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Adapting the Montessori Method in Saudi Early Childhood Classrooms

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by

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DEDICATION

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ABSTRACT

This study explored how teachers have adapted the Montessori method in Saudi early childhood classrooms to align with Saudi socio-culture and Islamic practices. The study was framed using the socio-cultural theory. A qualitative multi-case study design was used to collect data from semi-structured interviews and on-site observations for four Saudi early childhood teachers in two Montessori classrooms in Saudi Arabia. The data were thematically analyzed manually and with NVivo software. The study results showed that the teachers encouraged children's independence and freedom of choice in work time and during the classroom day, but limited their freedom during mini-lessons and circle times to meet religious or cultural expectations. The results also highlighted that the flexibility of the school culture and the Montessori method encouraged the teachers to cooperate in designing lessons and activities for the Saudi Montessori classroom context. The study found that the teachers integrated the Islamic and Saudi socio-cultural practices most in circle time, classroom activities, and the daily classroom routine to teach academic, social, and behavioral practices. The results also highlighted that the Montessori system and school rules encouraged organizing the classroom environment. The socio-cultural theory illuminated how the teachers' adaptations of Montessori principles and Islamic and Saudi socio-cultural practices were affected by their background, beliefs, and experiences. Implications of the study were discussed and recommendations given for early childhood teachers, the Saudi Ministry of Education, and higher education programs. Further research could focus on comparative analysis between teachers implementing Montessori

in Saudi Arabia and in a Western country to highlight the cultural influences on adapting the Montessori approach.

CHAPTER 1: INTRODUCTION

The foundation of education in Saudi Arabia is based on the aim to imbue children with faith in "Allah as a God, in Islam as a religion, and in Mohammed (peace be upon him) as a prophet and a messenger" (Rajab, 2016, p. 3). At all grade levels, confirmation of the Islamic religion, the Quran, and the *Sunnah* (the Prophet Mohammed's words) are among the leading goals in the Saudi education system (Rabaah et al., 2016). The Saudi educational policy, thus, holds students to the following criteria: "1) representing praiseworthy Islamic morals in oneself and with others, 2) positive interaction with other cultures, 3) and wise and honest interaction with others" (Rabaah et al., 2016, p. 3).

Preschools throughout Saudi Arabia have historically used teacher-centered approaches, as prescribed by the Saudi Ministry of Education (MOE). According to Rajab (2016), some preschool teachers who want to adopt other strategies have found it difficult "to comply with the Ministry of Education regulations. Their own training and knowledge of child-centered teaching and learning put them at odds with a system that allows little or no autonomy for teachers or children" (p. 7). However, recently, the MOE has begun adopting child-centered education as a part of Saudi Vision 2030, a strategic initiative to diversify the economy through public sector improvements including expanding early childhood education (ECE). One of the proposed child-centered approaches in Saudi Arabia is the Montessori approach (A. Albasim, personal communication, June 18, 2021).

The first Saudi Montessori school, Asrary Schools, was established in Riyadh in the 1990s, and served children from high-income Saudi families because of the high cost of tuition

(A. Albasim, personal communication, June 18, 2021). A few years later, more Montessori schools started to expand in Saudi Arabia with lower fees making them accessible to middle-class families (A. Albasim, personal communication, June 18, 2021). At that time, the Montessori schools were not allowed to name themselves "Montessori" based on the MOE rules (A. Albasim, personal communication, June 18, 2021). However, currently, the Saudi MOE is more flexible about certifying schools as Montessori and allowing investors to use the Montessori name, supporting the expansion of Montessori schools as part of the plan to increase children's enrollment in kindergarten from 17% to 95% by 2030 (MOE, n.d.).

Dr. Maria Montessori, an Italian physician, created the Montessori philosophy and the Montessori method (O'Donnell, 2014). Eventually, she worked with children with learning disabilities and shifted her interest to pedagogy. She believed that children with learning disabilities should be treated with the right education (Isaacs, 2018). Montessori created her theory, along with her method, by observing young children in a classroom environment (O'Donnell, 2014). Today, Montessori schools can be found in many countries around the world. The main reason I involved Montessori education in my study is due to the lack of public literature that addresses Montessori and the Saudi context.

