally appropriate, but not as appropriate as the items with an array score of +4 or +5. Assessing children independently as well as collaborative work with peers (Item #32) was considered to be developmentally appropriate by participants with this perspective. Providing opportunities for children to

play and work together in large and small groups (Item #5) and addressing key goals in all development domains (physical, social, emotional, cognitive) in preschool assessment (Item #31) were also considered to be developmentally appropriate by this group of participants.

Table 10

The Eight Most Inappropriate Statements that Define Perspective C

Item No.	**Array score**	**Statements**
DIP 27	-5	Teachers should follow a prescribed curriculum without attention to individual children's interests, needs, prior knowledge, emerging circumstances, or current events.
DIP 18	-5	Teachers should cover as much of the curriculum as possible even if it means covering topics once where some children will have to catch up later.
DIP 20	-4	It is more important to cover the curriculum than focus on children's interests.
DIP 17	-4	A teacher's primary responsibility is to maintain discipline, give directions, respond to requests for help, and mediate disputes.
DIP 36	-4	Assessment need only focus on the most important areas of children's learning (e.g., math and literacy) rather been comprehensive.
DIP 10	-3	Teachers always solve problems for children and give any help children request. Teachers do not encourage children to work through the problems together and help one another.
DIP 19	-3	Education is more effective if teachers tell children what they need to know. Lots of teacher-child conversations slow down the class.
DIP 46	-3	Teachers communicate with parents when problems or conflicts arise, thus there are little reasons for the parents to be involved in their child's experiences at school.

All the items in Table 10 were considered to be developmentally inappropriate by the participants who were associated with Perspective C and by NAEYC standards. The first two items in the table were given an array score of -5. The participants with this perspective believed that it is developmentally inappropriate to follow a prescribed

curriculum without attention to individual children's interests, needs, prior knowledge, emerging circumstances, or current events (Item #27). They also believed it is developmentally inappropriate for teachers to cover as much of the curriculum as possible even if it means covering topics once so that some children will have to catch up later (Item #18).

The next three items in the table were given an array score of -4. These items were considered to be developmentally inappropriate but not as inappropriate as the items with an array score of -5. In this group of participants associated with Perspective 3, it was believed to be developmentally inappropriate to cover the curriculum rather than focus on children's interests (Item #20). A teacher's primary responsibility is to maintain discipline, give directions, respond to requests for help, and mediate disputes (Item #17) was considered to be developmentally inappropriate. It was also believed to be developmentally inappropriate to focus on the most important areas of children's learning (math and literacy) rather been comprehension (Item #36).

The last three items in the table were given an array score of -3. These items were considered to be developmentally inappropriate, but not as inappropriate as the items with an array score of -4 or -5. It was considered to be developmentally inappropriate for teachers to solve problems for children and not encourage children to work through the problems together and help one another (Item #10). It was believed to be developmentally inappropriate for a teacher to tell children what they need to know and have less teacher-child conversation (Item #19). Communicating with parents only when problems of conflicts arise, which limits parents' involvement on children's learning (item #46), was believed to be developmentally inappropriate.

Perspective D

The normalized factor scores for each item are listed in (Appendix G). Figure 6 shows the item array for Perspective D.

Most Inappropriate Most Appropriate

-5	-4	-3	-2	-1	0	1	2	3	4	5
27	26	29	49	30	43	35	1	5	13	31
20	28	36	9	47	3	2	11	25	4	34
	6	37	38	16	40	24	32	23	14	
			48	19	50	21	15			
			39	18	42	22	12			
				8	7	33				
				44	45	41				
					46					
					17					
					10					

Figure 6 Item Array for Perspective D

Figure 5 represents the common belief structure of the seven participants who were associated with Perspective D. Item #31, "Preschool assessments address key goals in all development domains (physical, social, emotional, cognitive) and in the areas of physical education and health, language and literacy, mathematics, science, social competence, and creative arts," was considered to be the most appropriate item in Perspective D and had a z-score of 2.12. The other seven most appropriate items in this

perspective had z-scores above 1.0. In contrast, Item #20, "It is more important to cover the curriculum than focus on children's interests," was considered to be the most inappropriate item in Perspective D and had a z-score of -2.23. The other seven most inappropriate items had z-scores below -0.97.

Table 11

The Eight Most Appropriate Statements that Define Perspective D

Item No.	**Array score**	**Statements**
DAP 31	5	Preschool assessments address key goals in all development domains (physical, social, emotional, cognitive) and in the areas of physical education and health, language and literacy, mathematics, science, social competence, and creative arts.
DAP 34	5	Teachers assess children on an ongoing basis during daily activities and play time; they document children's learning and development in various ways including written notes, photographs, audio recordings, and work sample. The information therefore used for later planning and enhance teaching.
DAP 13	4	Teachers frequently engage children in planning or in reflecting on their experiences, discussing past experiences, and working to represent it (e.g., drawing, writing and dictating, making pictures)
DAP 4	4	Teachers recognize community-building opportunities in various parts of the day, such as mealtime, cleanup, and whole-group times.
DAP 14	4	When children are talking, teachers take into account preschoolers' capabilities as speakers, giving children time to express themselves and responding attentively to their speech.
DAP 5	3	Teachers provide many opportunities for children to play and work together, both in groups they form themselves and in small teacher created group.
DAP 25	3	Teachers use technology (computers, IPads, etc.) to expand shared learning experience among children. Technology is used to promote child-child interaction through cooperating in solving problems and helping one another.
DAP 23	3	Teachers make sure that children have plenty of opportunities to use large muscles in balancing, running, jumping, climbing, and other vigorous movements, both in

		play and in planned movement activities. Children can play outdoors every day except when weather is extremely inclement.

All eight of the items presented in Table 11 were considered to be developmentally appropriate by the participants who were associated with Perspective D and by NAEYC standards. The first two items in the table were considered the most developmentally appropriate items, with an array score of +5. Participants associated with this perspective believed it to be developmentally appropriate to address key goals in all development domains (physical, social, emotional, cognitive) and in the areas of preschool assessments (Item #31). In addition, assessing children on an ongoing basis during daily activities and play time and using the information to enhance teaching (Item #34) was considered one of the most developmentally appropriate items by this group of participants.

The next three items in the table were given an array score of +4. All three items were considered to be developmentally appropriate practices for this group of participants, but not as appropriate as the first two items with array scores of +5. Participants associated with this perspective believed it to be developmentally appropriate to engage children in planning and in reflecting on their experiences (Item #13). Participants further believed it is developmentally appropriate to promote community-building opportunities in various parts of the day, such as mealtime and whole-group times (Item #4), and to encourage children to express themselves and respond to them attentively (Item #14).

The last three items in the table were the items with an array score of +3. The three items were considered as developmentally appropriate but not as appropriate as the

items with an array score of +4 or +5. Providing opportunities for children to play and work together in large and small groups (Item #5) and using technology to expand shared learning experiences among children and promote child-child interaction (Item #25) were considered to be developmentally appropriate. Further, it is also believed to be developmentally appropriate in this group of participants to ensure outdoor play and children's activities that use large muscles, like balancing, running, jumping, and climbing (Item #23).

Table 12

The Eight Most Inappropriate Statements that Define Perspective D

Item No.	**Array score**	**Statements**
DIP 20	-5	It is more important to cover the curriculum than focus on children's interests.
DIP 27	-5	Teachers should follow a prescribed curriculum without attention to individual children's interests, needs, prior knowledge, emerging circumstances, or current events.
DIP 6	-4	It is more important to the teacher to focus on keeping classroom control more than focus on children as individuals.
DIP 28	-4	Teachers devote a majority of teaching time on developing children's academic skills more than meeting children's needs as physically active learners.
DIP 26	-4	It is better to teach children content (math, science, etc.) separately without trying to integrate everything together.
DIP 37	-3	Children are assessed as individuals. It is not a good use to time to know how children work in groups solving problems together.
DIP 36	-3	Assessment need only focus on the most important areas of children's learning (e.g., math and literacy) rather been comprehensive.
DIP 29	-3	In planning learning experiences, teachers aim to ensure children's later success by focusing mostly on math and literacy skills.

All eight of the most inappropriate statements that define Perspective D were also considered to be inappropriate by NAEYC. Table 12 shows what were considered the

two most inappropriate items by participants who were associated with Perspective D. These two items were given an array score of -5. Covering the curriculum more than focusing on children's interests (Item #20) and following a prescribed curriculum without attention to individual children's interests, needs, or prior knowledge (Item #27) were considered to be developmentally inappropriate.

The next three items in the table were given array scores of -4. These items were also considered inappropriate, but not as inappropriate as the items with array scores of -5. The participants in this perspective believed that it is developmentally inappropriate to focus on keeping classroom control more than focusing on individual children (Item #6), and to develop children's academic skills rather than meet their physical needs as active learners (Item #28). Further, teaching children academics separately without integration with other content (Item #26) was believed to be a developmentally inappropriate practice in Perspective D.

The last three items in the table with array scores of -3 were also inappropriate, but were not considered to be as inappropriate as the items with array scores of -4 or -5. It was considered developmentally inappropriate to assess children only as individuals and not a good use of time to know how children work in groups (Item #37), and it was also considered inappropriate to focus on the most important areas of children's learning (math and literacy) rather than comprehension (Item #36). Finally, participants associated with Perspective D believed it to be developmentally inappropriate that in planning learning experiences, teachers aim to ensure children's later success by focusing mostly on math and literacy skills (Item #29).

Preschool Teachers' Perspectives on Children's Learning

After reviewing the eight most developmentally appropriate/inappropriate items by each of the four perspectives, I reviewed the items that helped to define each perspective. First, I looked at the items that achieved consensus among all perspectives and did not distinguish between any pair of factors (Table 13). Second, I looked at the items that were distinguishing statements for each perspective (see Appendix H). This information is useful when considering in what aspects the four perspectives are different and/or similar. The four different perspectives that emerge from the Principal Component Analysis are summarized in Figure 7.

Table 13

Consensus Statements that Do Not Distinguish Between any Pair of Factors

Item No.	**Statements**	**Array scores**			
		A	**B**	**C**	**D**
DAP 5	Teachers provide many opportunities for children to play and work together, both in groups they form themselves and in small teacher created group.	4	3	3	3
DAP 12	To help children acquire new skills and understandings, teachers employ a range of strategies, choosing from and combining them to suite the goal, the child, and the situation.	1	2	0	2
DIP 20	It is more important to cover the curriculum than focus on children's interests.	-5	-5	-4	-5
DAP 23	Teachers make sure that children have plenty of opportunities to use large muscles in balancing, running, jumping, climbing, and other vigorous movements, both in play and in planned movement activities. Children can play outdoors every day except when weather is extremely inclement.	2	3	3	3
DIP 36	Assessment need only focus on the most important areas of children's learning (e.g., math and literacy) rather been comprehensive.	-3	-3	-4	-3
DIP 38	Children's assessment for academic progress is more important to the teachers more than the families. Thus, teachers make important decisions unilaterally.	-1	-1	0	-2

DAP 45	Parents' work schedules are accommodated in the planning of participation opportunities as well as teacher-parent conferences and family activities.	-1 -1 -1 0
DIP 48	Directors of programs and teachers should be responsive to the parent's wishes even if those wishes go against the teacher's beliefs.	-3 -3 -2 -2
DIP 49	Parents should not be encouraged to visit often as their presence in a classroom tends to be disruptive to the teaching and learning.	-1 -1 0 -2

As Table 13 indicates, the participants who were associated with any of the four perspectives agreed on four developmentally appropriate items and five developmentally inappropriate items. They all agreed to a certain degree that teachers should provide opportunities for children to play and work together (Item #5), as well as make sure that children have plenty of opportunities to use large-muscle activities (Item #23). Participants showed neutral responses to the statement that teachers should employ a range of strategies that suit the goal, the child, and the situation (Item #12) and that children's assessment is more important to the teachers than to the families (Item #38). Further, participants held a neutral opinion regarding accommodating parents' work schedules in planning for teacher-parent conferences (Item #45) and the notion that parents should not be encouraged to visit often as their presence in a classroom tends to be disruptive to the teaching and learning (Item #49). Moreover, all participants agreed to a certain degree that it is developmentally inappropriate to cover curriculum more than focusing on children's interests (Item #20) and that teachers should focus on the most important areas of children's learning (math and literacy) when assessing children (Item #36). Finally, they all agreed that it is developmentally inappropriate that directors of programs and teachers should be responsive to parents' wishes even if those wishes go against the teacher's beliefs (Item #48).

Reviewing the most and least developmentally appropriate items and the distinguishing items for each perspective, I found that there were four main sets of beliefs among Saudi preschool teachers regarding developmentally appropriate practices. Participants associated with Perspective A can be categorized as having a developmentally oriented approach to children's learning. This approach focused on a broad view of children's learning that required the teacher to have a great deal of knowledge about children's development in all areas of human functioning: physical, social, emotional, and cognitive. Participants with Perspective A shared beliefs in the priority for children to establish positive relationships with peers and to play and work together in small and large group. Fostering children's initiative; reflecting on children's experiences; encouraging children to express themselves; considering child's age, life, and culture; recognizing children's interest in the world; and meeting children's needs as physically active learners were considered highly appropriate practices for preschoolers.

Participants associated with Perspective B can be categorized as having a socially oriented approach to children's learning. Those with this perspective viewed children as socially active learners in the classroom and community environments. Participants associated with Perspective B shared common beliefs about children as social beings with a growing sense of self in relation to others. Understanding children's social and cultural contexts, as well as sharing information about children's learning with families, was considered important by preschool teachers. They believed in encouraging children to sustain close relationships with others, forming of friendships, having teacher-parent conferences, recognizing community-building opportunities during daily activities, and embracing a "caring community of learners." Furthermore, they aim to build nurturing

and responsive relationship with every child and family, as well as insuring blocks of time for children to work and play together both in sociodramatic play and in planned movement activities that promote a positive attitude to become socially competent individuals in later years.

Participants associated with Perspective C can be categorized as having a holistic approach to children's learning. This approach focused on educating multiple aspects of children development rather than focusing solely on academic progress. Participants associated with Perspective C have shared beliefs in the comprehensiveness and interrelatedness of children's needs in all domains of children's development. Preschool teachers who helped to define this perspective placed a priority on an interdisciplinary teaching style that integrated multiple subjects and made connections across content areas. Preschool teachers also emphasized on children's social skills development through fostering a positive atmosphere to establish constructive relationships with others through group work, in addition to communicating with mutual respect when children display challenging behaviors. Participants also have shown a preference to plan and implement learning experiences for children based on the knowledge of the characteristics of preschool age and cultural context. Teachers also preferred a holistic style of assessment that is comprehensive to address key goals in all domains of physical, social, emotional, and cognitive development. In addition, teachers' responsiveness to the diverse learning styles requires diverse assessment strategies to assess what children can do independently and collaboratively. Lastly, teachers' holistic view of children learning in this perspective reflected on documentation of children's learning and development in various ways and on an ongoing basis.

Finally, participants associated with Perspective D can be categorized with a child-centered approach to learning that focuses on children as active learners in the classroom. Participants associated with this perspective deny the conventional style of teaching young children academic content. Participants with this perspective placed high value on the importance of evaluating children in all development domains and not focusing mostly on academic "math and science" using different strategies that are varied to suit individual children. Participants also sought to engage children in planning and encourage them to reflect on their own experiences. They allowed children to present their work in different ways (e.g., drawing, writing and dictating, making pictures). Teachers also recognized the importance of communicating with children with respect to their speech capabilities as preschoolers and responding to them attentively. Moreover, teachers believed in the superiority of creating a sense of cohesive community in various parts of the day, such as mealtimes, cleanup, and whole-group times, as well as having children work cooperatively in groups they formed themselves or in small teacher-created groups. Teachers also displayed a value of making thoughtful use of technology in the classroom to expand the range of children's learning tools and at the same time promote child-child interaction through shared learning experiences. Finally, teachers associated with Perspective D opted for physical activities as integral to the preschool curriculum, and they emphasized on children's need for vigorous movement and outdoor play.

Perspective A: Developmentally-oriented Approach to Learning	**Perspective B: Socially-oriented Approach to Learning**
Build a relationship with children and family Children play and work together Children play in small and large groups Fostering children's initiative Reflecting on children's experiences Children encourage to express themselves Considering children's age/life/culture Children's needs as physically active learners. Recognize children's interests of their world Deny administrative policies over children's needs	Community building opportunities Children work together Children's Social and cultural contexts Teachers work with family Encourage children to maintain friendship Promote social relationship Communicate with parents Support teacher-child conversation Planned movements activities De-emphasis on teaching academics
Perspective C: Holistic Approach to Learning	**Perspective D: Child-centered approach to Learning**
Integrate multiple learning contents Interdisciplinary fashion of teaching style Knowledge of the contents of child's age Assess children as a whole Assess children with different strategies Assess children as individuals and groups Play in group Positive relationship with others Attention to individual children Consider children interests Comprehensive assessment for all areas Reject direct teaching for academics	Assessments include all development domains Teachers are responsive Children are active learners Engage children in planning Child-child interaction Focus on children interests Integrate contents Children's interests and prior knowledge Meet children's needs Children's individuality Deny the conventional style of teaching young children

Figure 7. Preschool Teachers' Perspectives on Children Learning

Visualize Data Using Color Coding Strategy

Figure 8 illustrates the array of the four perspectives that emerged from the analysis. Based on the color coding for the items of the five categories of effective teaching, the issue of dichotomized developmentally appropriate practices as either "appropriate" or "inappropriate" is clearly illustrated. The color coding strategy helps in visualizing how each item of the DAP and DIP statements might be interpreted and

placed at extreme polarities by the readers (in this research, preschool teachers). A clarification made in the second and the third version of NAEYC's guidelines that moves from *either/or* to *both/and* thinking of early childhood practice expressively conveys some of the complexity and interrelationship between both child-directed and teacher-directed approaches (Bredekamp & Copple, 1997; Copple & Bredekamp, 2009). Reflecting on *either/or* and *both/and* thinking of early childhood practice, Figure 8 presents the dichotomy of DAP and DIP statements by noting a virtually analogous distribution of color-coded items of DAP and DIP statements along a continuum of appropriateness. For more clarification, two examples from perspectives A & B of DAP and DIP sorted statements in the *Planning Curriculum to Achieve Important Goals* category—coded in blue—will be further discussed.

As Figure 8 illustrates, Item #21 to Item #29, which are coded in blue, refer to the third category of the five keys of effective teaching, which is *Planning Curriculum to Achieve Important Goals.* Analyzing the teachers' subjective perceptions concerning appropriate practice, we found that the binary oppositions of presenting DAP and DIP statements encourage teachers to reflect on their own beliefs and respond accordingly. For example, Item #24 "Teachers recognize children's interest in making sense of their world to promote academic concepts of mathematics, science, reading, writing, social studies, and art through various activities such as building blocks, playing games, intentional play, manipulatives, movement activities, and computer time" was sorted as the most developmentally appropriate item for the *Planning Curriculum to Achieve Important Goals* category with an array score of +4. Contrarily, Item #26 "It is better to teach children content (math & science) separately without trying to integrate everything

together" was sorted as the most developmentally inappropriate item for the same category with an array score of -4.

Another example that clarifies the false dichotomy of DAP was referred to by Delpit (1988) when she noted, "The dichotomy is false. The issue is really an illusion created initially not by teachers but by academics whose world view demands the creation of categorical divisions—not for the goal of better teaching, but for the goal of easier analysis" (p.296). For instance, Item #29 "In planning learning experiences, teachers aim to ensure children's later success by focusing mostly on math and literacy skills" was sorted by the teacher as a developmentally appropriate item with an array score of +3. However, Item #28 "Teachers devote a majority of teaching time to developing children's academic skills more than meeting children's needs as physically active learners" was sorted by the teachers as a developmentally inappropriate item with an array score of -4. This example reinforced the *both/and* co-existent thinking in practice rather than *either/or* limited possibilities. There is no paradox in viewing these two examples as polar because both Item #29 and Item #28 were either appropriate or inappropriate to a certain degree. Lubeck (1998) has also pointed out that the contradictory interpretations for both DAP and DIP are due to categorizing what is possible by either appropriateness or inappropriateness. However, in fact both DAP and DIP do not exit as separate entities in nature (Lubeck, 1998; Ernest, 1999). The issue of viewing DAP and DIP as polar descriptions was better expressed by Fowell and Lawton (1993):

> The initial decision to contrast appropriate with inappropriate practice by setting forth polar descriptions appears to have been effective. It caught the attention of

> practitioners, educators, and researchers, and it was easy to understand. But perhaps it is time to explain that the "appropriate" and "inappropriate" practice columns illustrate the polar extremes of a continuum. We are not dealing with discrete compartments, but with an infinite number of variations, each represented by a single point along a "classroom approach" line of possibilities, with respect to each program component. (pp.123–124)

Furthermore, by reading color-coded items to analyze the data, it can be clearly noticed that the items coded in red color were placed in the middle and/or toward the left side of the quasi-normal distribution diagram by the teachers in the four perspectives. The middle column that holds the 0 array score on the diagram represents the neutral items or items that are not categorized as either appropriate or inappropriate, while the left side columns that hold the array scores of -1, -2, -3, -4, and -5 represent developmentally inappropriate items according to participants' responses. The red-coded items represent the fifth category of the five keys of effective teaching, which is *Establishing Reciprocal Relationships with Families*. We can conclude that working with families and involving them in children's learning experiences was not considered a priority for this particular group of teachers. However, there is one exception that appeared within Perspective B that sorted Item # 50 "Opportunities for parent participation, teacher–parent conferences, meetings, and other event for families should occur when convenient to the teacher" as the most developmentally appropriate item with an array score of +4. It should be noted that Item #50 was considered as developmentally inappropriate practice by NAEYC's standards but was considered as developmentally appropriate practice by the participants in Perspective B.