The largest supporters of the growth of Montessori schools in Saudi Arabia are school investors and middle-class parents (A. Albasim, personal communication, June 18, 2021). The parents are attracted to Montessori because they believe that their children will be in high-quality early childhood schools that support the Saudi culture and Islamic values (S. Aljude, personal communication, June 15, 2021). However, some parents in Saudi Arabia find Montessori to be an incomplete method for developing skills children need for their growth. Moreover, not all

schools using the name follow Montessori principles in their program delivery (S. Aljude, personal communication, June 15, 2021).

Another reason behind the growth of Montessori schools in Saudi Arabia is the fact that Montessori materials can include Arabic language and Islamic principles that allow educators to involve different methods for children's learning (Aljabreen, 2020). For example, Saudi Montessori teachers have made adaptations to integrate cultural teaching for Saudi children by creating tools to supplement the Montessori materials, due to the limited availability of Montessori resources that reflect the Arabic cultural context (S. Aljude, personal communication, June 15, 2021). Saudi teachers integrate the Montessori method with Islamic practices because some Montessori educational methods, concepts, and principles "have a harmony of values with the principles of Islamic Education Psychology" (Gumiandari et al., 2019). For example, the Saudi Montessori teachers include teaching *Sunnah*, the Prophet Mohammed's (PBUH) guidance, in the classroom morning circle and daily routine (S. Aljude, personal communication, June 15, 2021). However, Saudi educators are encouraged to correct children's mistakes and reward them for good manners, which is not supported by Montessori philosophy (Abdullah et al., 2018; Gumiandari et al., 2019). In addition, as part of the Saudi culture, parents have control over their children as they guide their practices. At present, all of the Montessori schools in Saudi Arabia are private, serving young children ages 0 to 6 (H. Aljad, personal communication, June 22, 2021).

As a researcher, I found that some experimental Montessori studies conducted outside of Saudi Arabia showed the advantages and disadvantages of applying the Montessori method to children. For example, some experimental studies concluded with results illustrating that children who attend Montessori receive high scores in creativity, academic, social, prosocial, and

behavioral skills (Fleming et al., 2019; Hiles, 2018; İman et al., 2017; Lillard, 2016). On the other hand, other research has shown that Montessori education is unpopular in some countries for three reasons: (a) parents' preference to see their children's achievement through grades, (b) the Montessori school's requirement of teachers' training programs, and (c) the large classroom space, which makes it challenging to apply in some countries (Kotob & Antippa, 2020; Liao, 2020). Moreover, some countries reported that Montessori education does not support their cultural traditions of rewards and punishments for children (Liao, 2020). The current study strengthens the literature regarding how Saudi teachers adapt the Montessori method to align with Saudi socio-cultural and Islamic practices. The research also might support the adaptation of child-centered approaches as a part of Saudi Vision 2030, including expanding child enrollment in kindergarten schools from 17% to 95% (MOE, n.d.).

As a previous early childhood educator in U.S. Montessori classrooms, I observed that the Montessori students had control over their time and their choice of materials during working periods. The teacher's role was to observe the children, assess them when needed, and prepare the environment. My experience generated curiosity about the claim that Montessori classroom materials and teachers' roles lead children to be independent and self-learners. Subsequently, I discovered that Dr. Maria Montessori created this method based on her philosophy of children's development. When I worked in Saudi Arabia in a traditional early childhood classroom, I created some Montessori materials related to Arabic lessons. I provided the children with the freedom of choice to work with the materials for part of the day. My experience teaching in both countries and the need to adopt a child-centered approach as part of the Saudi 2030 plan have shaped my interest in further research on the Montessori approach.

In addition to my Islamic and Saudi identity, I received my undergraduate degree in Islamic Studies, which provided me with a deeper understanding of how the teachers' classroom practices connected to Islam. The aim of the study was to explore how Saudi teachers have adapted the Montessori method to align with Saudi socio-cultural and Islamic practices. My interest in adapting child-centered approaches in Saudi Arabia, as well as my Saudi and Islamic background, was influential in highlighting the benefits of applying Montessori in the Saudi context and avoiding the disadvantages when I collected data. However, when I observed my participants, I was careful not to fall into such subjectivity by reporting what it was "actually in a setting" (Simons, 2009, p. 16). For example, I recorded what I saw and heard and asked the teachers about their practices that I was unsure of.

The socio-cultural theory proposed by Rogoff (2003) guided my research, supporting my understanding of the ways the teachers' background and culture developed their practices in their Montessori classrooms and how the Saudi cultural practices and environments relate to the development of ways to shape teachers' thinking, reasoning, and problem-solving (Rogoff, 2003).

A study conducted in a preschool in Riyadh reported that children who used Montessori sensory materials developed better problem-solving skills than children in the control group (Bahatheg, 2011). However, the research was limited to the analysis of sensory materials and did not address the implementation of other Montessori materials aligned with Saudi culture and Islamic practices, and it did not consider the teachers' cultures and backgrounds.

Responding to the limited research conducted on Montessori implementation in the Saudi context, I focused on Saudi culture, Saudi social practices, and Islamic practices. My close case study of four Saudi teachers in two Montessori classrooms in Saudi Arabia produced an updated

picture of teachers' exploratory practices and the cultural beliefs involved when implementing the program in ECE classrooms. Qualitative case study designs facilitate the complex, in-depth analysis of a social phenomenon (Bhatta, 2018; Harrison, 2017). Qualitative methods also support the collection of data by observing and interviewing (Simons, 2009), as was done in this study. Given the lack of literature exploring Saudi teachers' implementation of Montessori practices in ECE, this study is unique in its aim to consider teachers' practices and perspectives in this context.

Purpose of the Study

The purpose of this study was to understand how teachers have adapted the Montessori method in Saudi ECE classrooms to align with Saudi socio-cultural values and the Islamic religion. The qualitative case study is a research design that facilitates the exploration of complex social phenomena that cannot be evaluated with a quantitative approach (Bhatta, 2018). I have chosen to conduct a case study because the essential goal of this method is to conduct an in-depth analysis of an issue within its context (natural setting) with a view to understanding it from the perspective of the participants (Harrison, 2017). The data collected in this study were gathered from observations and interviews, which are the most popular methods of qualitative research (Simons, 2009). The observations and interviews helped me to understand the teachers' adoption of, experiences with, and perspectives on implementing the Montessori method in the Saudi context.

Research Question

The following overarching question guided the research: How have the teachers in early childhood Montessori classrooms in Saudi Arabia adapted the Montessori method to align with Saudi socio-cultural and Islamic practices?

Theoretical Framework

Socio-Cultural Theory

The theoretical framework is the foundation from which all the knowledge in a study is constructed. It serves as the structure and support for the research rationale, statements, problems, significance, and research questions (Osanloo & Grant, 2016). A theoretical framework permits the researcher to identify and evaluate a problem against a theory that they can measure, test, and extend to guide the design of the study (Osanloo & Grant, 2016). When researchers begin with a theoretical framework, it will provide them with the focus and the security needed to make the analysis comparatively straightforward (Simons, 2009).

The socio-cultural theory proposed by Rogoff (2003) guided this study. Rogoff (2008) posited that different programs and policies are socially and culturally constructed. She also argued that the cultural community is where individuals learn and develop their culture (Rogoff, 2003). Rogoff's socio-cultural theory supported my study's aim to evaluate how teachers have adapted the Montessori method to align with Saudi socio-cultural and Islamic practices. The theory also helped me to understand the influence of teachers' cultures, backgrounds, and perceptions on how they implemented Saudi practices in their Montessori classrooms.

Interpersonal and Personal Planes of Analysis

This study explored the practices and perceptions of four teachers and how they aligned Saudi culture and Islamic practices in Montessori classrooms in Saudi Arabia. The study also examined ways the teachers' backgrounds, cultures, and perceptions have developed those practices (Rogoff, 2003). Thus, the study focused more on the interpersonal and personal planes of analysis. In the interpersonal plane, I analyzed a "general sense of individual and cultural information," which is important "to understand what people are doing" (Rogoff, 2003, p. 58). I

used the interpersonal plane of analysis to interrogate the teachers' communicative and organizational efforts as they used face-to-face interaction to observe, guide, interact, and present Saudi socio-cultural and Islamic activities in their Montessori classrooms (Rogoff, 2003; Rogoff et al., 1995). For example, I observed the teachers' level of intervention when children practiced Arabic and Islamic activities in the Montessori classroom and applied those results to a general sense of their culture. I also supported the observation by asking the teachers interview questions to examine their roles as teachers and how they managed their classrooms (see Appendix B).