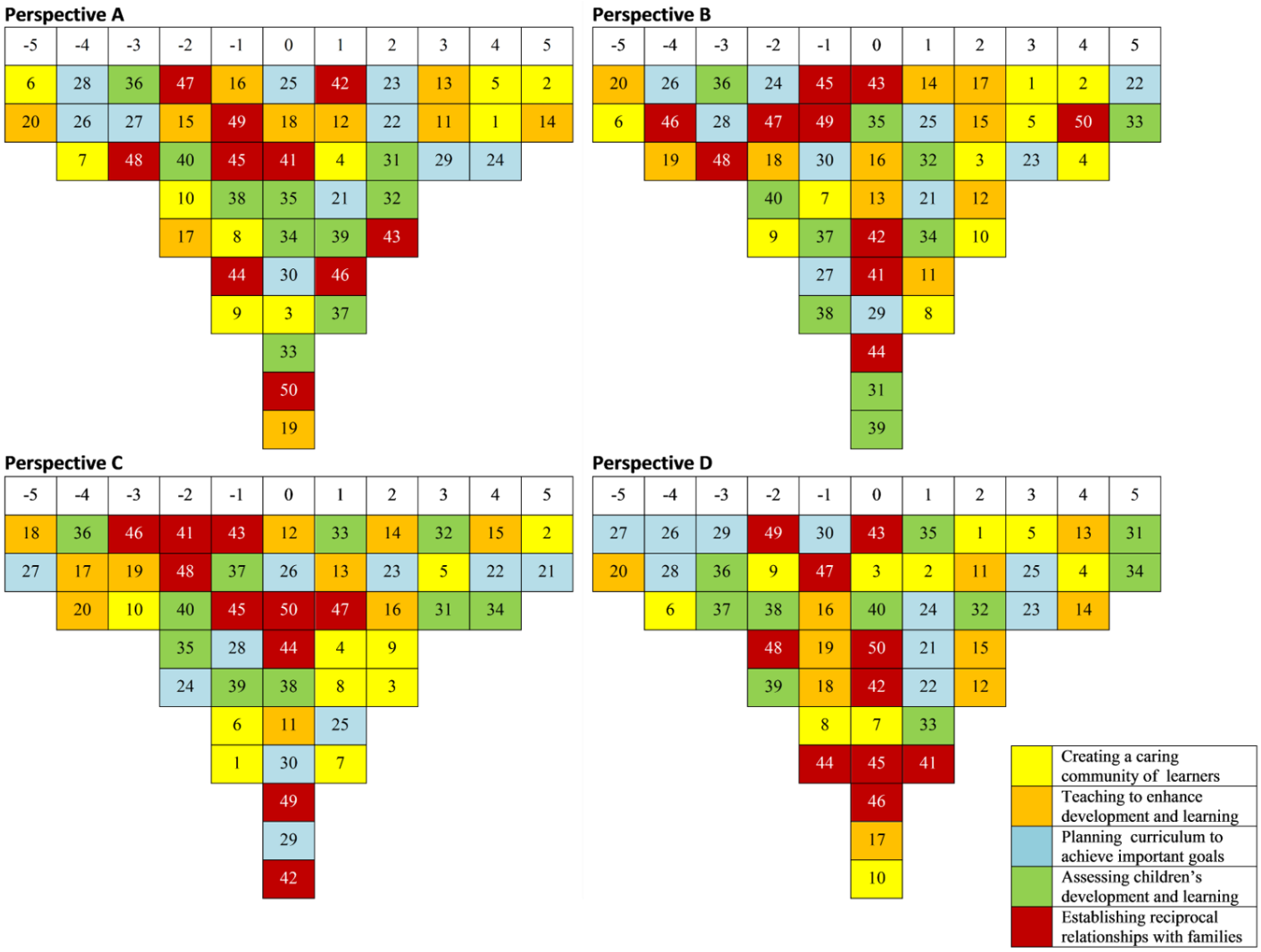

Figure 8. Color-Coded Item Array for Perspectives A, B, C, and D

Research Question Three

The third research question sought to investigate what might account for cultural influences of teacher' beliefs regarding developmentally appropriate practices. Using focus group interviews with all the four groups of teachers, I explored the result of the Q-sorting process and looked for patterns and themes within the four sets of beliefs that emerged from the analysis. Three participants were selected per perspective for the focus group interviews. To represent Perspective A, a preschool teacher (PST6) with factor association of .77, a preschool teacher (PST19) with factor association of .70, and a preschool teacher (PST27) with factor association of .71 were selected. To represent Perspective B, a preschool teacher (PST15) with factor association of .77, a preschool teacher (PST17) with factor association of .80, and a preschool teacher (PST25) with factor association of .75 were selected. To represent Perspective C, all three participants that helped to define this perspective were selected. They were a preschool teacher (PST5) with factor association of .69, a preschool teacher (PST12) with factor association of .56, and a preschool teacher (PST20) with factor association of .56. For the last group, Perspective D, a preschool teacher (PST4) with factor association of .72, a preschool teacher (PST34) with factor association of .73, and a preschool teacher (PST35) with factor association of .67 were selected.

All twelve preschool teachers were invited to a small meeting room in a hotel located in the central part of Mecca city where it was convenient for all selected participants. Prior to that, the researcher contacted by phone all of the selected teachers to arrange a time and location for the interview meeting. The participants agreed on a well-known hotel located in the Alaziziah district. The meeting room was reserved for two

hours for each group of teachers on four different days. For the group of preschool teachers representing Perspective C, only two teachers completed the interview and one teacher did not come for some reason. The total number of participants interviewed were 11 preschool teachers. The interviews lasted one hour and thirty minutes for all groups except the group of teachers who associated with Perspective C, whose interview lasted for only one hour.

Using Q-methodology, I reviewed the Q-sort configurations that share similar and different perspectives in order to identify the items worth further investigation. The most and least developmentally appropriate practices within the four sets of beliefs also were identified for follow-up explanation by the participants. Lastly, the items that are distinguishing for each perspective were also included in the investigation. The four sets of beliefs among Saudi preschool teachers revealed from the Q-analysis were the focus of the second phase of this study. Therefore, it was very useful to conduct interviews to explore how Saudi preschool teachers perceive DAP and DIP with regard to any cultural influences. The qualitative data from the interviews provided information regarding how teachers viewed DAP and DIP items with reflection on their practices in the classroom. Throughout the interviews, two types of themes developed to explain the quantitative part of the study. Cross-perspective themes presented the common beliefs regarding DAP and DIP items among all the four perspectives. Within-perspective themes presented a unique perspective (Figure 9). In the following section, I will describe the cross-perspective themes that emerged as common beliefs among all four perspectives.

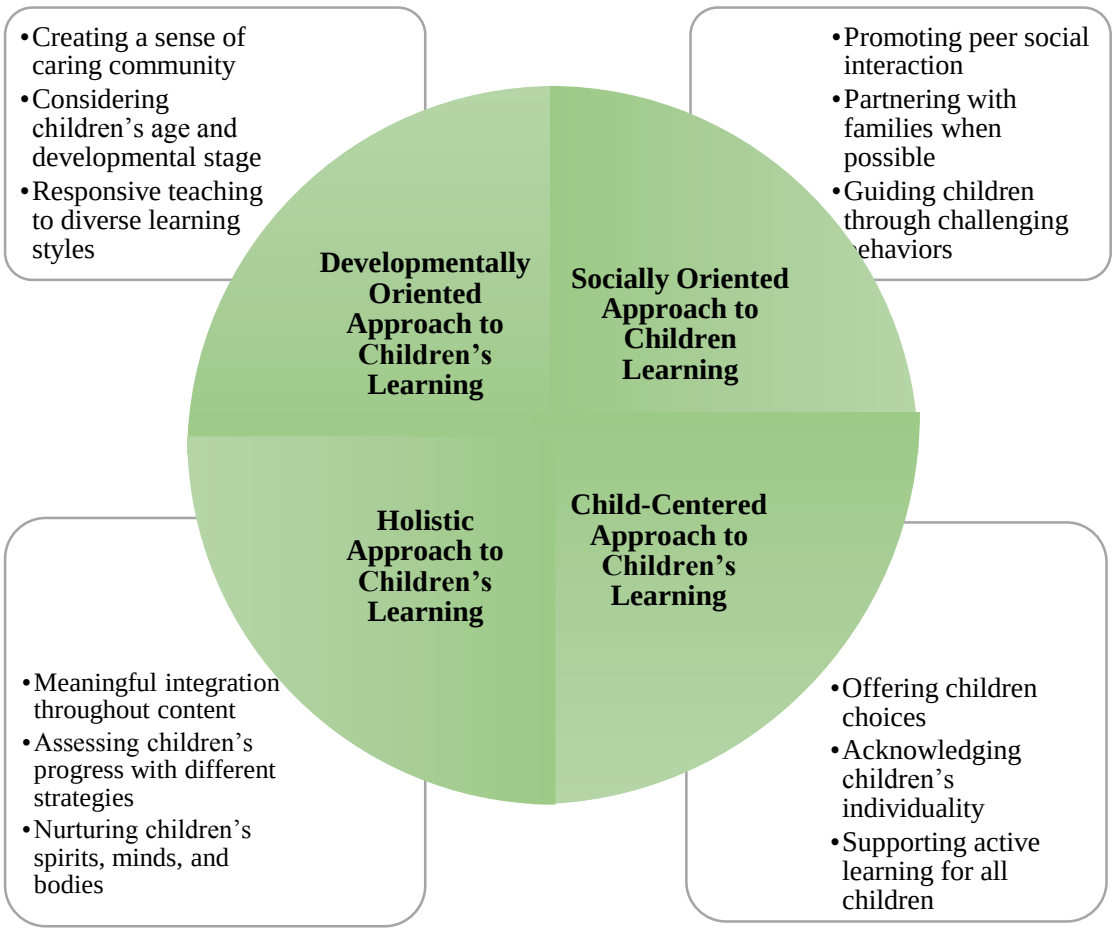

Figure 9. Within Perspective Themes

All of the 11 participants agreed on the following four themes:

a) Deny teaching preschoolers academics;

b) Modify the curriculum to suit children's needs;

c) Promote social activities;

d) Families are respected but not involved in classroom activities.

Deny teaching preschoolers academics

All of the interviewees agreed that a preschool teacher should not teach academics to young children, especially using the conventional way of teaching that is used in elementary school. To represent this view, I will quote a preschool teacher (PST19) who associated with Perspective A:

> Preschool years are a preliminary level and children should not be taught academic subjects like math, science, and reading and writing skills. It is too much for them. We focus more on gaining social skills like sharing, respecting others, respecting the teacher, working in groups, self-regulation, and all the skills that children need in school later on but not academic skills. That is an elementary school's job. (PST19)

As the above quote indicates, this preschool teacher believes that children during preschool years are not supposed to be taught academic subjects in the way that has been taught in school. The Saudi preschool teacher viewed elementary school as a separate and subsequent level to preschool and children's learning in a preschool program has different objectives than in elementary. At the preschool level, the focus of the program that endorsed by the Ministry of Education is on how to assist children in their

socialization into school life. One of the objectives and goals for preschool education is to familiarize children with a school atmosphere and help them move gently from egocentrism to social life with peers (Manual Guide for Preschool and Nursery Organizations, 2015–2016). Another preschool teacher who associated with Perspective D noted:

> Some of the skills that we practice with preschoolers are related to the academic content like math and literacy. For example, counting from 1–20 and doing some activities during circle time or in centers that depends on some mathematic concepts like adding, subtracting, division, measuring, but with games and activities as well as recognizing alphabet letters (in order) and its shapes and sounds, but it is not necessary to write them perfectly. Yet only children in preliminary level practice these skills, which are considered a basis for academic skills in elementary school. But we don't teach academics as a separate subject as in elementary school. (PST4)

The above quote illustrates how some academic content has been taught to young children in the way that is different from what has been taught in schools. As preschool teacher (PST4) indicated, some of the academic content can be taught in preschool through games and activities during various times of the daily program. Copple et al. (2013) have noted that "preschool mathematics curriculum and instruction need to be engaging to children, consistent with their developmental level, and focused on the important concepts and processes on which subsequent math learning will build" (p.54). Another preschool teacher (PST12) mentioned examples to illustrate children's exposure to some math and science concepts:

> In the time of learning in centers, children are exposed to a lot of activities that are related to math. For example, when playing with blocks children are building two or more towers, they count and use an equal number of blocks to create balance. They use words like tall, short, less, more, the same size, all these words are connected to measuring and math. (PST12)

As the above example demonstrates, during centers time children have opportunities to practice some academic concepts to help them to become mathematical thinkers and to develop mathematical language and vocabulary. According to Copple et al. (2013), "to promote children's mathematical thinking and learning, one of the most important things teachers can do is simply to talk with them about problems, patterns, and mathematical connections using mathematical language (e.g., more than, less than, tallest, five) and listen to what they say" (p.54)

Modify the curriculum to suit children's needs

All of the 11 interviewees agreed on the importance of modifying the curriculum to suit children's needs. Although preschool curriculum is prescribed and assigned by the Ministry of Education, all preschool teachers in the four focus groups agreed on the flexibility of implementing the curriculum. To represent this opinion, I will quote a preschool teacher (PST27) who associated with Perspective A:

> All the lessons and units are assigned by the Ministry of Education, we as teachers do not plan for the lessons, but we can plan for the activities for the lessons. A preschool teacher has flexibility over implementing the lesson that suits children's needs and suits the situations. (PST27)

As this quote illustrates, preschool teachers were not engaged in planning the curriculum assigned by Ministry of Education, but rather they received the curriculum divided into several units. Each unit is scheduled for three to four weeks and has its lessons and activities. Teachers have options for flexible implementation for the lessons, yet by the end of the unit, all the lessons should be covered. As a preschool teacher (PST5) who associated with Perspective C noted:

> Some of the lessons do not go along with the circumstances that might happen in the classroom or in the school. In this case, I wouldn't give the same lesson, I may plan my own lesson that would relate to the unit and suit the children's interests and classroom circumstances. But by the end of the unit, all the lessons must be taught in a way that meets the objective assigned for that unit. (PST5)

The Manual Guide for Preschool and Nursery Organizations (2015–2016) listed 23 tasks that teachers should perform when implementing the curriculum. The tasks included implementing unit lessons, preparing for practical lessons, designing hands-on activities, and completing the unit in the time scheduled. From Perspective D, a preschool teacher (PST34) expressed her opinion by sharing this example:

> One of the lessons of the *Water & Sand* unit, I didn't follow the suggested activities for that unit. I planned my own activities. I challenged the children to invent an activity for outdoor play where we can use either water or sand in a game but without mixing them together. They enjoyed doing an activity that was unusual for them rather making a sand castle, which they usually do in outdoor play for this unit. (PST34)

The challenge that the preschool teachers are facing is pairing the activities to prescribed curriculum lessons to create meaningful connections between them. Copple et al. (2013) indicated

> "A curriculum is much more than activities. It provides the framework for developing a coherent set of learning experiences that enables children to reach the identified goals. Whether the curriculum is a published product or one written by teachers, it must be effective and comprehensive in addressing all developmental domains and important content areas" (Copple et al., 2013, p.16)

Promote social activities

All of the interviewees agreed that preschool years appear to be the most important period of time for children's social lives. To represent this opinion, I will quote a preschool teacher (PST6) who associated with Perspective A:

> Good socialization is so stressed in our preschool curriculum. Children belong to the Muslim community that is based on Islamic morals. Sharing, caring, compassion, patience, selflessness, tolerance, all these kinds of ethics are developed through group work and collaboration. (PST6)

The above quote is an example of how social activities are used to establish religious orientation in preschool years. Education in the Kingdom of Saudi Arabia at all levels is Islamic-based education, which can be clearly seen in the principles of education policy documentation issued in 1970. Another participant who associated with Perspective B (PST15) further asserted the religious spirit that underlies social activities in her classroom:

> I always recall Hadith from Prophet Muhammed's legacy [Peace Be Upon Him], which urges children on the importance of group work as we are one family and children are brothers and sisters on this basis. For instance, "*None of you truly believes until he loves for his brother what he loves for himself*." And "*The believers are like one person; if his head aches, the whole body aches with fever and sleeplessness*" [Sahih Bukhari]. (PST15)

According to Copple and Bredekamp (2009), children after age three gain exposure to a wider world of socialization than before. Their social world in preschool extends from their parents to include peers, teachers, and other adults in the classroom and their social skills developed accordingly. A preschool teacher (PST35) who associated with Perspective D further indicated the importance of social activities in the classroom by saying that:

> When children do an activity as a group or peers, it is a good chance for them to learn how to be patient and wait for their turn, how to control their actions to fit with group work, how to negotiate for the best solution. (PST35)

This preschool teacher's opinion illustrates how planned social activities promote children's social and emotional development skills. When she was asked to name some of the planned social activities, she mentioned the following examples:

> In the classroom, designing the unit poster is teamwork done for each unit. The unit poster should be completed using all the art products for all children with their names displayed on the poster. Outside the classroom, gathering the crops in the school garden is good example for teamwork activity. Children are divided into small groups. Each group is responsible for harvesting one type of vegetable

[plastic toy] that belongs to the same vegetable family (for example, green leafy vegetables). The rules are like dividing team tasks, no damaging the other crops. (PST35).

In cooperation with NAEYC, and under the supervision of Ministry of Education, *Tatweer* Educational Services declared in 2015 the Saudi Early Learning Standards (SELS) that are aligned with NAEYC's standards. The statement provides valuable information for teachers, parents, administrators, and care providers about children's learning and outcome expectations in all domains in their early years. An observer of the statement will notice the pairing between Islamic teaching and children's social and emotional development. The guidelines for preschooler's social skills are based on the core principles of Islamic socialization that are explicitly stated in the preface of the statement. The statement also sought to bridge the gap between preschools and elementary schools by providing teachers with guidelines to promote children's social skills that are needed for school life later on. Additionally, the statement expressed two well-defined aspects that guide children's social and emotional development: (a) sense of self; and (b) relationships with others. The sense of self includes children recognizing themselves as individuals, becoming self-aware, understanding their feelings, regulating their emotions, and controlling their actions. The relationships with others include constructing positive relationships, forming friendships, interacting with teachers and peers, and working and playing together (Saudi Early Learning Standards, 2015, p.30).

Families are respected but not involved in the classroom

All of the 11 interviewees agreed on the limited participation of families in the classroom. Families are not involved in the classroom activities, whether for

administrative purposes or for the preferences of the families themselves. To represent this view, a preschool teacher (PST27) who associated with Perspective A described the nature of family communication in Saudi preschools by saying that:

> The norm in our society is that communication with families very often occurs between the teacher and the mother of the child with no direct contact with the father. In the case of absence of the mother for whatever reason (for example, divorce or passing away) the communication will be with the caregiver, who could be a grandmother or one of the female relatives or sometimes the child's nanny if she speaks Arabic. In some cases, that are urgent, communication with the father will be via phone or text or a written letter sent home with the child. (PST27)

As the above quote illustrates, the nature of a conservative society appears to influence all life aspects, including education. The unique cultural characteristics of Saudi society are reflected in lifestyle, norms, customs, and even communication. Gender separation is restricted in many aspects of public social life and can be clearly seen in the way that a teacher limits her communication to the mother as both are females and both can communicate by direct contact, which is the norm in this particular culture. Another participant who associated with Perspective B (PST25) noted some administrative obstacles regarding families' participation in the classroom:

> In the preschool I am working with, it is not easy to invite children's mothers to the classroom due to some administrative procedures. Mothers need to have written permission from the principal or her assistants to access the classroom,

> unless it is some occasion like to celebrate an event or so forth, then all mothers are invited and welcomed. (PST25)

She further noted:

> Some classroom activities need to be completed with cooperation with the family, like planting some seeds at home or taking pictures. In such cases, the teacher communicates with a mother via text messages or a chat application that very popular for communication called WhatsApp. (PST25)

PST25 stated that communication could be limited due to some administrative requirement that reduce the likelihood of partnership with families. Social media are also presented as other alternatives that help to keep parents and teachers connected. A preschool teacher (PST4) who associated with Perspective D commented on that issue by saying that:

> It is not common for children's mothers to participate in the classroom activities, whether it was for unavailability of the mothers—especially working mothers—or for the preference of a mother herself to not get involved in the teacher's job. Social media now, like Twitter and Instagram, give a great advantage to share classroom happenings with families via our private accounts. (PST4)

According to Copple et al. (2013):

> In some cultures, teachers are so highly respected that they are given absolute authority over everything educational. For families from such cultures, the partnership idea is a strange and uncomfortable concept, so teachers need to be

> patient and let the relationship evolve gradually into a more collaborative, two-way partnership. (p.101)

Establishing consistent teacher-parent communication is a good starting point for creating two-way relationships with families. Welcoming parents in the classroom, maintaining frequent and mutual conversation, avoiding a condescending attitude, acknowledging parents' preferences and goals, are all basic methods for building solid, reciprocal relationship with families (Copple & Bredekamp, 2012).

In the following section, I will review the within-perspective themes by remarking on evidence, claims, and standpoints resulting from the follow-up focus group interviews with the selected participants regarding DAP and DIP beliefs.

Perspective A: Focusing on Developmentally Oriented Approach to Children's Learning

Participants who associated with Perspective A were in close agreement with the principles of developmentally appropriate practices. Six preschool teachers defined this perspective, and they shared a set of beliefs about how all aspects of children's development are important. Three preschool teachers out of six were invited for further explanation. From the focus group interview with the selected participants who associated with Perspective A (PST6, PST19, and PST27), three themes arose. The themes include:

a) Creating a sense of caring community;
b) Considering children's age and developmental stage;
c) Responsive teaching to diverse learning styles.

Creating a sense of caring community

According to Copple and Bredekamp (2009), children best learn and develop in a community where all children contribute to one another's well-being and learning (p.35). In another words, a classroom that fosters a healthy social environment and promotes positive, constructive relationships is essential for children's learning and overall development. Knowing children as individuals and supporting them as community members is an important role of effective teaching in developmentally oriented classroom. Advocates for this view believe that all children need to feel they are part of a cohesive community.

In the following section, I will review the preschool teachers' responses regarding their beliefs and professional practices in the classrooms to create and maintain a sense of a caring community. A preschool teacher (PST6) described her classroom community by saying that:

> In my classroom, very often I use words that refer to our classroom as a community, like *we, for us*, *ours*. I usually reinforce the concept of a small community that is part of a big community outside the school. In the time of play in the centers, most of the centers are designed for more than one child to work in except one center designed for individual work. Each child in my classroom is assigned a task that he or she is responsible for. There are some rules that should be followed by all children and the teacher, like respecting others, no interrupting others' speech, listening to the teacher and peers, helping others, waiting for turns, staying in the line. (PST6)

As the above response illustrates, the developmentally oriented classroom in an early childhood setting is a community-like classroom. Children and a teacher are active members who work together to support one another. The community-based learning style requires a teacher to work with all children as individuals and as groups to promote a sense of group identity. According to Phillips and Scrinzi (2013), "how we interact with children shapes how they approach others, how they feel about themselves, and how they develop and learn" (p.38). Children are very sensitive to the language in their surroundings. The importance of using positive and supportive words that value what children are doing and are capable of is reflected in the following quote by PST19:

> I believe that the language that the teacher uses inside the classroom affects children's behaviors. Positive words (like *great work, that is so creative, you are so smart*) that make children feel accepted and appreciated are very important. Both teachers in the classroom are acting as a role model for the children and their relationship and the conversation they use should reflect mutual respect. (PST19)

According to this preschool teacher participant, using verbal encouragement is very important to motivate children, which reflects positively in their behaviors. Even the language used between the teacher and her assistant should consist of appropriate vocabulary. Besides the language a teacher uses, a teacher's ability to maintain an emotionally safe classroom where all children feel secure and comfortable is critical. PST27 described her experience with children's conflicts by saying that:

> In any normal day in my classroom, my children face some conflicts and problems like arguing about who's starting a game first or who's reserving a spot in the circle time. I usually leave children to figure out how to arrive at an

> agreement but sometimes I need to interfere to handle the issue when it is needed. (PST27)

As the previous quote indicates, in any early childhood classroom children may face some problems related to their interactions with peers or classroom resources. According to Copple and Bredekamp (2012), to promote children's self-regulation skills, a teacher needs to guide children to resolve their conflicts and model for children the skills that help them to solve problems on their own (p.30). Another participant (PST19) shared her guiding style for resolving conflicts by saying:

> In case of conflicts in my classroom, I prefer to solve it myself rather than communicate with the family. The conflicts are usually about not following the rules like taking turns or spending more than the allowed time in the centers, or using the classroom resources like the computer table, or such. I usually prefer to remind children about our rules in the classroom. If there is a child who consistently displays some challenging behavior, I talk to the child quietly and try to understand what the child needs. I know some children want more attention from the teacher and that makes them make up some conflicts with their peers to receive attention. A good teacher can determine when her children need her attention or when they are struggling with some real conflicts. (PST19)

To ensure that all children's needs are met, a teacher needs to know her children as individuals, including their family lives that might influence their learning in the classroom. Due to some familial circumstances, some children need a teacher's guidance and attention more than others. PST6 shared a case of a child in her classroom who has divorced parents:

> I have a boy in my classroom with divorced parents. He is so shy and quite. He rarely starts conversations on his own, he usually responds with very short phrases. I know he is living with his grandparents and with two other siblings who are older than him. For this particular child (Yazid), I pay more attention to him during the day because I know he is having family challenges that may influence his interaction with others in the classroom. (PST6)

She further noted:

> In one of the activities for the *My Lovely Family* unit, we opt to make handmade cards for children's mothers. Each child has to create and decorate one card for his or her mother. Yazid asked me to make two cards, one for his mother and the other one for his grandmother. He told me that she may come back soon, so I know he is not seeing his mother very often. I told him that would be a nice gift and it would be great way to show her how much Yazid loves his mother. He asked me to keep the card with me so the card will be as good as new. I feel sad for him living in an unstable family situation at a very early age. For this child particularly, I want to maintain a close relationship with him because I know he needs emotional support more than the other children in the classroom. (PST6)

As the case of Yazid exemplifies, some children who are going through traumatic family situations like divorce need more of a teacher's emotional support and guidance. According to Copple and Bredekamp (2009), "the excellent teacher makes it a priority to develop a warm, positive relationship with each child. The relationship is vital to young children's learning and development in all areas, and it makes effective, positive guidance possible" (p.35). Building a caring community in a classroom requires a teacher

to be aware of all children and make an effort to know each child's needs, abilities, and personality, including household circumstances. Children with such an emotionally unstable domestic life are at risk of suffering from a lack of emotional security that is needed for healthy emotional development.