The personal plane of analysis supported my understanding of the perceptions of individual teachers that drove their involvement of children in Saudi culture and Islamic practices in their Montessori classrooms (Rogoff et al., 1995). The observations and interviews provided a firmer foundation from which to analyze the personal plane of teachers' experiences and perceptions. For example, I used the interview questions to ask the teachers what Montessori meant to them and ask about their perceptions of applying Montessori in their classrooms (see Appendices A and B). The observations also supported my understanding to connect the teachers' perceptions that align with their practices in the Montessori classrooms. As I focused on the practices, the individual effort in the interpersonal and personal plane of analysis, I used the socio-cultural institutions in the background of my study, because I could not study them in isolation from each other (Rogoff et al., 1995).

Cultural–Institutional Analysis

Rogoff (2003) believed that some studies need a cultural–institutional analysis where the researcher directs attention to the processes underlying cultural institutions, such as how a school and community have developed practices and how they connect with the culture and educational policies. In my study, I used the community plane of analysis in the background to present ways

that teachers' practices in the Montessori classrooms connected with Saudi culture and Islamic practices, along with the ways the Montessori school's policies and community developed those practices (Rogoff, 2003). The community plane of analysis was divided into two parts: the formal system, where the teachers participated in the school community, and the informal system, where they participated in culturally organized activities (Rogoff, 2003; Rogoff et al., 1995). The community plane helped me evaluate the teachers' surrounding cultural and social environments, and exploring it provided a deeper understanding of how they adapted Saudi socio-cultural and Islamic practices in the Montessori classrooms (Rogoff et al., 1995). Thus, in my study, I indicated how the community practices of Saudi culture and Islamic religion have developed both through the contributions of teachers and through transformations in the practices of other institutions, such as the family and school policy (Rogoff, 2008; Rogoff et al., 1995).

I used the first interview (Appendix A) to ask the teachers about their surrounding culture and their involvement in activities at the school and with their families and community. For example, I asked the teachers open-ended questions to find out what kinds of cultural and religious activities they participated in. Moreover, I examined how the school's rules and regulations affected their practices in their classrooms. The teachers' answers supported my understanding of how their surrounding culture influenced their implementation of Saudi culture and Islamic practices in their classrooms. For the community plane of analysis, I also asked some questions about their cultural background, education, and work experience to understand how their background and experiences were presented in their classrooms.

In summary, the socio-cultural theory holds that whether development is viewed in the personal, interpersonal, or community plane, it "is a process of transformation through people's participation rather than of acquisition" (Rogoff et al., 1995, p. 45). The problem that Rogoff

(2003) identifies is that some researchers recognize the importance of culture but leave out the "important role of the people who constitute cultural activities" (p. 61). Therefore, not only did I present the cultural institutional analysis in my study, but I also underlined the teachers' interpersonal and personal planes of analysis (Rogoff et al., 1995).

Along with interviewing the teachers to develop a cultural, institutional, and community analysis through their participation and perceptions in their classrooms, I observed their developmental processes through their participation in and interaction with their classrooms' involvement on the cultural, institutional, and community levels. I examined the cultural–institutional plane in the background of my research, which facilitated my analysis of the personal and interpersonal processes.

Significance of the Study

Aljabreen (2017) noted that there was little published literature describing the philosophies and theoretical frameworks underlying Saudi preschool, including the teacher's role, the typical classroom environments, the image of the child, and the use of preschool materials. In exploring the literature, I also discovered a lack of published literature in either English or Arabic that clearly described the implementation and adaptation of Montessori to the Saudi context or the role of teachers in such classrooms. Thus, the current study sought to fill the gap in the literature surrounding teachers' adaptation of the Montessori method in Arabic countries in general and Saudi Arabia in particular. In addition, the study adds to the limited number of studies that consider ECE programs in Saudi Arabia, and it might lay out a plan to improve the quality of education in the country in the future.

This study is important because Saudi Arabia is one of the lowest-ranked countries in education worldwide. At the World Economic Forum, Strategic Gears Management Consultancy

(2018) concluded that the quality of education in Saudi Arabia "scores 4.3 (out of 7) on the global index scale . . . farther away from the international benchmark of 6.1" (p. 12). In addition, Saudi education does not achieve the desired outcomes: "While the overall quality of education remains low, Saudi schoolchildren score poorly in international comparative tests, and the university dropout rate is about 50 percent" (Allmnakrah & Evers, 2020, p. 25). Thus, the MOE moved forward to support the adoption of child-centered approaches as a part of Saudi Vision 2030, including expanding enrollment in kindergarten from 17% to 95% (MOE, n.d.).

One of the child-centered approaches that are growing in Saudi Arabia is the Montessori approach. Notably, the MOE is now more flexible in allowing private Montessori schools. Therefore, this study is significant because it offers school administrators a deeper understanding of ways to implement the Montessori method in Saudi Arabia while considering the Arabic culture and Islamic religion. It also might encourage school investors to establish Montessori schools in Saudi Arabia, which might contribute to an increase in kindergarten enrollment.

There are many Montessori schools in Saudi Arabia, but only two centers that provide Montessori teacher training courses and are certified by the MOE (H. Aljad, personal communication, June 22, 2021). Many schools do not adhere to Montessori principles in their program delivery, but use the Montessori name as a marketing device to attract parents.

Nevertheless, this study was conducted in a school where all the teachers were trained by the school principal, who was certified by the North American Montessori Center (NAMC) in the programs for children ages 0–3 and 3–6 (S. Aljude, personal communication, June 15, 2021). The NAMC diploma is an international certification allowing certified teachers to work in Montessori classrooms all over the world (NAMC, n.d.). The school had a full set of Montessori

materials in each classroom and allowed students to spend their time exploring and working with the materials.

Therefore, this study offers a solution to this problem, in that it is the first seeking to understand the adaptations teachers make to Montessori education in Saudi ECE classrooms, which might help other Montessori teachers in Saudi Arabia to include Arabic culture and Islamic practices in their classrooms. The study also considered the cultural practices and societal context surrounding the adaptation of educational methods to different cultures. The research findings may create a new path for researchers interested in the adaptation of new methods in the ECE field in Saudi Arabia and other Arab and Muslim countries, which may have a positive impact on children's learning and development. In turn, this positive impact may help increase enrollment rates in early childhood schools.

Chapter Summary

In this chapter, I presented the study's purpose and significance in detail. I provided descriptions of Rogoff's (2003) socio-cultural theory, which guided my research. The socio-cultural theory informed my understanding of teachers' adaptations of Montessori education in Saudi ECE classrooms. Chapter 2 will present a review of the literature, exploring the background of Dr. Montessori and the Montessori philosophy and method. It also will highlight implementations of Montessori education in different countries around the world, and lay out ECE rules and regulations in Saudi Arabia.

Definition of Key Terms

Montessori method: The educational method created by Dr. Maria Montessori in the early 19th century, based on the following nine principles: concentration, self-control,

movement, choice, collaboration, interest in learning, less adult involvement, order, and no rewards or punishments (Lillard, 2016).

Montessori classroom: A special set of hands-on scientific materials that support children's physical and psychological development. Children are the center of the Montessori classroom, and the teacher is the observer.

Montessori education in Saudi ECE: All Montessori ECE schools in Saudi Arabia are for children aged 0–6.

ECE in Saudi Arabia: All Saudi schools, both public and private, involve Arabic culture and the Islamic religion in the curriculum.

Kingdom of Saudi Arabia: A Middle Eastern country located in southwest Asia. The country's first language is Arabic, and English is its second language. Saudi beliefs and practices are influenced by Islamic practices of morality.

MOE: The Ministry of Education, which ensures that all Saudi schools, public and private, follow the Saudi national curriculum standards and policies.

HRSD: The Ministry of Human Resources and Social Development aims to support working mothers by providing safe and caring hospitality centers for children aged 0–10. These hospitality centers do not provide compulsory education but rather focus on delivering optional, free, and fun education that aligns with Arabic culture and Islamic values (Ministry of Human Resources and Social Development, Kingdom of Saudi Arabia [HRSD], 2019).