When it comes to including children with special needs in a classroom where normally developed children are taught, the participants had different views. Having no specialized preparation for the education of special needs children was considered as the biggest barrier for teachers to accept children with disabilities. PST27 noted that gaining some experience of working with special education teachers is needed to develop a strong knowledge base to serve as a solid professional foundation to educate children with disabilities. She expressed her opinion by saying that:

> Last year, my preschool established one classroom for special needs children. Only one teacher who specialized in special education was assigned to this classroom, other teachers in the preschool were taking turns to serve as an "assistant teacher" for four children with different learning disabilities. I admit that I gained some knowledge about working with children with special needs, but I don't think I can do this alone if I have a child with special needs in my classroom. I need to work with a specialized teacher, especially when we work with at least 25 children per classroom. (PST27)

As the above quote illustrates, a preschool teacher in an early childhood setting is concerned about her ability to adequately respond to the needs of children with disabilities. Including children with special needs in early childhood settings goes beyond welcoming them as equal community members. An inclusive early childhood classroom

extends the value of and support for full participation for all children within the educational setting. Teachers have to put inclusive values into actions and ensure all children have full access, participate, and thrive. According to Copple et al. (2013), "inclusion of children with disabilities and other special needs means more than their simply being present in the classroom; it means, rather, they are active participants as part of the classroom community" (p.9). Some of the students with disabilities need more than qualified teachers, they need an accessible environment that facilitates learning resources in the classroom for all children with and without disabilities. An accessible and orderly physical environment contributes significantly to creating a safe and caring community. According to Phillips and Scrinzi (2013), the "physical arrangement of the classroom sends the message to the children 'This is a safe space meant for me'" (p.36). PST19 expressed the link between the types of disabilities and the inclusion possibilities by sharing her experience of working with disabled children:

> It depends on the type of disability, whether it is physical, sensory, or a mental health disability. In our building, classroom sizes are not equal, which could be challenging for including children in wheelchairs. But I have worked with a child with Down syndrome in my classroom. It was challenging but I read a lot about their needs. Lana [her name] was a six-year-old girl in preliminary level, full of life, so excited, and very capable. She was making slower progression than other children but she was so cooperative with her peers. I was concerned in the beginning because of the questions children asked me about her appearance, features that look different from them. But it was a life example for them to see how Allah creates us as different humans with different looks and needs and we

> need to support and love each other. As Prophet Muhammed [Peace Be Upon Him] said, "*A believer to another believer is like a wall of bricks supporting each other*" [Sahih Muslim]. (PST19)

As the above quote demonstrates, the preschool teacher's experience with the child Lana is an example of a teacher's ability to approach disabled children based on the severity and complexity of the disability. In her response, it is noticeable how the spirit of faith perceived by Saudi a preschool teacher may influence her practice.

Consider children's age and developmental stage

Children are going through milestones in their development. At certain age, children are able to perform some specific tasks, functions, and skills that are expected of them. Knowing what is typical among children at particular ages and developmental stages is crucial in order for preschool teachers to provide high-quality early education. A teacher in an early childhood program has to have a good deal of knowledge about how children develop and learn. Advocates for this view believe that all children's developmental needs should be considered.

In the following section, I will review preschool teachers' beliefs about the appropriateness of their professional practices in the classrooms to children's age and life stage. A preschool teacher (PST6) expressed how she views children at this age by saying:

> Children at the preschool level have different needs than children in elementary school. They are at an age of being physically active, and they can learn through play, games, and activities. It is a preliminary stage for elementary school years,

> and education at this level must be full of play and fun. Their social lives outside the home begin in preschool and they learn how to make friendship with other children their age. (PST6)

This participant viewed the preschool years as a separate stage from the elementary level and suggested that it needs to be a joyful and pleasant educational experience for children. An excellent teacher of young children recognizes the corresponding pleasure of both play and learning. According to Copple et al. (2013), "teachers are always more effective when they tap into this natural love of learning rather than dividing work and enjoyment" (p.24). Compared to traditional schooling in a formal elementary school, children may struggle in their first year of school. As one preschool teacher (PST27) has noted:

> I've served in elementary school for almost five years and more than 17 years in preschool. I know what the difference is between teaching in a school setting and in a preschool classroom. Even the daily program, units, lessons, and activities are quite different. Because I've experienced both teaching styles, I don't like the gap between elementary and preschool years. I think it is hard for children in the first grade to adjust to a rigid school style, which they are not used to. (PST27)

The gap between the teaching style in the preschool years and formal schooling in Saudi public schools is a concern for preschool teachers. The planning and development of curricula in early childhood programs and in elementary schools need to build connections between these two stages for a smoother transition for children. Children's learning accrues in multiple stages that are based on their developmental stages. According to Copple et al. (2013), "[an] effective, developmentally appropriate

curriculum is based on what is known about the interrelationships and sequences of ideas, so that children's later abilities and understandings can be built on those already acquired" (p.2). Another preschool teacher (PST19) pointed to the misconceptions made by children's parents regarding the role of preschool:

> Preschool years are like a preparation for elementary school. The focus in elementary school is on teaching academic subjects like reading, writing, and arithmetic. Although we in preschool do some activities that promote these concepts, it is more like an introduction for later required skills. Children don't have to write words or read a sentence perfectly. And this is one of points of conflict between the teachers and parents. Some parents think their children will be able to know all letters and numbers as soon as they entered to preschool, but we don't focus on that at this level, as it is an elementary school task. (PST19)

Another preschool teacher (PST6) commented:

> I have taught some smart children in level 2 who have come to school knowing all of the letters of the alphabet and numbers up to 20. And that is usually because the mother is so eager to teach her child at home or because the child has older siblings or cousins. We do activities using worksheets for letters and numbers, which children can take home for their parents or add to their portfolio. (PST6)

As the above responses indicate, some parents think that their children will start learning literacy skills once they enter preschool. When parents are so concerned about their children's early literacy skills, they often expect too much from them in their preschool years. Preschool teachers can therefore close the gap by communicating with parents about what are developmentally appropriate expectations for children of preschool age.

The effective teacher recognizes how to bridge the differences between parents' expectations and the actual role of preschool. Copple et al. (2013) suggested that, "to create harmony even in the face of differing practices, it is important to move away from viewing contrasting practices as right or wrong, instead thinking of them simply as different" (p.20). One preschool teacher (PST19) spoke about her experience with parents' different expectations:

> I've noticed that some of the mothers of my children who are well educated have similar ideas about what I am doing as a preschool teacher. They know that their children's learning should not be focused on subjects like reading and writing and that we have a different style of teaching. We use play as a tool for learning. But at the same time, some mothers have told me that they worry about their children wasting their time in play and not practicing writing or counting. (PST19)

For the parents who did not have similar experiences of early education prior to formal schooling, they might misunderstand what developmentally appropriate early childhood education looks like. It should be noted that early childhood programs have a recent history in the Kingdom of Saudi Arabia, dating back to the mid-1970s. It was limited to wealthy families and not widely accessible like it is now. Some parents started their education with a rigid traditional style of formal schooling, which may result in their misunderstanding of preschool's role. According to Coople and Bredekamp (2009), "preschool is a different kind of educational setting for many parents, no matter what culture they come from. Challenges to partnering with the teacher can come when parents think about their own experiences as students in formal schooling settings" (p.183).

Responsive teaching to diverse learning styles

Each child is a unique individual and has different interests and abilities. A responsive teacher can notice these individual differences and reflect upon her teaching style. This theme represents the responses of the preschool teacher participants who associated with developmentally oriented approach to children's learning. In the following section, I will review preschool teachers' views on how to differentiate between teaching styles to suit diverse children. To illustrate this, a preschool teacher (PST6) responded as follows:

> Some children enjoy working in groups, some prefer to work with peers like their best friends in the class, and some children like to work alone without help from other children or even the teacher herself. Even when they play in the learning centers, some children prefer some centers over others. I even notice that girls like to work with their girl peers more than boys. Boys usually like to work alone. In the first couple weeks of the year I can determine each child's preferences, then I can keep this in my mind when I prepare activities. (PST6)

This preschool teacher's opinion illustrates how different children with different personalities like to work in the classroom. Children's personalities may influence how they learn and how they prefer to work during activities. Knowing children's preferences and learning styles is very important and can help the teacher to make wise choices regarding her teaching style. One participant preschool teacher (PST19) commented on how teachers can determine a suitable teaching style:

> We have to follow a specific lesson plan scheduled within a timeline for each unit, but I can choose my teaching strategies based on teacher's choice, children's preference, and classroom resources. (PST19)

As the above quote illustrates, although preschool teachers follow a prescribed curriculum with a specific schedule, they have some room for flexible implementation. The flexibility reflected teacher's ability to make intentional decisions about which style is best suited for the children and the classroom resources. According to Coople and Bredekamp (2009), "an effective teacher makes use of the strategy that fits a particular situation and the purpose or purposes she has in mind" (p.36). Another participant, preschool teacher (PST27) shared her experience with flexible implementation by mentioning the following example:

> Each unit plan comes with suggested teaching strategies. We apply the suggested strategies assigned for the lesson if it is possible for that day, or we simply invent our own. For the Healthy Food unit, one of the lessons was about fruit categories. The plan suggested categorizing fruit using printed pictures or plastic fruit. Instead, I asked my children to bring different kinds of fruit to our class so they could categorize them as group. And then I used the fruit for a hands-on activity to make fruit salad on the same day. The children enjoyed making their salads on their own using different kinds of fruit. (PST27)

Differentiating teaching styles depending on the different children also leads to differentiating teaching styles depending on the different parts of the daily program. For some activities, teachers prefer to take the lead over children's choices, especially when it

the activity takes place early in the morning, like circle time. One preschool teacher (PST6) described her teaching style at various parts of the day in greater detail:

> The circle time is the teacher's time. I usually sit close together with my children and talk to them with a clear voice about the topic assigned for that day. The children listen and can ask questions, commenting or talking to each other when I ask them to do so. I use pictures, real objects, an iPad, or a projector. For some topics, I may use collaborative learning strategies and divide the children into small groups with very clear directions. The learning center time is the children's time to choose whatever they want, and they follow the rules for each center. It is a good time for children to choose with their peers they want to work on. I intervene less with the children, but my assistant and I are there when they need help or to resolve conflicts. The outdoor play, it depends on what kind of physical activities we are doing whether it is free play or a structured game in which the children are given direction. (PST6)

Not all children are alike. The same with teachers: not all teachers use the same teaching styles. Different teachers prefer some teaching styles over others. As the following participant indicted:

> Me and my classmate teacher have different personalities, which can be seen in our teaching. I prefer to teach circle time when I can talk to the children quietly and listen to them; I feel like I have a close interaction with them. My assistant prefers centers time, where children can scatter in learning centers in small groups and they can be observed closely. (PST27)

This preschool teacher believes that a teacher's personality may influence her teaching style. Some teachers prefer to work with children as whole group, like in the circle time. Others may prefer to work with close interaction, like in small groups. Due the fact that two teachers alternate in classroom settings, this may give room for the teachers to focus on teaching styles that fit their preference. Having another adult in the classroom (e.g., an assistant teacher) benefits both the teacher and the children. According to Phillips and Scrinzi (2013), "the presence of another adult not only reduces the child-teacher ratio, but also provides a bit more freedom and flexibility to do small-group learning experiences" (p.49).

Perspective B: Focusing on Socially Oriented Approach to Children Learning

Participants who were associated with Perspective B viewed children as socially active learners who grow up in a broad social world that includes family and the classroom community. Eight preschool teachers defined this perspective, and they shared a set of beliefs about how the social aspects of children's development can influence their learning. Three preschool teachers out of eight were invited to explain further. From the focus group interview with the selected participants who were associated with Perspective B -PST15, PST17, and PST25- three themes arose:

a) Promoting peer social interaction
b) Partnering with families when possible
c) Guiding children through challenging behaviors

Promoting peer social interaction

According to Coople and Bredekamp (2009), between the ages of 3 and 5, children are more involved in social relationships with their teachers and other peers in

the classroom setting. They come into their own as social beings through relationships with others, through which they gain self-understanding. According to one preschool teacher (PST17), children are valuable facilitators for learning in the classroom and they contribute to one another's learning:

> Friends are as important as the teacher in the classroom. I believe that children need their peers in the classroom as much as they need the proper materials and objects. Many activities would be useless for the child if not supported by other peers. Preparing activities in which children can work in groups of two or more is important; it helps them to have good and strong relationships with others. (PST17)

As indicated in the previous quote, this participant stressed the social aspect of children's learning. Children benefit from interacting with each other as much as they benefit from having appropriate tools and materials. She asserted the benefit of group activities to promote positive and strong relationships among children. Another preschool teacher (PST15) valued the kind of activities that promote children's sense of group identity and team spirit:

> Children in my classroom are team members. I have been working on this value since the beginning of the year. I placed more emphasis on the activities that support children working together as caring friends, not competitors. I consistently remind them that "*the hand of Allah is with the group*." (PST15)

This preschool teacher placed more value on activities that support children to be collaborators, not competitors. She further believed in motivating children with verbal encouragement, inspiring them with praise and social values like collaborative work. It

can be noticed that this participant recalled an aphorism from Islamic heritage and the prophet Muhammad's legacy that emphasizes the value of group work. The expression *the hand of Allah* is a metaphor referring to aid or assistance from a higher power. In other words, Allah will support and empower those who work actively in the group. According to Copple and Bredekamp (2009), "culture also influences young children's developing sense of self, as many cultures emphasize collective or group worth rather than worth based on individual accomplishment" (p.123). Likewise, the culture in the Kingdom of Saudi Arabia is influenced mainly by Islamic beliefs and values, which can be seen in the religious spirit underlying some teaching practices.

Another preschool teacher (PST25) noted that children can do more complex tasks together than what they can do as individuals. She illustrated her opinion with the following example:

> Building blocks in learning center time is great example of what children can do together as a construction team. They are building, measuring, predicting, talking, negotiating, and, more importantly, working as a group. Through these kinds of cooperative activities, children develop trust in each other, which is a strong base for forming good positive friendships. (PST25)

As the above example indicates, learning centers is a great time for children to work together in small groups. According to one preschool teacher (PST25), children not only practice necessary social skills when they work together, but they also develop a strong base for forming friendships. Fostering a healthy social environment to support children's friendships is important for another preschool teacher (PST15). She further revealed her

unsatisfactory feeling about some administrative policies that do not consider the importance of supporting children's friendships:

> I very often see my children from last year waving to each other when they walk in the outdoor play area. I feel so sad that they are not together in the same classroom this year, but at the same time I feel satisfied that, in some way, I helped them to develop their friendship in my classroom. (PST15)

Due to some administrative policies, at the beginning of each year children are distributed to different classrooms based on their age, classroom capacity, and teacher availability. Teachers are not involved in the distribution process, despite the fact that they have close interactions with children and know the friendships formed between them. Some children may feel emotionally unstable because they start the year with new faces that are unfamiliar. This is especially the case for those children who lack social skills. One preschool teacher (PST17) stated that she seeks to build a trustful relationship with isolated children in order gradually to get them to develop relationships with peers:

> Some children are so shy and introverted. For these kinds of children, I seek to develop a relationship with them first and then encourage them to participate in group activities. For most of the children, I divide them myself or ask them to choose one or more peer based on what we are doing. For unsocial children, I pair them with someone they choose and can feel comfortable with to make their interaction easier. (PST17)

As the above quote illustrates, having strong and trustful teacher-child relationships is important for helping children to develop strong and trustful relationships with peers. As stated in Copple and Bredekamp (2009), "the most important contribution teachers can

make to children's social and emotional competence is to establish a personal, nurturing, responsive relationship with every child" (p.126).

Partnering with families when possible

The most important adults in children's lives (their parents) can make a significant contribution to children's learning. Parents are the prime caregivers, and their opinion regarding their child's learning matters. Children, parents, and teachers all benefit from having two-way partnerships that keep home and school connected. According to Phillips and Scrinzi (2013), "two-way communication between the school and family is important, too, in achieving a degree of consistency in the ways that the significant adults in the child's life guide and relate to that child" (p.68). Building a solid partnership with families may help confront some cultural barriers that are patterned into customary forms of communication. One preschool teacher (PST15) described her way of communicating with families:

> I use a chat application on my smart phone as the primary way to contact the mothers of the children. I created a group for them on WhatsApp. I send them pictures of children's products or activities. I keep the children's worksheets in their files for them to take home on Thursdays only. Mothers can call me in urgent cases. Otherwise, most of our contact is through the application. (PST15)

As the above quote shows, this preschool teacher limits her communication with families through digital device. She stated that children's learning outcomes can also be shared with the families through pictures sent via smart phones. Another preschool teacher (PST17) commented on the way she shares children's information with their families:

> I share the child's progress information card with the family. I send a copy of the card home with the child and ask the mother to contact me if she has questions. Some mothers are eager to know more about their children's performance in the classroom. Others consider the evaluation cards enough, as long as it is signed by the teacher. It depends on the mother. I had child once whose mother texted me almost every day asking about her child. (PST17)

This preschool teacher noted that parents are varied in their desires to know about their children's progress. As she indicted, some mothers would like detailed information about their children's progress, while other mothers view teachers as experts in their jobs and are satisfied by the evaluation card sent by the teacher. As noted by Copple et al. (2013), "in some cultures, teachers are so highly respected that they are given absolute authority over everything educational" (p.101). The following quote one preschool teacher's (PST25) opinion regarding welcoming family members—more particularly mothers—into the classroom:

> I welcome mothers into my classroom at times when I am available, like at the end of the day or early in the morning before the daily program has started. During the day I can hardly find time to meet with the mothers. I have a 30-minute break at the same time the children are having a meal. I am not allowed to leave the classroom during this time or even to have visitors without permission. (PST25)

The previous participant's response described her schedule, which limits time for teacher–parent conferences. As she indicated, her available time is at the beginning or the end of the day, which might be inconvenient for working mothers. Because teachers

follow a rigid time schedule, that limits their chances to meet parents during the day. For example, to enable maximum the use of the building's facilities, teachers have to line the children up at specific times to avoid delays. During the time that some classrooms are having learning centers, other classrooms are in the outdoor area, playing with bikes or the sand and water zone. That makes the teacher go back and forth during the day with only very short periods for rest.

Although some preschool teachers believed in the significant contribution families can bring to the classroom, the idea of partnering with families sounded unfamiliar. One preschool teacher (PST15) shared her opinion:

> Although family members are not usually involved in classroom happenings as that is a teacher's job, they can make great contributions to children's learning. For example, for one of the lessons, I have invited a child's mother who works as a nurse. Of course, that depends on the family's willingness to participate. (PST15)

As the previous quote demonstrates, family participation in the classroom depends on the teacher's decision as well as the family's willingness to be involved. As mentioned in the example, inviting real people to talk about their roles in society gives children a vivid illustration of different professions and adds to the classroom educational experience.

Another preschool teacher (PST17) noted the importance of listening to parents' preferences regarding childrearing. Some parents have preferences about their children's social interactions:

> I talk to the mothers and listen to their concerns, and I keep their preference in mind. For example, one mother told me that she prefers for her daughter only to

> play with girls. She told me that she is concerned about her daughter being influenced by a boyish style of play. (PST17)

She further noted:

> I told the mother and continue to tell her that we don't endorse gender segregation in the classroom, as it goes against the rules. I respect the family's preference. I try to consider this when I use an activity in the classroom, but I don't control children's play in the outdoor play area. (PST17)

It should be noted that gender segregation in Saudi public education starts in formal schooling. Male children enroll in all-male elementary schools with only male teachers, administrators, and students. Likewise, female children enroll in all-female elementary schools with only female teachers, administrators, and students. But at the preschool level, no sign of gender separation is allowed. Children, regardless their gender, are encouraged to work and play together as friends. Although the rules prohibit gender separation in the classroom setting, some learning centers still have pink and blue signs on their materials.