Saudi socio-cultural practices: Socio-cultural practices in Saudi Arabia include, though they are not limited to, generosity, respect, and gender segregation. Cultural activities are represented through materials from Saudi day-to-day life and annual events.

Islamic practices: Islamic practices involve living according to guidance from Allah (SWT) and the Prophet Mohammed (PBUH). These practices include, but are not limited to, praying, reading the Quran, fasting, making pilgrimages, saying supplications, and greeting others using Islamic words.

CHAPTER 2: LITERATURE REVIEW

This study aims to explain the teachers' adaptation of the Montessori method in Saudi early childhood classrooms. This chapter presents three sections that are based on the review of the literature. In the first section, I will provide an overview of Montessori education and its background, theory, classrooms, materials, and teachers. In the second section, I will present Montessori and globalization. Since my research focused on Montessori in Saudi Arabia, this section will discuss the adaptation of Montessori education in Saudi Arabia in particular and in different countries around the world in general. I will conclude the second section by addressing the connection between Montessori and Islamic psychology. For the third section, I will present an overview of ECE in Saudi Arabia. Then, I will provide an overview of two aspects: (a) the Saudi MOE rules and regulations for ECE, and (b) the HRSD goals and objectives for ECE. The reason for including the HRSD in the literature review is because it shares the responsibility of providing children with caring centers and free educational approaches, including Montessori. Following that, I will discuss the Saudi early childhood curriculum and the roles of early childhood teachers in Saudi schools. At the end of this section, I will present the Saudi 2030 vision and the plan that supports ECE and kindergarten school enrollment.

As for the literature search, it was conducted in two phases: electronic and bibliographic. I searched for literature using the following databases: ERIC, EBSCO, Google Scholar, and ProQuest. I used the following terms to find the articles: *Montessori education, Montessori theory, Montessori methods, Montessori and early childhood, Montessori curriculum, Montessori classrooms, Montessori and globalization, Montessori in Saudi Arabia, Montessori*

and cultural diversity, Montessori and Islam, Montessori and peace, early childhood education in Saudi Arabia, Early childhood teachers in Saudi Arabia, Saudi early childhood curriculum, Saudi 2030 vision in education, Ministry of Education in Saudi Arabia, and *Ministry of Human Resources in Saudi Arabia*.

Section One

Montessori Background

Montessori education is named for Dr. Maria Montessori, the creator of the philosophy and method. Montessori was born on August 31, 1870, at Chiaraville, Ancona, in Italy (O'Donnell, 2014). "As a child, she was educated at home where she showed a keen interest in mathematics and then was enrolled in a boy's technical school to further her studies in mathematics and science" (O'Donnell, 2014, p. 2). Then, her interest turned to medicine, and she enrolled at the University of Rome and became one of the first two women in Italy to be a doctor (Isaacs, 2018). Montessori received her degree in 1896 as a Doctor of Medicine and Doctor of Surgery (O'Donnell, 2014). Then, she went into private practice and surgical assistance (O'Donnell, 2014). While she was a student in medicine, in 1895, she worked in the psychiatric department of pediatric clinics, which sparked her interest in helping children with mental problems (O'Donnell, 2014; Lillard, 2016). She planned to help these children "by elevating their minds to a higher level through curative pedagogy" (O'Donnell, 2014, p. 7).

Thus, in 1898, Montessori's interest shifted to education and pedagogy because she believed that children with learning disabilities should be treated with the right education (Isaacs, 2018), "where she differed from her colleagues who treated mental disease through gymnastics (motor education)" (O'Donnell, 2014, p. 2). After she spent 2 years working with a group of children, they passed state tests in reading and writing that were assigned to normal children; this

allowed Montessori education to be internationally known (Lillard, 2016; O'Donnell, 2014). In 1900, Montessori was chosen as director of a Demonstration School in Rome, and she trained teachers for children with mental diseases (O'Donnell, 2014). She was lecturing teachers to work with children with learning disabilities in training programs, set up an appropriate education, and create materials to support the children's needs (Isaacs, 2018).

> [Montessori] became increasingly convinced that the methods she used were more rational and more beneficial than those in current use in state schools and had the potential for helping normal children as well. She determined to undertake the teaching of normal children based on her findings and withdrew from active teaching of deficient children *pre se* to re-study the works of Itard and Séguin, and also to find time for what she called "meditation." (O'Donnell, 2014, p. 8)

During her work with teachers, she went back to the university and studied anthropology and philosophy of education, and in 1904, she became a professor in anthropology (Isaacs, 2018). "Concurrently she continued her private medical practice and maintained her interests in the feminist and socialist movements" (O'Donnell, 2014, p. 8).

Later she put her philosophy into words and in 1909 she wrote "about what she perceived as a crisis in education, more convinced than ever that pedagogy must join with medicine" (O'Donnell, 2014, p. 9). Montessori's method is about making close and detailed observations of each child's development without making the activity for the children based on their age (O'Donnell, 2014). According to Isaacs (2018), Dr. Maria Montessori passed away at Noordwijk ann Zee, Holland, on May 6, 1952, when "she was preparing for a trip to Ghana" (p. 14).

Theoretical Foundation of the Montessori Curriculum

The first influence on Montessori's philosophy of education was Jean-Marc Itard (O'Donnell, 2014). Itard (1775–1838) was a French physician and student of philosophy; he worked in a deaf institution and developed "a methodological education for the sense of hearing" (O'Donnell, 2014, p. 4). Itard worked for 8 years with a 12-year-old boy, Victor, who had been stripped of all social, life, and cultural skills, because he spent most of his life in the forest (O'Donnell, 2014). Itard observed Victor closely and published his method that extended his program. Using the sensorial materials he had designed for students with hearing impairment, "Itard was the first educator to practice observation of his pupil" where his minute descriptions of "a child's behavior were formally documented in a diary," and he was "following the boy's lead and building up a repertoire of teaching methods for the development of boy's sense" (O'Donnell, 2014, p. 4).

Montessori followed Itard's scientific methodology; however, she did not begin her education with a theory, but closely observed each child as an individual case study and followed each child's natural tendencies in her method (O'Donnell, 2014). Thus, Montessori built her method based on observing children, and through her observation, she noticed that children showed interest in a prepared environment (Mavric, 2020) .

The second major influence for Montessori was Edouard Séguin (1812-80), a teacher and a deaf-mute physician (O'Donnell, 2014). Séguin believed that education depended on two things: nature and nurture. He founded the first school for children with intellectual disabilities, recorded everything that he observed from the children, and then published a curriculum that included practical things to help children in their physical development and in taking care of themselves (O'Donnell, 2014). Montessori was influenced by Séguin and not only included some

experiences in her method (e.g., walking the line) but also involved democracy in the classroom, where each child would "take an active part in their own education" (O'Donnell, 2014, p. 6).

Montessori defined education from a metaphysical or idealistic paradigm, creating a materialistic and unitarian worldview (Ferrer, 2018). She believed that embodied cognition denotes that our bodies are constructed and function as a dynamic system that develops by responding to the environment (Montessori & Carter, 1936; Lillard, 2016). Montessori (1949) provided examples of the metamorphosis of butterflies where she explained the internal development from egg to adult. She also discussed that the first organ that appears in the embryos of mammals and humans is the heart as it beats to regulate rhythm to provide the cells with what they need to live (Montessori & Carter, 1936). Moreover, Montessori (1949) described embryology and showed that children take control over their development as they grow step by step in their physical life. The importance of presenting such topics in Montessori's theory is to show there are hidden things that we do not see that are working inside creatures, which means the creatures are doing their job alone. In other words, Montessori showed that cells do not make mistakes, but find themselves having control of transformation. She used this example to point out the role of teachers as observers and not directors (Montessori & Carter, 1936; Lillard, 2016).

There are many different theories Montessori believed in. For example, the constructivism theory focuses on shifting the knowledge from product to process (Mavric, 2020). The constructivism theory shares the idea that the development of understanding requires activities to engage learners in making meaning (Mavric, 2020). Unlike behaviorism, which views children as empty vessels to be filled (Lillard, 2016), constructivism views the children's inner sensibilities and mental images based on their interests (Sikand, n.d.). In fact, constructivist teachers build instruction based on the students' styles and skills and encourage students to seek

out personal knowledge of a topic (Mavric, 2020). Moreover, Montessori believed in social construction theory, which is described in Montessori classrooms as when children build a relationship with others toward their learning goals (Mavric, 2020).