Guiding children through challenging behaviors

According to Copple et al. (2013), "children over the age of 3 are less likely to have tantrums or other outbursts when they are frustrated, and they are less likely to hit or fight with other children" (p.36). During the daily program in the classroom, children may engage in some conflicts that might lead to problematic behaviors. Differences between children's choices and preferences that emerge from their interactions with each other may also lead to problems. This theme represents preschool teachers' beliefs about

guiding children through challenging behaviors. One preschool teacher (PST17) described the kind of conflicts children confronted in her classroom:

> It happens very often in my classroom that children have some conflicts, and they are usually over the use of some classroom material like a toy or a book. Sometimes there is unwanted behavior like pushing, pulling, kicking, or sometimes children call each other silly names. All of these cause harm to children and some may cry. These are the kinds of problems that I typically have in my classroom. (PST17)

This preschool teacher asserted that problems and conflicts in her classroom mostly occur when children interact with each other either physically or verbally. In addition, conflicts over possessions are typically problematic in any early childhood setting. With very large class sizes, teachers may endure some difficulties encouraging children to interact peacefully. Another preschool teacher (PST25) pointed to this issue:

> In a very large class with up to 30 children, it is hard to be aware of everything that is going on. Although I work with another teacher in the same classroom, we take turns watching children's behaviors, especially in learning centers time, when children interact closely and conflicts happen very often. (PST25)

Another preschool teacher (PST15) added:

> For example, in the arts and crafts center, my assistant teacher or I need to be present, especially when children are crafting some art project for the unit poster. The same with the home living center. My assistant or I need to watch the children closely because the children regularly clash over the tools and materials in that center particularly. (PST15)

As the above responses exemplify, at certain time in the daily program—most notably learning in the centers—children are more likely to engage in relational clashes. As both teachers indicated, they need to be observing children's interactions closely in some specific centers. Typically, children's behaviors are a form of communication that express what they want to say or want to have. As Copple et al (2013) stated, "a child may find that his [aggressive] behavior is effective in getting him something he needs or wants" (p.128). The following responses describe the teacher's role regarding children's challenging behaviors:

> At the beginning of the year, we talk to the children about the rules in the classroom, rules in the walkway, and rules in the outdoor area. Children must understand that following rules will keep our classroom a safe and fun place to learn. But they are children, and they need to be reminded about these rules all the time. This is especially true for some children who do not get along with each other. (PST25)

Another preschool teacher (PST15) described her classroom management style:

> I have a poster with green and red dots that refer to acceptable and unacceptable behaviors that are illustrated in pictures. When children have problems, I just point to the poster; it is enough to tell them what I expect from them. But other problems require me to talk to the child and give him my attention. (PST15)

The above two quotes illustrate two styles of dealing with unacceptable behaviors. The first preschool teacher (PST25) is more likely to communicate verbally with children regarding the rules in the classroom. She pointed to the importance of reinforcing these rules with explanations to help children understand the point behind them. Copple et al.

(2013) suggested that, "rather than reacting to children's violations of rules with harsh discipline, teachers can reason together with children and help them think about the consequences of behavior" (p.44). Explaining what is socially acceptable from the children in a climate of mutual respect is considered developmentally appropriate guidance for preschoolers. On the other hand, the other preschool teacher (PST15) is in favor of a guidance style that uses fewer words and more pictures. This style encourages children to visualize socially expected behaviors, which may promote their self-regulation skills. However, children need clear explanations of the purposes behind the rules to learn appropriate expectations. Another participant (PST17) commented:

> The most important rule in my classroom is no hitting, no pushing, no pulling, or any kind of physically aggressive actions. Other than that, problems can be handled either by me or the children themselves. (PST17)

This preschool teacher believes that any conflicts that do not involve physical harm to other children might not need the teacher's interferences; the children are allowed to come to their own solution. From developmental point of view, "if a child's actions might result in harm—either physical or emotional—to himself or others, then teachers must step in, and the natural consequences will not unfold" (Copple et al., 2013, p.125). In other words, when children are involved in aggressive behaviors, teachers must not wait for them to resolve the problem. Teachers must interfere immediately, before any harm could come to them. Another preschool teacher (PST15) expressed her opinion about interfering in problematic behaviors:

> I don't prefer to intervene in any single problem arose. It depends on what is going on. Sometimes I let children negotiate, express their feelings, and resolve

> conflicts on their own. But sometimes I need to interfere, and I may use a time out or the punishment chair for a few minutes when necessary. Otherwise, I talk with the family if the unacceptable action occurs repeatedly. (PST15)

This preschool teacher believes that children can come into agreement with each other when they have a conflict. Allowing children to engage in verbal communication and express their feelings will help them to cope with future relational struggles. Interfering in the conflict or communicating with the family are not always the best solutions in the early childhood setting, where children interact closely. As long as children interact socially in the classroom, conflict is possible. As noted by Copple et al. (2013), "if challenging behaviors are persistent and serious, teachers, the family, and in some instances other professionals need to work as a team to develop and implement an individualized plan that supports the child's inclusion and success" (p.77).

Perspective C: Focusing on the Holistic Approach to Children's Learning

Participants who associated with Perspective C considered the connectedness of children's learning. Participants who associated with this perspective believed in the social, emotional, intellectual, and physical aspects of children's well-being and healthy development. Three preschool teachers associated with this perspective and were invited for a follow-up interview. Two out of the three participants were available and proceeded for further explanation. Three themes arose from the focus group interview with preschool teacher PST5 and preschool teacher PST12. The themes included the following:

a) Meaningful integration throughout content,
b) Assessing children's progress with different strategies,
c) Nurturing children's spirits, minds, and bodies.

Meaningful integration throughout content

Young children learn best when all topics, activities, and skills are connected and make sense of their world. Effective learning in the preschool years occurs through a series of meaningful experiences that build upon children's interests and prior knowledge. According to Phillips and Scrinzi (2013), "connected, integrated curriculum support learning more effectively than curriculum content taught in small, unrelated chunks" (p.58). This theme represents preschool teachers' beliefs and professional practices regarding creating meaningful integration throughout the content area. The following participant, preschool teacher (PST5), gave an overview of the kind of prescribed units for a preschool curriculum:

> We introduce children to many disciplines and learning content. We never teach any content separately as in elementary school. The units that we are teaching are on different topics, such as Healthy Food, Sand & Water, Lovely Family, Lovely Friends, Lovely Home, Who I am, What I Can Do with My Hands, Home Country, Health & Safety, My Book, and My Clothes, in addition to religious units such as Ramadhan and Hajj. (PST5)

As the above quote illustrates, the prescribed units implemented in Saudi public preschools are designed around different subjects. Each unit is divided into different themes and topics that are related to children's lives, and it lasts from 2 to 3 weeks

depending on the content of the unit. Two units out of 11 (Ramadhan and Hajj) have purely religious content. It should be noted that in some regions, the supervision department allows teaching some specific units that are designed for the region or the city. For example, the Holy City unit is designed specifically for the city of Mecca and is taught only in the Mecca region. The Holy City unit discusses the spirituality, significance, history, and lifestyle of the city of Mecca.

A thematic-based unit plan is an approach that ensures integrated and meaningful learning for children. The following quote from preschool teacher (PST12) describes the thematic-based content for one unit:

> In the circle time, we teach many different types of content tied into one theme in a very interesting way. For example, in the Healthy Food unit, children learn about what our bodies need, different kinds of healthy food, healthy habits, and how to grow veggies and fruits. These concepts are connecting science, social studies, and literacy in a very simple and attractive way. (PST12)

This preschool teacher indicated that one unit may encompass many different topics and different content. What makes these topics effective is if they are supported by carefully designed experiences and activities that make sense to children. The following response by preschool teacher (PST5) demonstrates how a daily routine can support children's learning in different domains:

> We follow a specific routine in the circle time. We start the circle time by spiritual meditation that includes reciting short phrases (Ayat) from the Qur'an and daily morning supplication (Duaa). This is followed by identifying the date and day of the week and counting the present and absent children. Then we start with the

> topic assigned for that day. The teacher takes the lead during the circle time, and the children listen and can participate when they are allowed to. In the end, we close with a quick review and closing supplication (Duaa). (PST5)

As the above quote shows, the circle time is a venue to exhibit multiple aspects of children's learning. Children come across mathematical concepts through everyday counting activities, and they develop logical thinking and prediction skills by identifying the date and the day of the week. As the teacher indicated, the circle time is mostly a teacher-guided activity, and the children are receptive with flexible participation at a specific time. Copple et al. (2013) clarified that both teacher-guided and child-guided activities are vital for children's learning. With teacher-guided activities, children practice skills that are needed for smooth social and relational interaction, such as listening to others, paying attention, self-control, and emotion regulation. The daily program also includes the spiritual aspect of children's development through religious meditation each day. It must be noted that the spiritual meditation presented in Ayat recitation and saying supplication is practiced by all preschool teachers in all preschools in the Kingdom of Saudi Arabia.

Learning in the centers is another venue for children to come across different content areas as well as different activities. Preschool teacher (PST12) shared some children's preferences of learning in the centers in her classroom:

> Learning in the centers is the favorite time for my children I think because of the free choices children have for activities and games in different centers. The discovery center is always an interesting place for them, especially when we supply it with a living creature. We have presented small fish, ladybugs, colored

> chicks, and one day we had a real embalmed frog. It always depends on the unit and the theme. (PST12)

This preschool teacher believes that the self-choice learning style that children generate in the learning centers provokes their interests. It keeps children connected to what they experienced in the circle time. The multiplicity of different learning content and areas could be presented in the learning centers in different ways, such as games, exploration, imaginary play, blocks, and more. The teacher's job is crucial to creating a meaningful connection between concepts and skills that children encounter in different parts of the day.

Assessing children's progress with different strategies

Although children's development follows universal sequences as they grow, they proceed at varying rates from one child to another. The individual variation shows in individual patterns of abilities, personalities, learning styles, and preferences. Some children may show more progress in one developmental domain than another. Using different assessment strategies to evaluate and enhance children's learning is essential to achieve desirable goals. This theme represents teachers' beliefs regarding assessing children's progress with different strategies. The following response by preschool teacher (PST5) describes assessment strategies implemented in her preschool:

> We do a checklist and observations for assessment. Checklists are divided into physical growth, social and emotional development, and cognitive abilities. Each level has a different checklist and has statements that describe the task that the child is capable of. I teach level two, and I do assessment of children's performance in the classroom. For example, the child can identify two identical

> shapes from the box, the child can name three things that start with B, the child can use the magnifier in the discovery center properly, and the child helps other children when asked to. (PST5)

The above quote gives some examples of assessment of children's performance using the checklist strategy. As the preschool teacher indicated, checklists depend on the child's level. As the child's progress level advances, the checklist increases in the level of the complexity too. Assessing children through observation is another strategy preschool teachers in this group endorse. Preschool teacher (PST12) illustrated some examples for the observation form assessment strategy:

> Observation forms are for learning in centers. For arts and crafts, we do fine motor skills evaluation. For example, the child can make different shapes with playdough. For the reading center, the child can identify the book title by the cover picture, and the child retains the book when s/he finishes. For the block centers, the child can build different figures with different blocks. (PST12)

This preschool teacher exemplifies some observational tasks that teachers practice with children in the learning centers. As she indicated, an observation form is used to assess children's performance in child-directed learning activities presented in some centers. From the examples provided, we noticed that in each center, one aspect or more of a child's development is observed purposefully. Children's fine motor skills can be scaffolded through manipulative art activities like shaping playdough, cutting paper, and coloring. Retaining the book's content after using it reflects a child's developing sense of responsibility. Moreover, building blocks are an important venue for children's creativity and provoke their imagination in very authentic ways.

The NAEYC considers the assessment of children using conventional strategies that rely on a single assessment measure (e.g., worksheets) developmentally inappropriate for the child's age and developmental status. Similarly, both preschool teachers believed in the inappropriateness of using worksheets in the preschool years. Preschool teacher (PST5) expressed her opinion as follows:

> Children enjoy doing something with their hands more than paper-pencil kinds of things. In level three children (preliminary), we have to apply 10-15 worksheets for each unit. These sheets are for documentation. Some children are still learning how to grip the pencil properly, and it is hard for them to follow dots. Also, they don't like to sit alone for a period of time to complete their sheets. They can practice these skills intensively in later years, not now. (PST5)

With a similar point of view, preschool teacher (PST12) commented by noting the following:

> We do worksheets specifically on numbers, letters, and cognitive games. My children don't enjoy these activities at all, but I have to do it. This is one of the administration's requirements. We have to prepare a file for the principal and supervisor that contains the children's worksheets, products, and pictures for their artwork or project by the end of each unit. (PST12)

As the above responses demonstrate, preschool teachers (PST5) and (PST12) are not in favor of assessing children using worksheets and paper-pencil activities. As they indicated, due to some administration purposes, children have to complete a certain number of worksheets per unit. Using a large volume of worksheets for assessment that exceeds the children's capacity may cause long-term damage in their educational

experience. At the same time, children may experience unpleasant feelings like stress, frustration, depression, and low self-esteem, which may potentially cause serious risk in later years.

Assessing children's learning and progress produces very valuable information that enables teachers to know children better. The information then can be reflected in the processes of planning, implementing, teaching, and even later assessment. Preschool teacher (PST12) reflected on using assessment information for enhancing children's learning by saying the following:

> We cannot make any changes to the content of the units, but we can modify the activities and teaching strategies that we are implementing. Maybe some children need more focus than others. If I have children with the minimum level of performance, I may use more hands-on activities, more pictures, more songs, or use an iPad and computer. If they are not showing any progress, I will be really concerned that they may have some kind of learning difficulties. (PST12)

This participant noted that preschool teachers are not authorized to make any modification to the content of the units. As mentioned earlier, the units are prescribed by the Ministry of Education and come with suggested teaching strategies, activities, and games. This participant also mentioned that preschool teachers have room for flexible implementation of the units' content. She further stated that children with the minimum level of progression may need a different style of teaching, or possibly, they may need professional intervention.

Sharing children's assessment information with the families is integral to children's success and helps to achieve the assessment's intended purpose. Parents are

the most important people in children's lives, and they need to be informed of their children's progression. Preschool teacher (PST5) commented on sharing children's information with the families by saying the following:

> All the child's information, including evaluation information, is kept in the child's file. The family receives a copy of the formal documentation like checklists and forms as well as worksheets by the end of the first half of the year. If the mother has some concerns about her child's learning, she can contact me. Some of the children's products are on some occasions sent home for the family, such as the cards the child makes, or worksheets, or some art projects. (PST5)

This preschool teacher's response notes how the family is informed about their children's learning. As she indicated, all information gathered throughout the first half of the year is documented and sent to the family. We can see that in any sort of communication with parents, teachers always use language that refers to the mother as the only way for direct communication with the family. As noted earlier, due to some norms and customs of this particular culture, same-sex exchange dominates teacher-parent communication in Saudi public preschools.

Nurturing children's spirits, minds, and bodies

Nurturing the whole child "head, hand, and heart" is a core concept for some alternative approaches to traditional childhood education, such as Waldorf and Whole Child. Adopting a holistic view of children's learning enables the teacher to consider the child's mind, body, and spirit and reflects upon all three dimensions of human well-being. This theme represents some teachers' beliefs that drive their professional practices

to support the wholeness of the child. Preschool teacher (PST12) commented on seeing the bigger picture of children's learning by noting the following:

> Children's learning in the preschool years is not limited to cognitive development. Other aspects of children's development are very important too. In each unit, there are a set of objectives the teacher has to sponsor in four main aspects: physical, emotional, social, and cognitive. (PST12)

This participant indicated that the four main aspects of children's development are targeted in the curriculum. Each unit has a set of objectives that direct the lessons, the activities, and the teacher's practices in the classroom. The Saudi version of the early learning and developmental standards statement (SELS) issued in 2015 in cooperation with the NAEYC guides children's learning in four main aspects: physical, social, emotional, and cognitive. The emotional aspect is paired with children's spiritual development through an emphasis on Islamic morals that shape individual identity and unify Islamic society.

Loading children's brains with facts and information transmitted by the teacher, book, device, or any source of information is not the only way of learning. It is more important to teach children to learn and think on their own rather than receive what the teacher deems important for them to learn. Regarding that issue, preschool teacher (PST5) shared her opinion by saying the following:

> It is wrong to think that children should learn what the teacher tells them. Many children in my classroom ask questions that are not related to the topic of the unit that I'm teaching. I know they are curious about many things they see everywhere in the street, in their home, and in the classroom. Sometimes I answer their

> questions directly, and sometimes I use the computer to search for some videos on YouTube or pictures on Google. Sometimes I reply to their questions with another question to keep them excited to find an answer. For one of the activities, I sent home a list of short questions and asked the parents to answer them with their children. (PST5)

This preschool teacher believes that children by nature are curious creatures; they ask questions about almost everything in their surroundings. Nourishing children's minds with questions makes them think and wonder and helps children to extend their learning beyond the classroom. It is important for teachers to encourage children's curiosity through providing questions that provoke their thinking to look for an answer. According to Phillips and Scrinzi (2013), teachers in developmentally appropriate classrooms have to "move beyond recall questions and ask well designed and timely questions that encourage the children to explain their thinking, express ideas and actions verbally, describe ideas and strategies in detail, justify decision made, draw connections, and push them to think in new ways" (p.42).

Meaningful learning includes many opportunities for young children to be involved through watching, observing, listening, and doing. Learning by doing and figuring out how things work are long-lasting educational experiences that combine both joy and learning. The following response by preschool teacher (PST12) details her opinion regarding children's active involvement:

> We don't implement all the lessons on the carpet in the circle time. Some practical lessons require conducting an experiment outside the classroom, such as in the garden or in the kitchen. My children love these kinds of activities when

> they can make something with their little hands. Any activity that requires children to do something or conduct an experiment is more joyful for them than sitting in the classroom in the circle time or seeing some pictures or videos. (PST12)

As the above quote illustrates, children love when they can do something on their own using their little hands. Providing opportunities for young children to use their hands in well-planned learning experiences helps them to develop their hand muscles. Children in the preschool years are in the phase of developing fine motor skills that are needed for later handwriting skills. A well-resourced classroom environment including age-appropriate tools, materials, and objects is a developmental investment for young children. From a developmentally appropriate point of view, Copple and Bredekamp (2009) noted:

> preschoolers should have access to many kinds of materials and objects to help them develop and practice fine motor skills, such as small objects to sort and count; pegboards and beads to string; clothing and things that zip, button, and tie for dress-up play; dolls and accessories; drawing and writing materials; scissors, paint, and clay; and opportunities to practice functional skills, such as pouring milk, setting the table, eating, and dressing. (p.119)

In a country where religion and culture are almost synonymous, education has a major role to educate individuals according to religious values and beliefs. As noted earlier, the religious spirit underlies preschool teachers' practices that are translated into daily activities and routines to foster children's spirituality. The following quote from

preschool teacher (PST5) provides some examples of some practices that targeted children's spiritual development:

> In different parts of the day, we do religious activities. Like in the circle time, we do early morning meditation and say supplication. In the learning centers, children can listen to a recorded tape for short phrases from the Qur'an (Ayat) in the Masjid center. The last part of the day is always storytelling time. We have many stories with religious content that children enjoy listening to either via the teacher or using a cartoon video, for example, "The Good Man and the Dog," "The People of Elephants," and prophets' stories from the Quran (Ibrahim, Joseph, Yunus, Jesus). (PST5)

This preschool teacher's response exemplifies some of the religious orientation practices in the preschool setting. In different parts of the daily program, children's spirits are nourished with religious content. As she indicated, the auditory/verbal learning style is used to provoke children's imagination through storytelling. For more clarification, the story of "The Good Man and the Dog" is a story from the prophet Muhammad's legacy that illustrates the importance of being kind and merciful to humans and animals. The story involves a man who was forgiven because he was merciful to a thirsty dog. "The People of Elephants" is a story from pre-Islamic history about a man called Abraha who wanted to destroy the *Kaaba* with the force of elephants. When he approached Mecca, Allah sent a flock of birds to destroy Abraha and his elephants. This story is mentioned in the Qur'an too, in the name of *Al-Feel*, the Arabic form of "elephants."

Nurturing children's spirits is not necessarily done through endorsing religious beliefs or religious content through daily practices and teaching. It could be done through

providing opportunities for children to see the beauty in the world around them. Preschool teacher (PST5) shared a unique experience that illustrated nurturing children's minds, bodies, and spirits in a planned trip:

> Visitations and trips are a favorite for children. We do one trip per semester, and it depends on the unit and the theme. For the Holy Mecca unit, we visited the covering of the Kaaba [*Kiswa*] Factory. The children watched closely how the black covering [*Kiswa*] is sewed. The children had a chance to touch the silk fabric, to observe the sewing process closely, and to swirl the golden threads around their little fingertips. It was a very unique trip for them. (PST5)

For more clarification, the *Kaaba*—also known as *Al-Bait Ul-Haram*, or Sacred House—is the most sacred Muslim site in the world, located in the center of *Al-Masjid Al-Haram* in the city of Mecca. *Kaaba* is the Arabic form of "square" or "cube," referring to its shape, and it is covered with black silk fabric similar to the cloth draped over a casket, known in Arabic form as *Kiswa*. The covering is ornate with gold and silver threads depicting Quranic verses in beautiful Arabic calligraphy. As the above quote exemplifies, planning a trip for children to this unique place, combined with thoughtful hands-on activities, is a sensory-stimulating learning experience. Having the children observe closely the process of creating the *Kiswa* and feel the beauty of it with their heads, hands, and hearts is a spiritually touching experience. The spiritual nature of children, based on Steiner's philosophy in Waldorf Education, is fostered through stimulating graceful feelings such as gratitude, appreciation, and fortunateness as well as feeling the beauty of nature and the beauty of the world (Steiner, 2004). According to Roopnarine and Johnson (2009), "The spiritual concept of 'feeling' is being realized at this time [childhood years],

and therefore the child is intrigued by imagery and pictorial stimulation that evoke emotions" (p.323).

Perspective D: Focusing on Child-Centered Approach to Children's Learning

Participants who associated with Perspective D believed in the effectiveness of a teaching style guided by the child's interests, needs, and individual requirements. Seven preschool teachers defined this perspective, and three of the seven were invited for further explanation. The focus-group interview with preschool teacher PST4, preschool teacher PST34, and preschool teacher PST35 resulted in three themes within Perspective D. The themes were:

a) Offering children choices,
b) Acknowledging children's individuality,
c) Supporting active learning for all children.

Offering children choices

Children in child-centered learning classrooms are allowed more freedom to make their own choices. Teachers who advocate for a child-centered approach to children's learning believe in the importance of providing a wide range of activities from which children can choose. Although all lessons, themes, and topics in the curriculum are planned and prescribed in advanced by the Ministry of Education, individual teachers have some room for flexibility, especially as pertains to activities. With regard to adjusting the curriculum to a wide range of well-selected activities, preschool teacher PST4 noted the following:

> At the beginning of each year, we receive the curriculum, which is divided into 13 units that have been approved by the Ministry of Education. Each unit has

> suggested activities designed specifically to suit the unit's theme and content. The problem is that some activities are repeated or familiar to children, so they do not get excited to do these activities. That's why I prefer to create my own activities based on our resources in the classroom as well as children's preferences, as opposed to following the unit's activities without taking the children's preferences into consideration. (PST4)

As the quote above illustrates, preschool teacher (PST4) advocated for considering children's interests and preferences during the planning of suitable activities. As she indicated, to keep children interested and excited, the activities should be revised and updated to keep children curious and, as a result, involved. When children repeat activities during a unit, they lose the sense of curiosity that fuels their learning. From a developmentally appropriate point of view, Phillips and Scrinzi (2013) clarified that "children generally need repeated experiences with an idea or skill to get a solid grasp of the idea, but not so often that it becomes old" (p.66). From a similar point of view, preschool teacher (PST34) stated her opinion by saying that:

> We cannot limit children's learning by using a list of activities prepared in advance. Teachers know their children better than anyone else, and they know when to work in large groups or small groups or individually. I use some planned activities, but I also search for and prepare my own activities based on the children's interests. (PST34)

This preschool teacher believes that children's learning should not be constrained by a set of activities that have not been designed to suit individual children's needs. As she indicated, children have varied learning styles and preferences; therefore, activities

should vary accordingly. Well-selected and well-planned activities based on the individuality, ability, and interests of each child are the best way to keep children fully engaged. According to Copple et al. (2013), "Both when [children] themselves primarily shape the activity (as in play) and when adults thoughtfully plan and guide the activity (such as large-group read-aloud or small-group science project), the key element is the level of children's interests and engagement" (p.74). The developmental level of children also matters when planning a thoughtful activity. Preschool teacher PST35 expressed her opinion by noting that:

> I know that groups of experts worked on and developed these activities based on children's developmental levels. Activities in level three [preliminary level] are more complex than those in levels two and one. But even among children in the same level, there are different abilities. I've taught level three for a long time, and not all children in my classroom can write their first and last names. (PST35)

As the above quote demonstrates, not all children within the same level have the same abilities. Meeting this wide range of abilities requires teacher to be flexible with regard to activities, for the activities may need to be modified according to children's preparation. Developmentally appropriate classroom activities start at the level of the children and gradually increase in complexity until reaching the children's zone of proximal development.

Acknowledging children's individuality

Every child is a unique human being with a unique personality as well as unique abilities, interests, preferences, and approaches to learning. Individual appropriateness means responding to individual children in light of where they are developmentally as

well as who they are. Thus, recognizing the individuality of children is a key element for effective teaching in an early-childhood setting. The following response is from a preschool teacher (PST4), who was commenting on the importance of getting to know the children as individuals:

> It is wrong to think that all children perform or play in the same way. Children's personalities show in their style of play both in the classroom and outside the classroom. In the classroom, my children have different personalities and interests too, and I know what interests each one of them. From the beginning of the year, I observe children playing at different times of day. Girls have common interests, as do boys. In the learning centers, I noticed that boys like to work individually; however, in the building block center, they prefer to work with peers. But girls tend to work more collaboratively and play together as group. In the imaginary play center, girls like to play different roles with each other and take turns more smoothly than boys. When I plan an activity or prepare a game, I consider their preferences and style of interaction. (PST4)

This preschool teacher believes in the importance of each child's preferences and style of learning. As she indicated, knowing each child's personality, approach to learning and style of interaction is beneficial when planning and preparing thoughtful activities. Observing children during play, along with their interactions, gives the teacher genuine information about individual children, information which can be used later as a guide for effective planning.

Reflecting upon children's individuality and unique characteristics is fundamental to the creation of developmentally appropriate practices. Putting these reflections into

action in the classroom is mutually beneficial for children and the teacher. Preschool teacher (PST35) shared an example related to the promotion of children's individuality through independent self-reflection:

> It is very important to treat children as independent individuals and to recognize their opinions, likes, and dislikes. For example, in the reading center in my classroom, each child has a handmade file with his or her picture on it. On this folder, the children are free to express themselves however they want, such as writing, drawing, coloring, or posting pictures. I also encourage children to bring pictures from home if they want to. This file helps me get to know the children and their preferences. Also, these kinds of activities help children understand and express themselves in their own way. (PST35)

As demonstrated by the above quote, children's independence can be supported through activities that require children to think independently and encourage them to engage in self-reflection. These kinds of activities help children view themselves as independent individuals, form a good image about their identity, and express themselves freely. Self-reflection also helps children stimulate cognitive growth and develop reasoned thinking skills. According to Phillips and Scrinzi (2013), teachers are encouraged to support reflection by "provide opportunities for children to reflect on their actions and their thoughts and integrate new information into what is already known. When children engage in reflective thought, they consider new information and develop understanding and reasoned thinking" (p.43).

In addition to self-reflection, a positive verbal environment that values and appreciates individual actions supports children's sense of individuality. This entails

sustaining a dialogue and communication between the teacher and his or her children, such that children feel valued by, and important to, the teacher. Preschool teacher (PST34) expressed her opinion by saying that:

> In my opinion, the most important thing is that children feel respected and accepted in the classroom. I see the happiness in their eyes when I give them a good comment and appreciate what they are doing. I use encouraging words, such as (you are so smart, I am proud of you, you are so creative), to motivate them. When children talk to me, I listen to them or give them a sign, such as nodding my head or moving my hands, to keep them talking. Sometimes, it is hard to understand what children are saying because they are in the process of learning the language and learning how to express themselves. (PST34)

As preschool teacher (PST34) noted, the language that teachers use in the classroom is very important to building children's self-esteem and confidence. Using positive words when describing children's accomplishments helps them develop positive perceptions of themselves as capable, independent individuals. Words of encouragement send a message to children, letting them know that they are special individuals and that what they are doing is great. Furthermore, respecting children's capabilities as speakers, along with listening to them, is another strategy through which teachers get to know children as individuals, which, in turn, allows teachers to mold their teaching style to children's individual needs, interests, and abilities.

Supporting active learning for all children

Effective teaching requires teachers to make thoughtful use of a wide range of teaching strategies aimed at supporting and sustaining children's active learning.

Teachers who advocate a child-centered approach stress that a teacher should be familiar with a variety of teaching methods and have knowledge of individual children. This combination helps teachers engage children in meaningful learning experiences. This represents teachers' beliefs, professional practice, and obstacles regarding the use of different strategies to ensure children's active participation. The following response from preschool teacher (PST4) represents a preference for a multisensory teaching style when working with young children:

> I use any method that can communicate with children through their five senses. Children enjoy learning when they are singing, watching, listening, dancing, touching, and moving around. Also, children have different learning processes. Some children enjoy singing and dancing, others prefer to watch recorded videos or listen to the teacher. I take this into account when I group children in the learning centers, so that I can match children with common interests and styles for an activity. During circle time, all children carefully listen to the teacher, and they can ask questions when I give them the opportunity. (PST4)

As illustrated in the quote above, this preschool teacher believes that an approach based on multisensory instructional strategies elicits active participation in classroom activities. Activities that provoke two or more senses that align with children's interests can ensure full and active engagement by all children. As this teacher indicated, knowledge of children's learning styles allows the teacher to plan and apply meaningful educational experiences that are grounded in children's interests. Another participant, preschool teacher (PST34), advocated for a play-based learning style, saying that:

> Children can be fully active during play. Almost any lesson can be supported while children are playing. I usually introduce the lesson to children in circle time and talk about it using visual tools. Children can ask questions at the end of the lesson. Learning centers are always prepared in advance with materials that support the lesson. (PST34)

This teacher went on to mention the following detailed example of one of her lessons grounded in a play-based approach to children's learning:

> For level two [4- and 5-year-olds], the lesson *Different roles in our society*, from the unit *What can I do with my hands*, teaches children about different careers and jobs. Prior to that, in the unit announcement letter sent to children's homes, we specified a day and asked parents to send children to school wearing an outfit for a job he or she would want in the future. During circle time, each child talked about his or her outfit. But not all children wore outfits, so I also talked about other jobs using pictures and digital photos. In learning centers, children had different directions in the classroom. They did different roles in imaginary play [home living center], and they received books about different jobs in the reading center. In the arts-and-crafts center, they had different choices, such as making art projects or posters related to the lesson with guidance from the teacher or simply doing free coloring. In the outdoor play area, children took turns wearing the outfit of a traffic man directing other children's bikes. (PST34)

This preschool teacher (PST34) believes in the importance of playful learning experiences that combine joy and learning. When teachers tap into children's natural love of play, and utilize this love to help children meet their potential, learning becomes more

effective, even a joyful experience. As the previous example illustrates, for that particular lesson, the teacher employed a range of instructional strategies for which play served as the main avenue to guide children's learning. During that lesson, children participated in whole-group conversation in which they talk and listen to others, they took part in make-believe play that lets them try new roles and ideas, and they practice decision-making skills by navigating the different art options for self-expression. By and large, play is the tool that children use to explore the world around them, and teachers can make thoughtful decisions to support spontaneous, planned, and purposeful play.

Technology and digital devices not only dominate human social life and communication but they also influence how teachers and children approach learning. The following preschool teacher (PST35) expressed her opinion regarding children's active participation through digital devices:

> This new generation of children is born with a love of technology. They very quickly learn how to use and explore digital devices. I am teaching level three [the preliminary level 6-year-olds], and almost all children can navigate smartphones and iPads on their own. In my classroom, I try to use technology to meet children's interests and hold their attention for as long as possible. Personally, though, I prefer more face-to-face communication with children because they spend plenty of time on digital devices at home. During circle time, I use photos or videos, and in the computer center, children can play digital games on the computer, and only three children are allowed at a time for 5-7 minutes. (PST35)

The response of this preschool teacher (PST35) demonstrates ways to integrate technology so as to promote children's active learning. Teachers can make great use of the technological revolution in classroom activities to trigger children who are digital learners. Nonetheless, teachers need to use technology with care, maintaining a balance between exposure to digital learning and promotion of quality human interaction. Some educators are concerned that screen time may threaten young children's social and emotional well-being and affect social and behavioral skills (Mistry, Minkovitz, Strobino, & Borzekowski, 2007). From a developmentally appropriate standpoint, teachers in preschool settings play a crucial role in ensuring that children tap into social life and develop interpersonal relationships (Coople & Bredekamp, 2009).

CHAPTER 5

SUMMARY, DISCUSSION, CONCLUSION, IMPLICATIONS, AND RECOMMENDATION

This chapter provides a brief summary of the findings of the study, discussion with reference to the review of the literature, conclusions from the study, and recommendations for future research.

Summary of the Major Findings

This study explored preschool teacher subjective beliefs toward developmentally appropriate practices as defined by NAEYC guidelines in the Kingdom of Saudi Arabia. Three main research questions guided this investigation:

1. What are the similarities and differences between the participants' beliefs regarding developmentally appropriate and developmentally inappropriate practices for preschool teachers in Saudi Arabia?
2. What are the items that teachers considered as the most developmentally appropriate practices and the most developmentally inappropriate practices?
3. What might account for cultural influences on teachers' beliefs regarding DAP?

Research Question One

Thirty-seven Saudi preschool teachers from five randomly selected preschools in the city of Mecca were involved in the study. Each participant sorted 50 cards on a quasi-

normal distribution of continuum, ranging from the most appropriate to the most inappropriate practices according to the teacher's subjective beliefs regarding developmentally appropriate practice. Each of the 37 sorts was entered into a Q Methodology software package known as PQMethod (version 2.35). A correlation matrix of 37 x 37 Q-sort was created and subjected to principal component analysis and Varimax rotation.

The inspection of the principal components analysis (PCA) resulted in seven principal components with an eigenvalues greater than one. Four of the seven components met the criteria and were retained for Varimax rotation. After the rotation, the components accounted for 19%, 19%, 10%, and 19% of the variance, respectively. The total variance accounted for by the four components was 67%. The four-component solution suggested that there were four main perspectives regarding the beliefs of Saudi preschool teachers as they relate to NAEYC's developmentally appropriate and inappropriate practices.

Each component represents a unique perspective (viewpoint) on how Saudi preschool teachers view DAP and DIP items based on their subjective points of view. The four main sets come across consensus beliefs regarding the best way to teach young children. On the other hand, each perspective was defined by a set of distinguishing items that were sorted as significantly differently from one another at $P < .05$ or at $P < .01$. Participants associated with each of the four perspectives were comprised of six participants, who had a pure association with the first component (component association greater than .40); eight participants, who had a pure association with the second component; three participants with a pure association with the third component; and

seven participants with a pure association with the fourth component. Thirteen participants did not associate purely with any of the four components. Of these thirteen participants, however, eight associated with more than one component to a statistically significant degree. Thus, the four perspectives are representative of all participants to a certain degree.

Research Question Two

The second research question sought to determine which items were considered the most developmentally appropriate and most developmentally inappropriate based on the preschool teachers' subjective beliefs regarding DAP. To answer this question, each component (perspective) was weighted by calculating the z-score for each participant's sorted statements. The z-scores resulted in creating an items array for each perspective (see Figure 3, 4, 5, and 6 in Chapter 4). Within the four perspectives, analysis showed that the teachers shared similar and different beliefs regarding children's learning.

For Perspective A, seven of the eight statements were considered the most appropriate statements and were also considered appropriate by NAEYC standards. Only one statement (Item #29) was considered appropriate by this group of teachers and not appropriate by NAEYC, and all of the eight most inappropriate statements that define Perspective A were considered inappropriate by NAEYC standards. Participants associated with Perspective A can be categorized as having a developmentally oriented approach to children's learning. This approach focused on a broad view of children's learning that required the teacher to have a great deal of knowledge about child development in all areas of human functioning: physical, social, emotional, and cognitive.

In Perspective B, seven of the eight items considered the most developmentally appropriate by the participants were also considered appropriate practices by NAEYC standards. Only one item (Item #50) was considered appropriate by the participants but developmentally inappropriate by NAEYC. All the items considered the most inappropriate by the participants associated with perspective, however, were also considered to be developmentally inappropriate by NAEYC standards. Participants associated with Perspective B can be categorized as having a socially oriented approach to child learning. Preschool teachers holding this perspective viewed children as socially active learners in the classroom and community environments.

Regarding Perspective C, all of the eight most appropriate items were considered developmentally appropriate by the participants and by NAEYC standards. In addition, all eight of the most inappropriate items were also considered developmentally inappropriate by the participants and by NAEYC standards. Participants associated with Perspective C can be categorized as having a holistic approach to child learning. Participants associated with Perspective C have shared beliefs in the comprehensiveness and interrelatedness of children's needs in all domains of child development. This approach focused on educating multiple aspects of child development rather than focusing solely on academic progress.

Perspective D noted all eight of the most developmentally appropriate items were considered developmentally appropriate by the participants and by NAEYC standards. Similarly, all eight of the most inappropriate items were also considered inappropriate by the participants and by NAEYC standards. Participants associated with Perspective D can

be categorized as a child-centered approach to learning that focuses on children as the center of the classroom pedagogical practices.

The four main perspectives that emerged from the analysis show a dominance consensus among perspectives that fit equitably within the DAP framework regarding the best practice of early childhood education. All four perspectives agreed upon NAEYC's scope of developmentally appropriate practices through different lenses. The framework of developmentally appropriate practices was reflected and stressed in different aspects of the child learning that:

- relied upon the knowledge of child developmental theories
- empowered children's social and relational competence with peers and others
- is inspired by a holistic view of child learning
- formed primarily to serve the child as the center of learning practices

Although only two items of the most appropriate practices were sorted in contrast with NAEYC guidelines (Item #29 in Perspective A and Item #50 in Perspective B), all of the most appropriate and most inappropriate sorted practices coincided with NAEYC's view of what proper learning looks like for young children.

Research Question Three

To provide further explanation, question three sought to conduct further investigation with purposefully selected teachers. The participant selection procedure for focus group interviews was based on the high association of the participant with the perspective and the participant's willingness and availability to volunteer participation.

Three participants were selected to represent each perspective; however, due to teacher availability, only two participants represented Perspective C.

The focus group interviews with 11 preschool teachers provided information regarding how teachers viewed DAP and DIP items with reflection on their practices in the classroom. Throughout the interviews, two themes developed and highlighted the major ideas from the interviews. Cross-perspective themes presented the common beliefs regarding DAP and DIP items among all four perspectives, there were: a) deny teaching preschoolers academics, b) modify the curriculum to suit children's needs, c) promote social activities, and d) families are respected but not involved in classroom activities. Within-perspective themes were also developed through thematic analysis and presented to highlight each perspective.

During the focus group interview with the three preschool teachers selected for Perspective A, three themes arose: a) creating a sense of caring community, b) considering children's age and developmental stage, c) responsive teaching to diverse learning styles. Advocates for Perspective A believed in the importance of building a caring community where all children can feel safe and secure. Participants addressed some concerns due to limited teaching experience regarding children with disabilities. Some participants also held a strong belief that learning in preschool should be preparation for elementary school, and teachers should consider their teaching abilities concerning these early ages, and what they are capable of. Participants also advocated for differentiating teaching styles based on the children's levels and styles of learning.

Similarly, with Perspective B, three themes arose from the focus group interview: a) promoting peer social interaction, b) partnering with families when possible, and c)

guiding children through challenging behaviors. Advocates for Perspective B shared beliefs about how the social aspects of child development can influence a child's learning and advocated promoting child social interaction through group work activities. Participants also recognized the importance of informing parents about the child's performance in the classroom, but they addressed some obstacles regarding home–school relationships and communication. Participants also discussed their beliefs and professional practices regarding challenging behavior within any socially active classroom setting.

In the same way as Perspective B, Perspective C had three themes arose from the focus group interview with only two teachers: a) meaningful integration throughout content; b) assessing children's progress with different strategies; and c) nurturing children's spirits, minds, and bodies. Participants shared beliefs on the importance of creating meaningful integration throughout the content area and relative connection to children's lives. Participants also believed that a child's progress should be assessed with different strategies, although participants in this perspective advocated for more developmentally appropriate ways of assessment. Yet, they indorsed some developmentally inappropriate practices due to administration purposes. Participants further discussed the beliefs that drive their professional practices to support the wholeness of the child, stressing the child's spiritual support and religious commitment.

Lastly, with Perspective D, three themes arose from the focus group interview with three teachers representing this set of beliefs: a) offering children choices, b) acknowledging children's individuality, and c) supporting active learning for all children. Advocates for Perspective D believed in the importance of providing a wide range of

activities from which children can choose. Despite the curriculum being planned and prescribed in advanced by the Ministry of Education, teachers showed a tendency toward flexible implementation with activities. Participants also believed in the importance of individualized teaching styles based on knowing children as individuals with unique personalities, abilities, and preferences. Furthermore, participants advocated for the importance of being familiar with a variety of teaching methods and having knowledge of individual children to support and sustain a child's active learning.

Discussion of Findings

Due to the lack of research regarding DAP conducted in Saudi Arabia, findings from this research will be discussed with reference to other research in the field. Furthermore, some methodological advantages and the suitability of data collection procedures will be discussed.

Research Question One

Based on the participants' card sorts, a correlation was found among the perspectives regarding how similar or different the four sets of beliefs that were emerged from the data. The correlation among the components ranged from positive low, to moderate, to high. This resulted in similarities emerging as consensus beliefs among all of the perspectives and in distinguishing items that differentiated each perspective. The Q-items differentiating the four sets of beliefs helped in making distinctions between perspectives. For Perspective A, which was defined as developmentally oriented approach to children learning, much emphasis was placed on the developmental characteristics of young children. For instance, Item #24 "Teachers recognize children's

interest in making sense of their world to promote academic concepts of mathematics, science, reading, writing, social studies, and art through various activities such as building blocks, play with games, intentional play, manipulatives, movement activities, and computer time." was a distinguishing statement for Perspective A at $P < .01$, and it was differentiated among all of the B, C, and D perspectives (array scores: 4, -2, -2, 1).

Item #33 "Teachers and families regularly share information in ways that are clear, respectful, and constructive. Both teachers and families make decisions together regarding learning goals and approaches to learning that are suitable for the individual child." was a distinguishing statement for Perspective B at $P < .05$, and it was differentiated among A, C, and D perspectives (array scores: 0, 5, 1, 1). It should be noted that, despite the consensus belief among all of the participants in the four perspectives regarding the limitation of parents' participation in classroom happenings, participants who associated with this perspective acknowledged the importance of keeping parents informed about their children's progress. Participants who represented Perspective B further showed an acceptance of the idea of partnering with families while considering some cultural customs in terms of direct communication within Saudi culture.

Item #21 "Teachers integrate ideas and content from multiple domains and disciplines, through themes, projects, play opportunities, and other learning experiences so that children are able to develop an understanding of concepts and make connections across content areas." was a distinguishing statement for Perspective C at $P < .01$, and it was differentiated among A, B, and D perspectives (array scores: 1, 1, 5, 1). Preschool teachers who helped to define this perspective placed a priority on an interdisciplinary

teaching style that integrated multiple subjects and made meaningful connections across content areas. In addition, the two preschool teachers who represented this perspective and proceeded to the interview showed a holistic view of the child's well-being that values nurturing the whole child: head, hands, and heart.

Item #31 "Preschool assessments address key goals in all development domains (physical, social, emotional, cognitive) and in the areas of physical education and health, language and literacy, mathematics, science, social competence, and creative arts." was a distinguishing statement for Perspective D at $P < .05$, and it was differentiated among A, B, and C perspectives (array scores: 2, 0, 3, 5). Although both the distinguishing and the most DAP and DIP items that helped in defining this perspective closely overlapped other perspectives, the focus-group interview with the participants brought the meaning of this perspective to life. Participants who associated with Perspective D believed in the effectiveness of a teaching style guided by the child's interests, needs, and individual requirements, which coincides with the child-centered approach to children learning. Furthermore, participants of this perspective stated that despite the fact that the ministry of education prescribes the curriculum, individual teachers have some room for flexibility and the freedom to plan and implement their own activities. Allowing teachers some freedom over instructional decisions that affect their practices likely increases their chances of endorsing some developmentally appropriate practices. Similarly, Parker and Neuharth-Pritchett (2006) concluded, "One can conclude that when teachers perceive they have the professional freedom to make instructional decisions, they will use child-centered, developmentally appropriate strategies more frequently" (p. 75).

Similarities and differences among the four perspectives found in the study were supported by many studies that reported a variation among teachers' beliefs regarding DAP (Hoot et al.,1996; Liu, 2007; McMullen et al., 2005; Parker & Neuharth-Pritchett, 2006; Rababah, 2012). Some comparative studies among different nations have concluded that different teachers in different countries interpret DAP beliefs differently. Despite the varied educational systems, social structures, and cultural backgrounds of different countries, findings will be compared in terms of similarities and differences.

For example, McMullen et al. (2005) conducted a study to examine commonalities among five nations—United States (US), China, Korea, Turkey, and Taiwan—regarding teachers' DAP beliefs; they reported that common beliefs and practices existed regarding promoting social/emotional development and allowing play/choice in the curriculum (p. 461). Similarly, the findings of this study reported some practices that emerged as consensus beliefs among the four perspectives and showed a consensus appreciation for social values, such as group work and support children forming friendships. For example, Item #5 "Teachers provide many opportunities for children to play and work together, both in groups they form themselves and in small teacher created group." was a consensus item and was sorted as one of the most developmentally appropriate practices with array scores of 4, 3, 3, and 3 for perspectives A, B, C, and D, respectively. Also, Item #2 "Teachers help children learn how to establish positive, constructive relationship with others. They support children's forming of friendships and provide opportunities for children to play and work together." was also sorted as the most developmentally appropriate item by perspectives A, B, and C with array scores of 5, 4, and 5, and for Perspective D, it was sorted as a DAP item with an

array score of 1, which is not as appropriate as the scores associated with perspectives A, B, and C for Item #2.

Furthermore, a common value found in McMullen et al. (2005) study among child care professionals in China, Korea, and Taiwan particularly was "being socially reinforced (use of verbal praise, approval, attention, etc.) for appropriate behavior and/or performance" (p. 462). This common value for the three cultures in particular was attributed to the fact that the belief system of Confucianism undergirds all three cultures. Likewise, the current study reported that within the Saudi culture, a commitment to religious values that appreciate the building of a caring and unified Muslim community early in a child's preschool years was found to be buttressed by Saudi preschool teachers. As noted earlier, the religious spirit that underlies preschool teachers' beliefs influences their practices in the classroom.

In addition to belief systems, socioeconomic factors have been found to indirectly affect the beliefs and practices of educating young children in some cultures. According to Hoot et al. (1996), "Given the varied educational systems, educational priorities, and socio-economic factors in countries worldwide, teachers, administrators, and parents in other sites may view DAP differently" (p. 161). Within an international context, similarities and differences among teacher beliefs toward the DAP construct were found to be varied among parents and early childhood educators of the four nations of Finland, the US, China, and Ecuador. Hoot et al. (1996) reported that a noticeable variation that differentiated Finnish parents and educators from the other participants was the emphasis on children's intellectual abilities, which the later countries were found to highly support. The Ecuadorian and Chinese economic situations might be influencing both parents' and

educators' belief in teaching young children academics to ensure later success, which includes attaining higher education and claiming sophisticated jobs in the future (Hoot et al., 1996).

Findings from this study were consistent with findings from Hoot et al.'s (1996) study in terms of the emphasis placed on children's intellectual abilities; this study found that Saudi parents appreciate these abilities, but the teachers themselves do not. For example, preschool teacher (PST19), who associated with Perspective A, noted that "some mothers have told me that they worry about their children wasting their time in play and not practicing writing or counting." Further, she stated that "this is one of points of conflict between the teachers and parents. Some parents think their children will be able to know all letters and numbers as soon as they entered to preschool, but we don't focus on that at this level, as it is an elementary school task." Hoot et al., (1996) also reported a clash between teachers' and parents' beliefs regarding some educational practices, most notably between parents and educators from the US compared to the Finnish, Chinese, and Ecuadorian participants.

The most relevant studies to the aim and the methodological approach utilized in this study were conducted in the United States, Hungary, and southwest of England (Ernest, 1999, 2011; Szente, 2001). It should be noted that these studies targeted both teachers and family members and explored their beliefs regarding developmentally appropriate practices, whereas only preschool teachers' beliefs were the prime focus of the current study

Q Methodology as an approach to studying subjective phenomenon has a significant power to identify potential communalities and diversity of purposively

selected subjects. The powerful capacity of its analytical technique encompasses the maximum diversity of possible views across set of Q-sorts (Brown, 1993; Smith, 2001; Ramlo & Newman, 2011). With a limited number of 30 participants consisting of teachers and family members, Ernest (1999) found two contrasting views of DAP and DIP beliefs emerged from the data. The first view was a dominant viewpoint that accounted for 57% of the total variance. This viewpoint was identified mostly by teachers and reported more developmentally appropriate practices that aligned with NAEYC's guidelines. Further, the study reported that 26 of the 30 participants sorted the 30 DAP cards as more appropriate than the 30 DIP cards. Ernest (1999) advocated this finding by noting, "The dominance of this viewpoint lends credence to the portrayal of DAP (as defined by the NAEYC) as a single set of beliefs that represent what may be considered appropriate and inappropriate practices" (p. 226). Similarly, findings from the current study supported the NAEYC's portrayal of DAP evidenced through items sorted as either most appropriate or most inappropriate that coincides and aligns with the NAEYC's view. Only two items were sorted as the most developmentally appropriate practice, but were defined by NAEYC as developmentally inappropriate. These items were (item #29, +3), "In planning learning experiences, teachers aim to ensure children's later success by focusing mostly on math and literacy skills," within Perspective A, and (item #50, +4), "Opportunities for parent participation, teacher-parent conferences, meetings, and other event[s] for families should occur when convenient to the teacher," within Perspective B. Both groups of teachers in the two perspectives provided further discussion regarding these two items.

Using the same approach to study subjective beliefs, Szente (2001) found three main sets of beliefs regarding DAP within a limited number of participants that involved 28 subjects. The three sets of beliefs found within Hungarian perspectives ranged from a more developmental approach—that agrees with NAEYC's vision of early learning—to the more traditional approach of teaching. Diversity in school was also found to be respected within Hungarian perspectives. Szente (2001) noted that the data found supported the view that the participants have multiple perspectives regarding what is considered more or less appropriate when teaching young children. The existence of multiple views was also supported by the finding of this current study through identifying four sets of beliefs that agree with the different aspects of DAP. The developmental, social, holistic, and child-centered aspects of DAP were found to be supported for the teachers involved in this study. In addition, the agreement reported by the participants for the developmentally inappropriate items also aligned with what the NAEYC considered developmentally inappropriate.

The empirical results of Ernest's 2011study southwest of England presented how groups of people with similar beliefs might emerge through the measurement technique used in Q Methodology that best explores and obtains subjective opinions. Throughout his study, Ernest found three sets of beliefs regarding DAP among 53 subjects consisting of teachers, teacher education candidates, and parents. The three unique viewpoints included cultural responsivity, social cohesiveness and communication, and the teacher as the prime agent of change. Although, the three viewpoints have different proportions of people who subscribe to a single view, the multiple views were found to be existent. In parallel fashion, findings from the current study reported multiple perspectives regarding

the best practice of the different aspects of DAP and DIP in preschool settings. Ernest (2011) pointed to the superiority of quality over quantity in exploring subjective views by noting that "as Q-technique factor analysis factors people and not items, Q Methodology is not the method of choice to estimate how many people of one kind or another subscribe to each view" (p. 234).

Research Question Two

Q Methodology as a mixed methods approach provided a methodological bridge that enabled the participants to sort DAP items along a continuum of appropriateness (Ernest, 1999; 2001; 2011). That means each item sorted as either appropriate or inappropriate was sorted subjectively to a certain degree. The issue of dichotomizing DAP as extremely polar as either appropriate or not appropriate has concerned many educators in the field (Delpit, 1988; Fowell & Lawton, 1992; 1993; Lubeck, 1998; Charlesworth, 1998; Bredekamp, 1993). This issue of DAP's dichotomy has initiated a productive dialogue that contributes to developing later versions of DAP statements and provides clear interpretations of what are considered appropriate or inappropriate instructions (Fowell & Lawton, 1992; 1993; Bredekamp, 1993). Fowell and Lawton (1992) have pointed to the necessity of making a balance of teacher-directed and child-directed learning styles. According to Fowell and Lawton (1992),

> We do not intend here to set up a bipolar comparison of different approaches to the practice of early childhood education (e.g., child-directed vs. teacher-directed learning, informal vs. formal education, or guided discovery vs. reception learning) although, at first glance, it may appear that we are doing so. (p. 56)

Almost all the items that were sorted as the most developmentally appropriate and the most developmentally inappropriate by the participants harmonized with NAEYC guidelines. This finding proved the universality of developmentally appropriate practice and encouraged the extension of DAP philosophy to different cultures and countries (Abu-Jaber et al., 2010; McMullen et al., 2005; Haroun & Weshah, 2009; Liu, 2007; Erdiller Akın, 2013). Although there is a general agreement about relative appropriateness and inappropriateness found among the participants in all four perspectives, A, B, C, and D, two items were interpreted and sorted differentially (Item #29 and Item #50). These items were identified by NAEYC as developmentally inappropriate practices but sorted as one of the most developmentally appropriate practices. Similar results were found with Szente (2001) that some Hungarian teachers and parents interpreted DAP and DIP statements differently than identified by NAEYC. Further explanation for these items will be discussed in question three.

As observers to DAP literature of DAP history and development, we found many critical points that contributed to and shaped our understanding of DAP. For example, Lubeck (1998) warned of the limited possibilities presented in a set of statements that are either appropriate or inappropriate, which leads us to a single interpretation of DAP and DIP practices. The dichotomy between DAP and DIP may turn out to be false in that both can be interpreted differently by different people (Delpit, 1988). The most important note is that presenting DAP and DIP statements as counter-exemplars does not mean they are only one right way and one wrong way of practice. It helps us as educators to form a conceptual meaning of the DAP framework and also helps teachers to reflect on their own practices (Charlesworth, 1998; Bredekamp & Copple, 1997; Fowell and Lawton,

1993). The issue of dichotomy was clearly decreased in the last two revisions of DAP's position statement, which reflects a clear indication of moving from *either/or* to *both/and* thinking of early childhood practices (Bredekamp & Copple, 1997; Copple & Bredekamp, 2009).

Perspective A, for example, considered the statement, "In planning learning experiences, teachers aim to ensure children's later success by focusing mostly on math and literacy skills," as one of the DAP items with an array score of +3. At the same time, participants of this perspective considered the statement, "Assessment need only focus on the most important areas of children's learning (e.g., math and literacy) rather been comprehensive," as one of the most DIP items with array score of -3. If one were to use *either/or* way of thinking, these two statements were presenting contradicting beliefs regarding teaching math and literacy. Reflecting on these two items with the lens of the *both/and* way of thinking, we can conclude for this group of teachers who associated with perspective A that math and literacy are highly considered in teaching to a certain degree but are not much focused on in assessment. In this sense, some DAP items reflect practices that wouldn't be interpreted as either completely appropriate or completely inappropriate; rather, both can be combined effectively.

The dialectical dichotomy of DAP's portrayal can be theoretically linked to Hegel's dialectical way of thinking. Reflecting on DAP using the trilogy of thesis, antithesis, and synthesis gives us a better understanding of how to approach a clear interpretation of ECE best practice. According to Schnitker and Emmons (2013), thesis, antithesis, and synthesis can be interpreted as follows:

> A dialectic method of historical and philosophical progress that postulates (1) a beginning proposition called a thesis, (2) a negation of that thesis called the antithesis, and (3) a synthesis whereby the two conflicting ideas are reconciled to form a new proposition. (p. 978)

The trilogy itself goes back to ancient Greek and simply means "discussion" about the truth. Solomon (1985) further explained: "The truth, according to Hegel, that consciousness is capable of opposing points of view and feels the necessity to resolve them" (p. 23). Connecting to education, many of the DAP aspects can be characterized as thesis, antithesis, and synthesis as a compact way of thinking about ECE best practices. In this sense, all that can be advocated as the DAP side of a child's learning is the thesis, and all that can oppose the proposition of DAP (the DIP side) stands as the antithesis, while considering both sides and forming a new proposition that reconciles the common truths between thesis and antithesis is synthesis. Viewing DAP with the lens of thesis, antithesis, and syntheses will solve many critical points that question what are considered as best practices in early childhood education. Based on that, bringing both DAP and DIP to a point of being complementary rather being adversarial is a new shift to view DAP differently. In a complementary, not contradictory, way, Bredekamp and Copple (1997) and Copple and Bredekamp (2009) advise readers to consider the *both/and* concept of thinking of DAP's guidelines rather being *either/or* limited options. According to Copple et al. (2013):

> In the process of updating the position statement, it became evident that many in the early childhood field have moved toward valuing the *both/and* way of thinking. However, a new worry arises: that sometimes *both/and* thinking may be

> applied quite superficially as just a "pinch of this and a dash of that." Most questions about what is and is not developmentally appropriate practice require more nuanced and evidence-based responses. (p. 23)

Findings from this study support the *both/and* approach of thinking about developmentally appropriate practice. Perspective B, for example, considered the statement, "Opportunities for parent participation, teacher-parent conferences, meetings, and other events for families should occur when convenient to the teacher," as one of the most DAP items with array score of +4. Contrary, the statement, "Teachers communicate with parents when problems or conflicts arise, thus there are little reasons for the parents to be involved in their child's experiences at school," was considered as one of the most DIP items, with an array score of -4. Using the *either/or* concept, these statements represent inconsistent beliefs of Saudi preschool teachers toward parents being not often connected and rarely communicating about their children. But using the *both/and* concept, we can conclude that teachers and parents both communicate regarding children's learning and that their communication depends on teacher convenience due to the higher authority given to the teacher over children's education in this particular culture. Further cultural influences over Saudi preschool teachers will be discussed in question three.

Research Question Three

Research question three sought to investigate what might account for cultural influences on teachers' beliefs regarding DAP. Three Saudi preschool teachers were invited for focus group interview and discussion regarding their beliefs and professional practices. Only two teachers participated in the focus group interview for perspective C.

The following section reviewed any cultural aspects that emerged from the data's thematic analysis with reference to literature review.

DAP has been criticized for lack of cultural variation, as it is a Western point of view regarding children's learning. Many researchers have been concerned about the appropriateness of DAP in different cultures and countries (e.g., Lubeck, 1998; Delpit,1988; Zeng & Zeng, 2005; Hedge & Cassidy, 2009; Liu, 2007; Rababah, 2012; Szente, 2001; Caner & Subaşı, 2010; Fauor, 2003; McMullen et al., 2005). In Saudi Arabia, where religion and culture are unified and braced through education, many aspects of DAP were attributed to different issues. General findings from this study were compatible with NAEYC's view of the core principles of DAP. That is, what is considered developmentally and individually appropriate is also considered culturally appropriate in cultural and social contexts other than the United States. Even though interviewees reported some practices that might be considered as developmentally inappropriate (based on NAEYC's guidelines), they were considered culturally appropriate and socially acceptable within Saudi culture particularly.

A theme running through focus group interviews with all the selected participants for the four perspectives was the clear commitment to religious content in educating young children in both knowledge and practices. The objectives and goals for preschool education stated clearly the promotion of Islamic good virtues and values through teaching practices (e.g., teach children good conduct and help them to acquire the virtues of Islam by giving them a positive example at school). The previous example is one of the objectives that guide teacher practices in the classroom. For example, socially oriented activities were frequently referred to in relation to the importance of cooperation

in Muslim society. The following quote from a preschool teacher (PST15) who associated with Perspective B illustrates that meaning:

> Children in my classroom are team members. I have been working on this value since the beginning of the year. I placed more emphasis on the activities that support children working together as caring friends, not competitors. I consistently remind them that "*the hand of Allah is with the group*." (PST15)

Another example of the religious spirit of a teacher's beliefs that influences her classroom practice is presented in the following quote:

> I always recall Hadith from Prophet Muhammed's legacy [peace be upon him], which urges children on the importance of group work as we are one family and children are brothers and sisters on this basis. For instance, "*None of you truly believes until he loves for his brother what he loves for himself*." And "*The believers are like one person; if his head aches, the whole body aches with fever and sleeplessness*" [Sahih Bukhari]. (PST15)

In Jordan, where belief system, religion, culture, social structure and even geographical borders are shared, religious influences for teachers were found to be similar. Rababah (2012) reported a notable role of religion that influences Jordanian kindergarten teachers as they perceive and implement DAP. She noted that Jordanian teachers committed to implementing religious instruction frequently in the curriculum, such as teaching tenets of Islam, telling stories from the Qur'an, and memorizing some (Ayat) from the Qur'an (Rababah, 2012). Similarly, findings from this study reported that Saudi preschool teachers frequently endorse religious practices as part of their daily

routines, such as reciting short phrases (Ayat) from the Qur'an, performing morning supplication (Duaa), reading stories with religious content, and reading stories from the Qur'an.

The conventional teaching style associated with teaching the (Ayat) from the Qur'an is through the didactic way of teaching. That is, children repeated the (Ayat) over and over with the teacher until they memorized it. From NAEYC's point of view, the exclusive use of the didactic style of teaching is considered a developmentally inappropriate practice. An example for a similar practice that is viewed as "in contrast" or DIP by Copple and Bredekamp (2009) is, "Groups tend to be didactic, with little use of children's ideas and contributions by teachers" (p.154). Reflecting on what has been found in Rababah's study (2012) and current findings, such didactic practices might be considered as DIP but are considered religiously and culturally appropriate. Back in the late nineties when Lubeck (1998) doubted and questioned the appropriateness of DAP for everyone, she pointed out that DAP philosophy might be interpreted differently with different people and different situations. Lubeck further stated the following:

> It is there when a student from Saudi Arabia, enhanced with American child-centered pedagogy, confides that she helps her 2 1/2 -year-old son to memorize the Koran [Qur'an] each day, as Muslims have done for untold centuries. It is there when we realize that world societies are now more diverse that at any time in its history. And it is there when people simply interpret situations differently. (Lubeck, 1998, p. 290)

The 2009 NAEYC's guidelines for DAP advocate for family members and practitioners to work together to achieve maximum contribution to children's learning.

Establishing reciprocal relationships with family through regular base communication was found to be not supported by Saudi preschool teachers. Communication barriers, for example, are one of the reasons for the limited home-school relationship. A preschool teacher (PST27) who associated with perspective A has noted that she limited her communication to the mother, as both are females and both can communicate directly, which is the norm in this particular culture. The nature of a conservative Saudi society that presents in clear gender separation is customary in many aspects of social life, including communication. This restriction pushes the teacher to limit her contact only to the mother of the child and to not include the father. Thus, in many cases, such as those of working mothers, divorced parents, or a mother's preference not to be involved, chances for teacher-parent relationships would be quite limited. These limitations might affect full implementation of DAP principles, but it is considered culturally appropriate and socially acceptable.

Another developmentally inappropriate practice arising from the thematic analysis was the applying a large volume of worksheets in preschool classrooms. The two teachers associated with perspective C demonstrated beliefs that are not in favor of assessing children using worksheets and paper-pencil activities, but they do so for some administrative purposes. As (PST12) stated, "My children don't enjoy these activities at all, but I have to do it. This is one of the administration's requirements." Another teacher (PST5) shared a similar opinion: "In level three children (preliminary), we have to apply 10-15 worksheets for each unit. These sheets are for documentation. Some children are still learning how to grip the pencil properly, and it is hard for them to follow dots." Both (PST12) and (PST5) cases showed an inconsistency between teachers' beliefs and

practices due to some administration policies. This finding may reflect that the administration team, including the principal, might not have adequate knowledge of unique characteristics of effective early childhood programs. With similar findings, Zeng and Zeng (2005) have reported in their study that 77.2% of the principals have never taught in kindergarten. Further, they stated, "To effectively direct a kindergarten program, administrators must have an in-depth knowledge of the unique characteristics of early childhood programs and a thorough understanding of teacher's roles and their daily experiences working with children" (Zeng & Zeng, 2005, p. 715). Adequately, Copple and Bredekamp (2009) have noted that many elements of DAP require both teachers and administrators to have deep knowledge of child development and learning.

Other than administration requirements to extensively use worksheets in the classroom, in different cultures, worksheets tend to be prevalent and considered educationally and developmentally appropriate. For example, the study conducted by Hedge and Cassidy (2009) in Mumbai, India revealed the customary use of worksheets: "It is believed that the rationale for using worksheets in the classrooms offsets the belief that worksheets are harmful, developmentally inappropriate, and impediments to children's development" (p. 380). Indeed, the point of synthesizing both DAP and DIP approaches is a way of thinking to resolve contradictions and balance instructional practices (Goldstein, 2008). Changes in the way of viewing both DAP and DIP as absolute truths and either appropriate or not appropriate lends clear understanding of ECE best practices. In this sense, Ernest (1999) best simplified the issue of a singular option in the *either/or* way of teaching by noting the following:

> Although many early childhood educators would consider some of the DIP items to be inappropriate if used exclusively, it would be inappropriate to believe that drill and practice or the use of workbooks should never be used, and that academic work (however that is defined) should never be considered in an ECE classroom. (p. 256)

Inconsistencies between teachers' beliefs and practices found in this study was to coincide with findings from several studies. For example, Fauor (2003) explored Lebanese kindergarten teachers' DAP beliefs and found that teachers had more developmentally appropriate beliefs than developmentally appropriate practices. Classroom observation from Fauor's study indicated that teachers endorsed some DIP instruction. Similarly, Liu (2007) compared U.S. and Taiwanese public kindergarten teachers and reported that Taiwanese teachers had higher level of DAP beliefs and lower level DIP beliefs than did U.S. teachers, whereas U.S. kindergarten teachers reported higher DAP but DIP activities. Abu-Jaber, Al-Shawareb, and Gheith (2010) reported that Jordanian kindergarten teachers have reported a mix between DAP and DIP in their teaching practices. Further, Abu-Jaber et al. (2010) attributed implementing DAP to several factors that included teacher's education, age, and years of experience. Likewise, the present study seemed to be supportive of Goldstein's findings (2007). Goldstein explored the tension between teaching the standards and keeping up with DAP of two kindergarten teachers from Texas. Goldstein's findings reported teachers were striving to provide their students with developmentally appropriate learning experiences and meet the mandated curriculum standards.

The issue of teaching young children academics brought up an agreement among the four perspectives. There was a consensus rejection among all eleven interviewees that a preschool teacher should not teach academics to young children, especially using the conventional way of teaching that is used in elementary school. Although this might sound nicely with a DAP voice that is not in favor of an academically oriented teaching style, it hides a DIP belief. The tone that appears in teachers' language when they speak opinions like "That is an elementary school's job" and "We don't teach academics as a separate subject as in elementary school" mirrors how teachers view preschool and elementary school as separate parties. Such narrowing of view to children's learning by the current stage without considering the interrelatedness and sequences of learning offsets DAP principles. The NAEYC's position statement for DAP, stated to serve children from birth to age 8, advocated for learning experiences for young children that are integrated and aligned, particularly between pre-kindergarten and K-3 (Copple & Bredekamp, 2009, p. xiii). The recent Saudi Early Learning Standards (SELS) position statement 2015 that was issued with conjunction with NAEYC's view addressed expressly the importance of the preschool-elementary boundary to children's success. It would be quite informative to explore preschool and elementary school teachers' perceptions of the Saudi Early Learning Standards documentation that built upon many aspects of DAP.

The Western shift to adopt and customize NAEYC's principles to the Saudi educational system is clearly shown in the current educational reforms. As discussed earlier, the Kingdom of Saudi Arabia experienced major changes in its educational system since the launching of King Abdullah bin Abdul-Aziz's Public Education

Development Project (KAAPEDP) in 2007. Since then, the education system has witnessed many major reforms that attempted to adapt alternative waves to traditional Saudi education, especially for early childhood education. Undoubtedly, the SELS shows a promising potential to include DAP guidelines in the future.

In summary, since the late eighties, DAP has received local and global interest among researchers and educators in the field of early childhood education. Nevertheless, interest in DAP is new to the Saudi education system. Many have studied teachers' beliefs regarding developmentally appropriate practices (e.g., McMullen et al., 2005; Liu, 2007; Erdiller Akın, 2013; Hoot et al., 1996; Parker & Neuharth-Pritchett, 2006; Zeng & Zeng, 2005; Erdiller Akın, 2013; Caner and Subaşı,2010; McCaslin, 2004; Han & Neuharth-Pritchett, 2010), yet studies conducted in Middle Eastern countries are still quite limited (Abu-Jaber et al., 2010; Haroun & Weshah, 2009; Rababah, 2012; Fauor, 2003). Other than limitations of DAP research in the region, studying teachers' beliefs from a subjective point of view is notably promising to provide authentic and realistic information through combining the strengths of both qualitative and quantitative approaches.

Methodological Notes

According to Pajares (1992), "Clearly, when specific beliefs are carefully operationalized, appropriate methodology chosen, and design thoughtfully constructed, their study becomes viable and rewarding." (p. 308). Following Q Methodology traditions, the q-sorting process encourages participants to thoughtfully translate their views into a numerical ranking that allows the researcher to examine the subjectivity in a very objective way. The method also ensured navigation for commonality and diverse

views by opening the door of possibility for convergent and divergent views to emerge (Brown, 1993; Smith, 2001; Watts & Stenner, 2013). It was recommended by researchers advocating for the potential power of Q Methodology as a promising method to conduct follow-up interviews to study subjective phenomena such as teachers' beliefs (Brown, 1993; Shinebourne & Adams; 2007; Shinebourne, 2009; Ernest, 1999, 2001, 2011). The focus group interviews following the results of Q Methodology provided insightful information on how Saudi preschool teachers approach and perceive desired implementation for developmentally appropriate practices.

Within the realm of Q Methodology, generalizability and the ability to generalize the results to the broader population is less of concern. Therefore, due to its small sample size, the result of this study will be only representative of the group of Saudi preschool teachers that were sampled. Moreover, the results of this study were limited to the selection of DAP and DIP items quoted from the latest revised position statement of NAEYC's guidelines (2009) for DAP (Bredekamp & Copple, 2009). Although the selected statement for the q-sample provided a representation as much as possible of views related to teachers' instructional practices, in Q study, there is always a sense that a q-sample can never be complete, as there is always something with potential to be said (Watts & Stenner, 2005).

Implications and Conclusion From the Study

Based on the findings of the present study, the following implications can be thoughtfully considered:

1. There were four perspectives among the Saudi preschool teachers that were sampled in the study. This finding suggests that there may be different perspectives among the whole population of Saudi teachers regarding developmentally appropriate practice.
2. Even though all of the perspectives mostly coincide with different aspects of DAP, the interviews revealed some DIP instructions that were mainly attributed to administrative purposes.
3. Effective implementation of DAP requires both teachers and administrators to possess similar beliefs regarding children's learning as well as deep knowledge of the unique characteristics of early childhood programs.
4. Based on the findings from this particular group of Saudi teachers, the framework of developmentally appropriate practice is found to be quite acceptable in this religious and conservative society.
5. Many aspects of developmentally appropriate practices and religiously oriented instructions were found to not conflict but instead were rather consistent within Saudi preschool teaching instructions.
6. The appropriateness of a set of practices is relative to different situations, times, cultures, and belief systems.
7. The results show that the Saudi preschool teachers do not place much emphasis on involving family members in children's learning experiences in the classroom. Thus, chances for collaboration between teachers and parents would back the DAP's endorsement.

8. The social aspects of children's learning were found to be highly appreciated among Saudi preschool teachers and culturally valued within the Saudi classroom community.
9. Even in classrooms with a prescribed curriculum and planned contents, DAP can be implemented through developmentally appropriate activities and thoughtfully structured games that match the children's interests and needs.
10. Some of the DAP items reflect practices that would not considered either appropriate or inappropriate to this particular group of teachers.
11. Early childhood educators should not consider both DAP and DIP as extreme propositions; they are complementary rather than adversarial.
12. Teachers are advised to consider the *both/and* way of thinking about DAP's guidelines rather than them being limited *either/or* options (Bredekamp & Copple, 1997; Copple & Bredekamp, 2009).
13. Viewing DAP through the lens of thesis, antithesis, and syntheses will resolve many critical points of what is consider to be best practices in early childhood education.
14. In light of the current educational reforms toward alternative waves within early childhood education in the Kingdom of Saudi Arabia, it is important to be aware of multiple views of the DAP framework that would support and promote DAP beliefs among Saudi preschool teachers.
15. In general, professional workshops for in-service and pre-service teachers as well as administrators and supervisors are needed to promote DAP's philosophy among Saudi early childhood educators.

Recommendations for Future Research

The following are some recommendations for future research that were derived from the results of the present study:

1. The information gained from the focus group interviews provided complementary justification for the numerical results. Thus, involving more participants into the interviews would provide further explanations and enrich our understanding.
2. The interviews revealed some inconsistency between teachers' beliefs and practices. Thus, following the interviews with classroom observation is recommended to closely explore when and why teachers' beliefs and practices converge or diverge.
3. The qualitative information gained from the interviews revealed practices that are relative to the instructions used regularly in the Saudi preschool setting. Potential Q-studies in the country might be considered with a Q-sample that is customized with items reflecting different views of Saudi preschool teachers, in particular.
4. The present study was conducted in a specific geographic location within the Kingdom of Saudi Arabia. More studies could be conducted in other cities and regions of the country to explore more views on DAP.
5. Examining preschool teachers' beliefs in other Middle Eastern countries and various cultures will contribute to the cultural aspects of DAP's knowledge base nationwide.

6. A future avenue of study might involve other individuals related to children's learning, including parents, administrators, principals, supervisors, and early childhood student teachers.

Subjectively, there are always hidden views, beliefs, and even stories that need to be revealed and told. From a sacred place on Earth (City of Mecca), this study brought to light teachers' beliefs, insights, and narratives regarding their educational practices in the classroom. To keep with NAEYC's promise to promote high-quality early education for all children worldwide, this study seeks to extend the interest in DAP among Saudi educators to join global ECE community. The findings from this study will contribute to the knowledge base on the applicability of different aspects of DAP in the most religious and conservative society in the world. With the inspirations of better education and brighter futures for young Saudi children, adapting DAP's guidelines to current educational reforms would inform best practices in ECE.

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APPENDIX A

VISUAL MODEL FOR MIXED METHODS PROCEDURES

(SEQUENTIAL EXPLANATORY MIXED METHODS DESIGN)

Sequential Explanatory Mixed Methods Design

Phase	Procedure	Product
Quantitative Data Collection	Using Q-Methodology (participants will Q-sort 50 statements that represent DAP & DIP on a distribution line range from -5 to +5	Numeric data
Quantitative Data Analysis	Entering the data to Q methodology software package • principal component analysis • Z-score	Similarities and differences between participants The most DAP & DIP items
Pearson Sample Selection	Purposefully selecting the participants for follow up interview	3-4 participants per focus group
Qualitative Data Collection	Focus group interview	Text data (interviews transcript)
Qualitative Data Analysis	Coding and thematic analysis	Codes and themes, similar and different themes
Interpretation for Entire Analysis	Explanation of the meaning of quantitative results, Interpretation of the meaning of qualitative results.	Discussion, Recommendations

APPENDIX B

THE INSTITUTIONAL REVIEW BOARD FOR HUMAN USE APPROVAL FORM

THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

Institutional Review Board for Human Use

Exemption Designation
Identification and Certification of Research
Projects Involving Human Subjects

UAB's Institutional Review Boards for Human Use (IRBs) have an approved Federalwide Assurance with the Office for Human Research Protections (OHRP). The Assurance number is FWA00005960 and it expires on January 24, 2017. The UAB IRBs are also in compliance with 21 CFR Parts 50 and 56.

Principal Investigator:	ALGHAMDI, AHLAM A
Co-Investigator(s):	
Protocol Number:	**E160217005**
Protocol Title:	*Examining Preschool Teachers' Subjective Beliefs Toward Developmentally Appropriate Practices: A Saudi Arabian Perspective*

The above project was reviewed on 4/19/16. The review was conducted in accordance with UAB's Assurance of Compliance approved by the Department of Health and Human Services. This project qualifies as an exemption as defined in 45CFR46.101(b), paragraph 1.

This project received EXEMPT review.

Date IRB Designation Issued: 4/19/16

Cari Oliver, CIP
Assistant Director, Office of the
Institutional Review Board for Human
Use (IRB)

Investigators please note:

Any modifications in the study methodology, protocol and/or consent form/information sheet must be submitted for review to the IRB prior to implementation.

470 Administration Building
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APPENDIX C

PARTICIPANT CONSENT FORM

INFORMED CONSENT

Title of Study: Examining Preschool Teachers' Subjective Beliefs Toward Developmentally Appropriate Practices: Saudi Arabian Perspective

IRB Protocol:

Principal Investigator: Ahlam Alghamdi, doctoral student

Explanation of Procedures:

You are being invited to take part in a research study regarding your beliefs as a preschool teacher. The purpose of this study is to learn more about preschool teachers' subjective beliefs toward Developmentally Appropriate Practices (DAP), and Developmentally Inappropriate Practices (DIP) identified by the National Association of the Education of Young Children (NAEYC). You have been selected because as preschool teachers you will be able to provide valuable information regarding your teaching experiences and pedagogical practices in your classroom. The information will help us understand the professional practices of Saudi preschool teachers in preschool settings.

If you choose to participate in this study, your participation will take place in two phases. In the first phase, you will be asked to rank 50 statements (cards) in a distribution line range from -5 to 5+ based on your beliefs of Developmentally Appropriate or Inappropriate Practices. The second phase of the study will depend on the analysis of all the teachers' ranking, that the teachers who ranked the statements in similar fashion will be sharing similar viewpoints. The interviews will be focus group of 3 to 4 teachers per shared viewpoint. The interview will be audio-recorded and transcribed by the primary investigator, and it is expected to last one hour and thirty minutes to two hours. Questions will be asked are related to how each cluster of teachers responded to Developmentally Appropriate Practices (DAP) and Developmentally Inappropriate Practices (DIP) statements. Your participation in the focus group interview will be completely voluntary and you have the right to not participate.

Risks:

The risks of this study are minimal. You may choose to not answer any or all the questions or you may withdraw from the interview or all the study with no penalty

Benefits:

There will be no direct benefits to you for your participation in this study. However, we hope that the information obtained from this study help to understand the Saudi preschool teachers' subjective beliefs toward developmentally appropriate practices.

Confidentiality:

Any sort of collected data from this study, sorted cards, written notes, recorded and transcribed interviews, or any other identified participants' information will be kept in locked file cabinet. And all the materials will be destroyed when no longer necessary for the research.

The information that has been collected from this study will be used for the purpose of this study only. And any publications in the future that might result from the findings of this study the participants will be not identified.

Legal rights

You are not waving any of your legal rights by signing this form

Person to contact:

If you need any further information or if you have any question, please contact the primary researcher Ahlam Alghamdi at +1 (812) ###-#### or 55######## or via e mail Ahlam@uab.edu. If you have questions about your rights as a research participant, or concerns or complaints about the research, you may contact the UAB Office of the IRB (OIRB) at +1 (205) 934-3789 or toll free at 1-855-860-3789. Regular hours for the OIRB are 8:00 a.m. to 5:00 p.m. CT, Monday through Friday. You may also call this number in the event the research staff cannot be reached or you wish to talk to someone else.

Unforeseeable Risks:

There may be risks that are not anticipated. However, every effort will be made to minimize any risks.

Costs and Compensation:

There are no costs or monetary compensation to you for your participation in this study.

Consent:

By signing this consent form, I confirm that I have read and understood the information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, I understand that I will be given a copy of this consent form.

Signature_____ Date_____

APPENDIX D

Q-SAMPLE STATEMENTS

(THE FINAL 50 STATEMENTS USED IN THE STUDY)

Q-sample

25 Items on Developmentally Appropriate Practices (DAP) and 25 Items on Developmentally Inappropriate Practices (DIP) by NAEYC Guidelines adopted from the book *Developmentally Appropriate Practice: Focus on Preschoolers* written by Copple, Bredekamp, Koralek, and Charner (2013).

Developmentally Appropriate Practices	Developmentally Inappropriate Practices
Creating a caring community of learners 1. Teachers are warm, caring, and responsive. They make it a priority to know every child and family well and build a relationship with each of them. 2. Teachers help children learn how to establish positive, constructive relationship with others. They support children's forming of friendships and provide opportunities for children to play and work together. 3. Teachers actively seek to ensure that all children, including children with special needs, are included in the social relationships, play, and learning experiences of the classroom. 4. Teachers recognize community-building opportunities in various parts of the day, such as mealtime, cleanup, and whole-group times. 5. Teachers provide many opportunities for children to play and work together, both in groups they form themselves and in small teacher created group.	**Creating a caring community of learners** 6. It is more important to the teacher to focus on keeping classroom control more than focus on children as individuals. 7. It is more important to keep with administrative policies like keeping all class sizes equal than keep all children together in a group to maintain friendships 8. In case of conflicts and other undesired behavior, teachers take the role to handle the problems directly rather than seeing conflicts as learning opportunities for children. 9. It is good for children to spend time in whole-groups doing workbooks even if it means children have less opportunities to work and play together. 10. Teachers always solve problems for children and give any help children request. Teachers do not encourage children to work through the problems together and help one another.
Teaching to enhance development and learning 11. Teachers create a learning environment that fosters children's initiative, active exploration of materials, and sustained engagement with other children, adults, and activities. 12. To help children acquire new skills and understandings, teachers employ	**Teaching to enhance development and learning** 16. Teachers arrange learning environment that allow children to do what's expected of them more than promote exploration with the environment and the materials. 17. A teacher's primary responsibility is to maintain discipline, give directions,

a range of strategies, choosing from and combining them to suite the goal, the child, and the situation. 13. Teachers frequently engage children in planning or in reflecting on their experiences, discussing past experiences, and working to represent it (e.g., drawing, writing and dictating, making pictures) 14. When children are talking, teachers take into account preschoolers' capabilities as speakers, giving children time to express themselves and responding attentively to their speech. 15. Teachers set clear limits regarding unacceptable behaviors and enforce these limits with explanations in a climate of mutual respect and caring.	respond to requests for help, and mediate disputes. 18. Teachers should cover as much of the curriculum as possible even if it means covering topics once where some children will have to catch up later. 19. Education is more effective is teachers tell children what they need to know. Lots of teacher-child conversations slow down the class. 20. It is more important to cover the curriculum than focus on children's interests.
Planning curriculum to achieve important goals 21. Teachers integrate ideas and content from multiple domains and disciplines, through themes, projects, play opportunities, and other learning experiences so that children are able to develop an understanding of concepts and make connections across content areas. 22. In planning and implementing learning experiences, teachers draw on their knowledge of the content of that age, and understanding of the cultural and social contexts of children's lives. 23. Teachers make sure that children have plenty of opportunities to use large muscles in balancing, running, jumping, climbing, and other vigorous movements, both in play and in planned movement activities. Children can play outdoors every day except when weather is extremely inclement. 24. Teachers recognize children's interest in making sense of their world to	**Planning curriculum to achieve important goals** 26. It is better to teach children content (math, science, etc.) separately without trying to integrate everything together. 27. Teachers should follow a prescribed curriculum without attention to individual children's interests, needs, prior knowledge, emerging circumstances, or current events. 28. Teachers devote a majority of teaching time on developing children's academic skills more than meeting children's needs as physically active learners. 29. In planning learning experiences, teachers aim to ensure children's later success by focusing mostly on math and literacy skills. 30. Children have limited access to computers or if children use computers, the software should be designed to work independently on drill and practice activities

promote academic concepts of mathematics, science, reading, writing, social studies, and art through various activities such as building blocks, play with games, intentional play, manipulatives, movement activities, and computer time. 25. Teachers use technology (computers, iPads, etc.) to expand shared learning experience among children. Technology is used to promote child-child interaction through cooperating in solving problems and helping one another.	
Assessing children's development and learning 31. Preschool assessments address key goals in all development domains (physical, social, emotional, cognitive) and in the areas of physical education and health, language and literacy, mathematics, science, social competence, and creative arts. 32. Teachers look at what each child can do independently but also assess collaborative work with peers and adults as well as child's participation in groups. 33. Teachers and families regularly share information in ways that are clear, respectful, and constructive. Both teachers and families make decisions together regarding learning goals and approaches to learning that are suitable for the individual child. 34. Teachers assess children on an ongoing basis during daily activities and play time; they document children's learning and development in various ways including written notes, photographs, audio recordings, and work sample. The information therefore used for later planning and enhance teaching.	**Assessing children's development and learning** 36. Assessment need only focus on the most important areas of children's learning (e.g., math and literacy) rather been comprehensive. 37. Children are assessed as individuals. It is not a good use to time to know how children work in groups solving problems together. 38. Children's assessment for academic progress is more important to the teachers more than the families. Thus, teachers make important decisions unilaterally. 39. The most useful assessments are the ones that are the same for every child and compare the child to the average child. 40. Assessments in general take too much time and take attention away from teaching and interacting with children.

35. Assessment is important because the information is used to evaluate teaching effectiveness, which may lead to change in schedule, curriculum content, teaching style, room setup, resources, and so on.	
Establishing reciprocal relationships with families 41. Teachers actively work to create partnership with each family, communicating regularly to build mutual understanding and trust and to ensure that children's leaning and developmental needs are met. 42. Teachers and parents work together in making decisions about how best to support children's development and learning or how to handle problems of differences of opinion as they arise. 43. Teachers listen to parents, seek to understand their goals and expectations for their children, and respect that family's personal and cultural preferences. 44. Parents are welcome in early childhood setting at all time. Family members have opportunities to participate in ways that are comfortable for them, such as observing, reading to children, or sharing a skill or interest. 45. Parents' work schedules are accommodated in the planning of participation opportunities as well as teacher-parent conferences and family activities.	**Establishing reciprocal relationships with families** 46. Teachers communicate with parents when problems or conflicts arise, thus there are little reasons for the parents to be involved in their child's experiences at school. 47. When children are having difficulties in the classroom, parents have to have responsibility for their children's performance at the school. 48. Directors of programs and teachers should be responsive to the parent's wishes even if those wishes go against the teacher's beliefs. 49. Parents should not be encouraged to visit often as their presence in a classroom tends to be disruptive to the teaching and learning. 50. Opportunities for parent participation, teacher-parent conferences, meetings, and other event for families should occur when convenient to the teacher.

APPENDIX E

DEMOGRAPHIC INFORMATION FORM

Demographic Information Form

Age:

- 20-29
- 30-39
- 40 and above

Specialization:

_____

Highest level of education:

_____

Total numbers of years of being a teacher:

_____

Grade levels you have taught:

_____

Total numbers of years for each level:

_____

Total numbers of hours of training programs:

_____

APPENDIX F

37 X 37 CORRELATION MATRIX OF THE PARTICIPANT'S Q-SORT

Correlation Matrix Between Sorts

SORTS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1 PST1	100	54	57	45	54	63	53	49	57	54	35	-1	53	47	34	50	28	58	49	30	33	36	54	51	31	31	60	51	66	62
2 PST2	54	100	66	74	48	35	57	62	50	45	51	15	60	47	44	50	49	66	51	15	38	27	59	45	49	37	62	59	48	55
3 PST3	57	66	100	77	61	41	57	59	55	53	40	24	56	50	43	54	40	56	53	41	38	43	62	53	32	30	54	54	66	64
4 PST4	45	74	77	100	50	33	49	62	47	46	45	23	42	53	40	48	46	54	41	35	52	33	64	47	43	31	53	51	52	59
5 PST5	54	48	61	50	100	49	49	46	52	52	32	35	57	48	47	60	41	45	40	46	39	35	50	55	39	49	39	62	90	85
6 PST6	63	35	41	33	49	100	37	32	43	43	23	-5	44	18	31	45	20	46	47	30	41	26	58	33	23	27	54	38	53	46
7 PST7	53	57	57	49	49	37	100	36	38	50	35	12	47	39	42	52	32	60	40	23	33	35	62	41	27	36	56	53	57	58
8 PST8	49	62	59	62	46	32	36	100	58	44	41	11	46	51	41	53	47	58	40	17	47	41	53	49	44	38	56	60	52	51
9 PST9	57	50	55	47	52	43	38	58	100	46	33	2	44	39	28	46	36	54	51	24	47	29	58	38	32	36	51	48	57	57
10 PST1	54	45	53	46	52	43	50	44	46	100	62	8	62	57	51	59	51	73	62	43	59	25	61	46	41	48	68	55	61	60
11 PST11	35	51	40	45	32	23	35	41	33	62	100	7	59	63	61	66	59	56	32	27	36	34	45	55	52	48	58	66	43	36
12 PST12	-1	15	24	23	35	-5	12	11	2	8	7	100	14	26	33	30	23	7	-4	25	15	17	4	12	21	44	5	22	24	26
13 PST13	53	60	56	42	57	44	47	46	44	62	59	14	100	56	58	63	55	57	30	36	38	37	49	39	50	52	55	65	61	57
14 PST14	47	47	50	53	48	18	39	51	39	57	63	26	56	100	75	75	65	51	42	24	32	32	44	45	60	69	50	75	52	54
15 PST15	34	44	43	40	47	31	42	41	28	51	61	33	58	75	100	78	56	59	39	34	29	39	37	39	55	87	57	75	49	43
16 PST16	50	50	54	48	60	45	52	53	46	59	66	30	63	75	78	100	69	59	43	33	42	49	52	60	62	68	60	90	69	58
17 PST17	28	49	40	46	41	20	32	47	36	51	59	23	55	65	56	69	100	56	33	20	41	24	47	35	93	52	51	64	44	36
18 PST18	58	66	56	54	45	46	60	58	54	73	56	7	57	51	59	59	56	100	64	21	43	36	67	38	49	53	95	66	51	44
19 PST19	49	51	53	41	40	47	40	40	51	62	32	-4	30	42	39	43	33	64	100	17	41	26	53	41	30	35	60	45	44	44

20	PST20	30	15	41	35	46	30	23	17	24	43	27	25	36	24	34	33	20	21	17	100	14	22	32	22	20	26	19	24	50	52
21	PST21	33	38	38	52	39	41	33	47	47	59	36	15	38	32	29	42	41	43	41	14	100	32	48	42	35	37	42	36	50	51
22	PST22	36	27	43	33	35	26	35	41	29	25	34	17	37	32	39	49	24	36	26	22	32	100	22	37	14	24	30	51	42	31
23	PST23	54	59	62	64	50	58	62	53	58	61	45	4	49	44	37	52	47	67	53	32	48	22	100	51	45	38	72	57	62	62
24	PST24	51	45	53	47	55	33	41	49	38	46	55	12	39	45	39	60	35	38	41	22	42	37	51	100	35	35	43	67	70	60
25	PST25	31	49	32	43	39	23	27	44	32	41	52	21	50	60	55	62	93	49	30	20	35	14	45	35	100	52	44	57	42	36
26	PST26	31	37	30	31	49	27	36	38	36	48	48	44	52	69	87	68	52	53	35	26	37	24	38	35	52	100	52	69	49	51
27	PST27	60	62	54	53	39	54	56	56	51	68	58	5	55	50	57	60	51	95	60	19	42	30	72	43	44	52	100	64	49	41
28	PST28	51	59	54	51	62	38	53	60	48	55	66	22	65	75	75	90	64	66	45	24	36	51	57	67	57	69	64	100	69	60
29	PST29	66	48	66	52	90	53	57	52	57	61	43	24	61	52	49	69	44	51	44	50	50	42	62	70	42	49	49	69	100	90
30	PST30	62	55	64	59	85	46	58	51	57	60	36	26	57	54	43	58	36	44	44	52	51	31	62	60	36	51	41	60	90	100
31	PST31	60	61	56	49	60	45	55	54	53	59	47	27	52	58	58	73	57	74	52	25	42	40	59	55	51	59	72	77	65	62
32	PST32	57	50	59	51	60	40	62	52	56	80	50	14	48	53	54	61	39	65	59	44	54	31	70	65	35	53	62	61	74	75
33	PST33	53	54	66	66	47	37	55	47	42	62	62	20	47	64	61	65	52	61	40	52	42	36	62	52	50	42	61	59	60	55
34	PST34	52	63	61	58	62	19	55	49	57	56	54	12	63	60	53	55	57	56	37	39	39	27	56	54	53	48	51	62	70	72
35	PST35	58	50	55	57	58	33	60	50	52	56	44	12	48	54	51	58	38	55	36	42	49	35	57	58	36	45	52	57	71	72
36	PST36	62	55	62	58	51	42	53	46	46	59	47	-5	56	59	51	53	44	61	52	42	40	34	66	56	44	39	61	56	68	64
37	PST37	66	65	87	72	59	55	60	61	56	62	49	25	61	54	52	62	45	71	55	36	42	44	69	60	41	42	75	62	66	62

Correlation Matrix Between Sorts

SORTS	31	32	33	34	35	36	37
1 PST1	60	57	53	52	58	62	66
2 PST2	61	50	54	63	50	55	65
3 PST3	56	59	66	61	55	62	87
4 PST4	49	51	66	58	57	58	72
5 PST5	60	60	47	62	58	51	59
6 PST6	45	40	37	19	33	42	55
7 PST7	55	62	55	55	60	53	60
8 PST8	54	52	47	49	50	46	61
9 PST9	53	56	42	57	52	46	56
10 PST10	59	80	62	56	56	59	62
11 PST11	47	50	62	54	44	47	49
12 PST12	27	14	20	12	12	-5	25
13 PST13	52	48	47	63	48	56	61
14 PST14	58	53	64	60	54	59	54
15 PST15	58	54	61	53	51	51	52
16 PST16	73	61	65	55	58	53	62
17 PST17	57	39	52	57	38	44	45
18 PST18	74	65	61	56	55	61	71
19 PST19	52	59	40	37	36	52	55

20	PST20	25	44	52	39	42	42	36
21	PST21	42	54	42	39	49	40	42
22	PST22	40	31	36	27	35	34	44
23	PST23	59	70	62	56	57	66	69
24	PST24	55	65	52	54	58	56	60
25	PST25	51	35	50	53	36	44	41
26	PST26	59	53	42	48	45	39	42
27	PST27	72	62	61	51	52	61	75
28	PST28	77	61	59	62	57	56	62
29	PST29	65	74	60	70	71	68	66
30	PST30	62	75	55	72	72	64	62
31	PST31	100	68	54	56	59	54	70
32	PST32	68	100	64	67	74	70	69
33	PST33	54	64	100	67	74	75	70
34	PST34	56	67	67	100	82	74	61
35	PST35	59	74	74	82	100	79	64
36	PST36	54	70	75	74	79	100	70
37	PST37	70	69	70	61	64	70	100

APPENDIX G

THE Z SCORES FOR THE FOUR PRESEPECTIVES A, B, C, AND D

The Z Scores for Perspective A

No.	Statement		No.	Z-SCORES
2	DAP 2	Teachers help children learn how to establish positive	2	2.055
14	DAP 14	When children are talking, teachers take into account	14	1.801
5	DAP 5	Teachers provide many opportunities for children to pl	5	1.570
1	DAP 1	Teachers are warm, caring, and responsive. They make i	1	1.529
24	DAP 24	Teachers recognize children's interest in making sens	24	1.454
13	DAP 13	Teachers frequently engage children in planning or in	13	1.283
11	DAP 11	Teachers create a learning environment that fosters c	11	1.282
29	DIP 29	In planning learning experiences, teachers aim to ens	29	1.274
23	DAP 23	Teachers make sure that children have plenty of oppor	23	1.079
22	DAP 22	In planning and implementing learning experiences, te	22	0.911
31	DAP 31	Preschool assessments address key goals in all develo	31	0.864
32	DAP 32	Teachers look at what each child can do independently	32	0.772
43	DAP 43	Teachers listen to parents, seek to understand their	43	0.697
42	DAP 42	Teachers and parents work together in making decision	42	0.647
12	DAP 12	To help children acquire new skills and understanding	12	0.637
4	DAP 4	Teachers recognize community-building opportunities in	4	0.541
21	DAP 21	Teachers integrate ideas and content from multiple do	21	0.472
39	DIP 39	The most useful assessments are the ones that are the	39	0.263
46	DIP 46	Teachers communicate with parents when problems or co	46	0.172
37	DIP 37	Children are assessed as individuals. It is not a goo	37	0.063
25	DAP 25	Teachers use technology (computers, iPads, etc.) to e	25	0.043
18	DIP 18	Teachers should cover as much of the curriculum as po	18	0.037
41	DAP 41	Teachers actively work to create partnership with eac	41	0.017
35	DAP 35	Assessment is important because the information is us	35	0.014
34	DAP 34	Teachers assess children on an ongoing basis during d	34	0.005
30	DIP 30	Children have limited access to computers or if child	30	-0.010
3	DAP 3	Teachers actively seek to ensure that all children, in	3	-0.026
33	DAP 33	Teachers and families regularly share information in	33	-0.049
50	DIP 50	Opportunities for parent participation, teacher-paren	50	-0.049
19	DIP 19	Education is more effective if teachers tell children	19	-0.056
16	DIP 16	Teachers arrange learning environment that allow chil	16	-0.131
49	DIP 49	Parents should not be encouraged to visit often as th	49	-0.221
45	DAP 45	Parents' work schedules are accommodated in the plann	45	-0.357
38	DIP 38	Children's assessment for academic progress is more i	38	-0.374
8	DIP 8	In case of conflicts and other undesired behavior, tea	8	-0.431
44	DAP 44	Parents are welcome in early childhood setting at all	44	-0.605
9	DIP 9	It is good for children to spend time in whole-groups	9	-0.635
47	DIP 47	When children are having difficulties in the classroo	47	-0.697
15	DAP 15	Teachers set clear limits regarding unacceptable beha	15	-0.773
40	DIP 40	Assessments in general take too much time and take at	40	-0.775
10	DIP 10	Teachers always solve problems for children and give	10	-0.978
17	DIP 17	A teacher's primary responsibility is to maintain dis	17	-1.106

36	DIP 36	Assessment need only focus on the most important area	36	-1.141
27	DIP 27	Teachers should follow a prescribed curriculum withou	27	-1.287
48	DIP 48	Directors of programs and teachers should be responsi	48	-1.331
28	DIP 28	Teachers devote a majority of teaching time on develo	28	-1.444
26	DIP 26	It is better to teach children content (math, science	26	-1.513
7	DIP 7	It is more important to keep with administrative polic	7	-1.584
6	DIP 6	It is more important to the teacher to focus on keepin	6	-1.837
20	DIP 20	It is more important to cover the curriculum than foc	20	-2.071

The Z Scores for Perspective B

No.	Statement		No.	Z-SCORE
22	DAP 22	In planning and implementing learning experiences, te	22	1.542
33	DAP 33	Teachers and families regularly share information in	33	1.440
2	DAP 2	Teachers help children learn how to establish positive	2	1.388
50	DIP 50	Opportunities for parent participation, teacher-paren	50	1.336
4	DAP 4	Teachers recognize community-building opportunities in	4	1.289
1	DAP 1	Teachers are warm, caring, and responsive. They make i	1	1.267
5	DAP 5	Teachers provide many opportunities for children to pl	5	1.147
23	DAP 23	Teachers make sure that children have plenty of oppor	23	1.085
17	DIP 17	A teacher's primary responsibility is to maintain dis	17	1.045
15	DAP 15	Teachers set clear limits regarding unacceptable beha	15	1.031
3	DAP 3	Teachers actively seek to ensure that all children, in	3	1.011
12	DAP 12	To help children acquire new skills and understanding	12	0.817
10	DIP 10	Teachers always solve problems for children and give	10	0.726
14	DAP 14	When children are talking, teachers take into account	14	0.711
25	DAP 25	Teachers use technology (computers, iPads, etc.) to e	25	0.588
32	DAP 32	Teachers look at what each child can do independently	32	0.536
21	DAP 21	Teachers integrate ideas and content from multiple do	21	0.505
34	DAP 34	Teachers assess children on an ongoing basis during d	34	0.486
11	DAP 11	Teachers create a learning environment that fosters c	11	0.482
8	DIP 8	In case of conflicts and other undesired behavior, tea	8	0.480
43	DAP 43	Teachers listen to parents, seek to understand their	43	0.435
35	DAP 35	Assessment is important because the information is us	35	0.415
16	DIP 16	Teachers arrange learning environment that allow chil	16	0.384
13	DAP 13	Teachers frequently engage children in planning or in	13	0.376
42	DAP 42	Teachers and parents work together in making decision	42	0.369
41	DAP 41	Teachers actively work to create partnership with eac	41	0.353
29	DIP 29	In planning learning experiences, teachers aim to ens	29	0.331
44	DAP 44	Parents are welcome in early childhood setting at all	44	0.230
31	DAP 31	Preschool assessments address key goals in all develo	31	0.224
39	DIP 39	The most useful assessments are the ones that are the	39	-0.035
45	DAP 45	Parents' work schedules are accommodated in the plann	45	-0.610
49	DIP 49	Parents should not be encouraged to visit often as th	49	-0.732
30	DIP 30	Children have limited access to computers or if child	30	-0.739
7	DIP 7	It is more important to keep with administrative polic	7	-0.763
37	DIP 37	Children are assessed as individuals. It is not a goo	37	-0.775
27	DIP 27	Teachers should follow a prescribed curriculum withou	27	-0.798
38	DIP 38	Children's assessment for academic progress is more i	38	-0.818
24	DAP 24	Teachers recognize children's interest in making sens	24	-0.863
47	DIP 47	When children are having difficulties in the classroo	47	-0.976
18	DIP 18	Teachers should cover as much of the curriculum as po	18	-0.986
40	DIP 40	Assessments in general take too much time and take at	40	-1.102
9	DIP 9	It is good for children to spend time in whole-groups	9	-1.120

36	DIP 36	Assessment need only focus on the most important area	36	-1.137
28	DIP 28	Teachers devote a majority of teaching time on develo	28	-1.147
48	DIP 48	Directors of programs and teachers should be responsi	48	-1.176
26	DIP 26	It is better to teach children content (math, science	26	-1.240
46	DIP 46	Teachers communicate with parents when problems or co	46	-1.400
19	DIP 19	Education is more effective if teachers tell children	19	-1.406
20	DIP 20	It is more important to cover the curriculum than foc	20	-1.887
6	DIP 6	It is more important to the teacher to focus on keepin	6	-2.319

The Z Scores for Perspective C

No.	Statement		No.	Z-SCORE
2	DAP 2	Teachers help children learn how to establish positive	2	1.766
21	DAP 21	Teachers integrate ideas and content from multiple do	21	1.747
15	DAP 15	Teachers set clear limits regarding unacceptable beha	15	1.621
22	DAP 22	In planning and implementing learning experiences, te	22	1.604
34	DAP 34	Teachers assess children on an ongoing basis during d	34	1.426
32	DAP 32	Teachers look at what each child can do independently	32	1.422
5	DAP 5	Teachers provide many opportunities for children to pl	5	1.368
31	DAP 31	Preschool assessments address key goals in all develo	31	1.285
14	DAP 14	When children are talking, teachers take into account	14	1.190
23	DAP 23	Teachers make sure that children have plenty of oppor	23	1.080
16	DIP 16	Teachers arrange learning environment that allow chil	16	0.931
9	DIP 9	It is good for children to spend time in whole-groups	9	0.904
3	DAP 3	Teachers actively seek to ensure that all children, in	3	0.749
33	DAP 33	Teachers and families regularly share information in	33	0.716
13	DAP 13	Teachers frequently engage children in planning or in	13	0.667
47	DIP 47	When children are having difficulties in the classroo	47	0.573
4	DAP 4	Teachers recognize community-building opportunities in	4	0.526
8	DIP 8	In case of conflicts and other undesired behavior, tea	8	0.518
25	DAP 25	Teachers use technology (computers, iPads, etc.) to e	25	0.342
7	DIP 7	It is more important to keep with administrative polic	7	0.288
12	DAP 12	To help children acquire new skills and understanding	12	0.002
26	DIP 26	It is better to teach children content (math, science	26	0.000
50	DIP 50	Opportunities for parent participation, teacher-paren	50	0.000
44	DAP 44	Parents are welcome in early childhood setting at all	44	-0.002
38	DIP 38	Children's assessment for academic progress is more i	38	-0.141
11	DAP 11	Teachers create a learning environment that fosters c	11	-0.195
30	DIP 30	Children have limited access to computers or if child	30	-0.232
49	DIP 49	Parents should not be encouraged to visit often as th	49	-0.286
29	DIP 29	In planning learning experiences, teachers aim to ens	29	-0.375
42	DAP 42	Teachers and parents work together in making decision	42	-0.377
43	DAP 43	Teachers listen to parents, seek to understand their	43	-0.427
37	DIP 37	Children are assessed as individuals. It is not a goo	37	-0.472
45	DAP 45	Parents' work schedules are accommodated in the plann	45	-0.485
28	DIP 28	Teachers devote a majority of teaching time on develo	28	-0.499
39	DIP 39	The most useful assessments are the ones that are the	39	-0.522
6	DIP 6	It is more important to the teacher to focus on keepin	6	-0.613
1	DAP 1	Teachers are warm, caring, and responsive. They make i	1	-0.629
41	DAP 41	Teachers actively work to create partnership with eac	41	-0.665
48	DIP 48	Directors of programs and teachers should be responsi	48	-0.702
40	DIP 40	Assessments in general take too much time and take at	40	-0.758
35	DAP 35	Assessment is important because the information is us	35	-0.772
24	DAP 24	Teachers recognize children's interest in making sens	24	-0.960

46	DIP 46	Teachers communicate with parents when problems or co	46	-1.043
19	DIP 19	Education is more effective if teachers tell children	19	-1.134
10	DIP 10	Teachers always solve problems for children and give	10	-1.171
36	DIP 36	Assessment need only focus on the most important area	36	-1.283
17	DIP 17	A teacher's primary responsibility is to maintain dis	17	-1.519
20	DIP 20	It is more important to cover the curriculum than foc	20	-1.606
18	DIP 18	Teachers should cover as much of the curriculum as po	18	-1.764
27	DIP 27	Teachers should follow a prescribed curriculum withou	27	-2.089

The Z Scores for Perspective D

No.	Statement		No.	Z-SCORES
31	DAP 31	Preschool assessments address key goals in all develo	31	2.123
34	DAP 34	Teachers assess children on an ongoing basis during d	34	1.750
13	DAP 13	Teachers frequently engage children in planning or in	13	1.728
4	DAP 4	Teachers recognize community-building opportunities in	4	1.404
14	DAP 14	When children are talking, teachers take into account	14	1.371
5	DAP 5	Teachers provide many opportunities for children to pl	5	1.170
25	DAP 25	Teachers use technology (computers, iPads, etc.) to e	25	1.029
23	DAP 23	Teachers make sure that children have plenty of oppor	23	1.022
1	DAP 1	Teachers are warm, caring, and responsive. They make i	1	1.001
11	DAP 11	Teachers create a learning environment that fosters c	11	0.900
32	DAP 32	Teachers look at what each child can do independently	32	0.900
15	DAP 15	Teachers set clear limits regarding unacceptable beha	15	0.782
12	DAP 12	To help children acquire new skills and understanding	12	0.748
35	DAP 35	Assessment is important because the information is us	35	0.732
2	DAP 2	Teachers help children learn how to establish positive	2	0.716
24	DAP 24	Teachers recognize children's interest in making sens	24	0.691
21	DAP 21	Teachers integrate ideas and content from multiple do	21	0.681
22	DAP 22	In planning and implementing learning experiences, te	22	0.557
33	DAP 33	Teachers and families regularly share information in	33	0.493
41	DAP 41	Teachers actively work to create partnership with eac	41	0.465
43	DAP 43	Teachers listen to parents, seek to understand their	43	0.423
3	DAP 3	Teachers actively seek to ensure that all children, in	3	0.309
40	DIP 40	Assessments in general take too much time and take at	40	0.225
50	DIP 50	Opportunities for parent participation, teacher-paren	50	0.186
42	DAP 42	Teachers and parents work together in making decision	42	0.014
7	DIP 7	It is more important to keep with administrative polic	7	-0.098
45	DAP 45	Parents' work schedules are accommodated in the plann	45	-0.157
46	DIP 46	Teachers communicate with parents when problems or co	46	-0.383
17	DIP 17	A teacher's primary responsibility is to maintain dis	17	-0.409
10	DIP 10	Teachers always solve problems for children and give	10	-0.418
30	DIP 30	Children have limited access to computers or if child	30	-0.479
47	DIP 47	When children are having difficulties in the classroo	47	-0.501
16	DIP 16	Teachers arrange learning environment that allow chil	16	-0.515
19	DIP 19	Education is more effective if teachers tell children	19	-0.573
18	DIP 18	Teachers should cover as much of the curriculum as po	18	-0.597
8	DIP 8	In case of conflicts and other undesired behavior, tea	8	-0.664
44	DAP 44	Parents are welcome in early childhood setting at all	44	-0.737
49	DIP 49	Parents should not be encouraged to visit often as th	49	-0.879
9	DIP 9	It is good for children to spend time in whole-groups	9	-0.914
38	DIP 38	Children's assessment for academic progress is more i	38	-0.938
48	DIP 48	Directors of programs and teachers should be responsi	48	-0.946
39	DIP 39	The most useful assessments are the ones that are the	39	-0.950

29	DIP 29	In planning learning experiences, teachers aim to ens	29	-0.975
36	DIP 36	Assessment need only focus on the most important area	36	-1.099
37	DIP 37	Children are assessed as individuals. It is not a goo	37	-1.114
26	DIP 26	It is better to teach children content (math, science	26	-1.256
28	DIP 28	Teachers devote a majority of teaching time on develo	28	-1.426
6	DIP 6	It is more important to the teacher to focus on keepin	6	-1.532
27	DIP 27	Teachers should follow a prescribed curriculum withou	27	-1.626
20	DIP 20	It is more important to cover the curriculum than foc	20	-2.234

APPENDIX H

DISTINGUISHING STATEMENTS FOR THE FOUR PRESEPECTIVES A, B, C, AND D

Distinguishing Statements for Perspective A

(P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value (Q-SV) and the Z-Score (Z-SCR) are Shown.

			A		B		C		D	
No.	**Statement**		**Q-SV**	**Z-SCR**	**Q-SV**	**Z-SCR**	**Q-SV**	**Z-SCR**	**Q-SV**	**Z-SCR**
24	DAP 24	Teachers recognize children's interest in making sens	24	4	1.45*	-2	-0.86	-2	-0.96	1	0.69
29	DIP 29	In planning learning experiences, teachers aim to ens	29	3	1.27*	0	0.33	0	-0.38	-3	-0.97
46	DIP 46	Teachers communicate with parents when problems or co	46	1	0.17	-4	-1.40	-3	-1.04	0	-0.38
18	DIP 18	Teachers should cover as much of the curriculum as po	18	0	0.04	-2	-0.99	-5	-1.76	-1	-0.60
33	DAP 33	Teachers and families regularly share information in	33	0	-0.05	5	1.44	1	0.72	1	0.49
15	DAP 15	Teachers set clear limits regarding unacceptable beha	15	-2	-0.77*	2	1.03	4	1.62	2	0.78
7	DIP 7	It is more important to keep with administrative polic	7	-4	-1.58*	-1	-0.76	1	0.29	0	-0.10

Distinguishing Statements for Perspective B

($P < .05$; Asterisk (*) Indicates Significance at $P < .01$)

Both the Factor Q-Sort Value (Q-SV) and the Z-Score (Z-SCR) are Shown.

			A		B		C		D	
No.	**Statement**		**Q-SV**	**Z-SCR**	**Q-SV**	**Z-SCR**	**Q-SV**	**Z-SCR**	**Q-SV**	**Z-SCR**
33	DAP 33	Teachers and families regularly share information in	33	0	-0.05	5	1.44	1	0.72	1	0.49
50	DIP 50	Opportunities for parent participation, teacher-paren	50	0	-0.05	4	1.34*	0	0.00	0	0.19
17	DIP 17	A teacher's primary responsibility is to maintain dis	17	-2	-1.11	2	1.05*	-4	-1.52	0	-0.41
10	DIP 10	Teachers always solve problems for children and give	10	-2	-0.98	2	0.73*	-3	-1.17	0	-0.42
29	DIP 29	In planning learning experiences, teachers aim to ens	29	3	1.27	0	0.33	0	-0.38	-3	-0.97
31	DAP 31	Preschool assessments address key goals in all develop	31	2	0.86	0	0.22	3	1.28	5	2.12
7	DIP 7	It is more important to keep with administrative polic	7	-4	-1.58	-1	-0.76*	1	0.29	0	-0.10

Distinguishing Statements for Perspective C

(P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value (Q-SV) and the Z-Score (Z-SCR) are Shown.

			A		B		C		D	
No.	**Statement**		**Q-SV**	**Z-SCR**	**Q-SV**	**Z-SCR**	**Q-SV**	**Z-SCR**	**Q-SV**	**Z-SCR**
21	DAP 21	Teachers integrate ideas and content from multiple do	21	1	0.47	1	0.51	5	1.75*	1	0.68
9	DIP 9	It is good for children to spend time in whole-groups	9	-1	-0.63	-2	-1.12	2	0.90*	-2	-0.91
47	DIP 47	When children are having difficulties in the classroom	47	-2	-0.70	-2	-0.98	1	0.57*	-1	-0.50
26	DIP 26	It is better to teach children content (math, science	26	-4	-1.51	-4	-1.24	0	0.00*	-4	-1.26
11	DAP 11	Teachers create a learning environment that fosters c	11	3	1.28	1	0.48	0	-0.20	2	0.90
43	DAP 43	Teachers listen to parents, seek to understand their	43	2	0.70	0	0.44	-1	-0.43	0	0.42
28	DIP 28	Teachers devote a majority of teaching time on develop	28	-4	-1.44	-3	-1.15	-1	-0.50	-4	-1.43
6	DIP 6	It is more important to the teacher to focus on keepin	6	-5	-1.84	-5	-2.32	-1	-0.61*	-4	-1.53
1	DAP 1	Teachers are warm, caring, and responsive. They make i	1	4	1.53	3	1.27	-1	-0.63*	2	1.00
41	DAP 41	Teachers actively work to create partnership with eac	41	0	0.02	0	0.35	-2	-0.67	1	0.46
35	DAP 35	Assessment is important because the information is us	35	0	0.01	0	0.41	-2	-0.77	1	0.73
18	DIP 18	Teachers should cover as much of the curriculum as po	18	0	0.04	-2	-0.99	-5	-1.76	-1	-0.60

Distinguishing Statements for Perspective D

(P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value (Q-SV) and the Z-Score (Z-SCR) are Shown.

			A		B		C		D	
No.	**Statement**		**Q-SV**	**Z-SCR**	**Q-SV**	**Z-SCR**	**Q-SV**	**Z-SCR**	**Q-SV**	**Z-SCR**
31	DAP 31	Preschool assessments address key goals in all develop	31	2	0.86	0	0.22	3	1.28	5 2.12
2	DAP 2	Teachers help children learn how to establish positive	2	5	2.06	4	1.39	5	1.77	1 0.72*
24	DAP 24	Teachers recognize children's interest in making sens	24	4	1.45	-2	-0.86	-2	-0.96	1 0.69*
40	DIP 40	Assessments in general take too much time and take at	40	-2	-0.78	-2	-1.10	-2	-0.76	0 0.23*
46	DIP 46	Teachers communicate with parents when problems or co	46	1	0.17	-4	-1.40	-3	-1.04	0 -0.38
17	DIP 17	A teacher's primary responsibility is to maintain dis	17	-2	-1.11	2	1.05	-4	-1.52	0 -0.41
10	DIP 10	Teachers always solve problems for children and give	10	-2	-0.98	2	0.73	-3	-1.17	0 -0.42