Furthermore, Montessori's theory is related to a few other theories. For instance, Montessori theory is associated with the self-determination theory, where the children have self-control; the Montessori theory is connected with the goal orientation theory as under the Montessori theory and education, the children are allowed and encouraged to set their own goals; and lastly, Montessori theory is related to flow theory, as the children are fully connected with task and clear about what needs to be completed from one moment to the next (Mavric, 2020).

In addition to theories, Montessori's philosophy of education was linked to the beliefs of Dewey, Vygotsky, and other naturalists. For example, both Montessori and Dewey believed in freedom, where the school should be the foundation of democracy and the children should construct their knowledge (Mavric, 2020; Sikand, n.d.). Also, Vygotsky and Montessori have commonalities in their theories: specifically, they both "emphasize the importance of the scientific approach in pedagogy and agree that instruction can drive the development of the children" (Mavric, 2020, p. 17). On the other hand, Dewey and Vygotsky had conflicting beliefs about the Montessori philosophy. For example, Dewey believed that the classroom teacher had a greater role to direct the children than the Montessori teacher (Sikand, n.d.). Moreover, Vygotsky emphasized the importance of co-instruction for child development through social environments (Mavric, 2020). However, Montessori alluded to the importance of the individuality and independence of children.

Montessori Early Education

Montessori (1912) established her first school, the Children's House (Casa dei Bambini), in Rome in 1907. It had only one classroom, for children ages 3–6; the room was unfurnished, with no materials, and held 50 children (Isaacs, 2018). Her focus was to provide the children with physical care (e.g., cleaning, measuring, and feeding children; Isaacs, 2018). In the classroom, the children had towels, soap, nails, and toothbrushes (Montessori, 1912). Every month, Montessori (1912) measured the children's weight and length in relation to their development. The requirements for accepting children were that the child should arrive clean and that the parents should cooperate with teachers and show them respect (Montessori, 1912). There were no fees for attending the Children's House, and Montessori used her school to do experiments on the pedagogy and psychology of young children (Montessori, 1912). She focused her research on the child's brain and development and how the brain can function and improve in the early years through the environment (Isaacs, 2018). Based on her observations, she created a basic approach (children learn math, grammar, biology, etc.) and a progressive approach (children learn by choice and discovery, work collaboratively, no grades, with a project focus; Lillard, 2016) .

There are three essential parts of the Montessori method: the environment, the teacher, and the materials (Montessori & Carter, 1936). The Montessori method is based on nine principles as follows: concentration, self-control, movement, choice, collaboration, interest in learning, less adult involvement, order, and no reward or punishment (Lillard, 2016). Montessori subtracted two aids of development: the sensitive period and the absorbent mind (Mavric, 2020). The sensitive period is for children from 0 to 6 years old, with the age of 5 being the last (Montessori & Carter, 1936). Children aged 0 to 3 years are concerned with psychological and

spiritual events that prepare them for consciousness (Montessori & Carter, 1936). In the absorbent mind, children from 0 to 6 years old absorb learning from their environment. Thus, Montessori focused on preparing the environment for the children with the appropriate materials and with the freedom of choice to support their development and growth.

Montessori Classrooms

The Montessori classroom is a multi-age classroom where children of three ages (e.g., 0–3, 3–6, 6–9) work together (Lillard, 2016). The multi-age classrooms also mean that children typically stay with the same teacher for 3 years. This longevity helps the teachers to develop a deeper knowledge of the students, which in return leads to stronger relationships with their families (Debs & Brown, 2017). The multi-age classroom also allows the younger children to learn from the older children and the older children to care about the younger children (Lillard, 2016). Montessori recommended a larger number of students in a classroom with one teacher. The reason for that is to have the children express different personalities, as it might help them in social work (Lillard, 2016). In addition, the Montessori classroom should not include more than one teacher for a primary class. The classrooms should only include non-teaching assessments when needed to encourage the children's independence (Lillard, 2016).

Based on her experiments and experiences, Montessori found that children are diverse in their needs, but have the same need for individuality (Bahmaee et al., 2016). Thus, she created different classroom materials based on children's diverse interests, but all the materials are hands-on to meet the children's inner needs. Hence, Montessori classrooms have five areas, as Ferrer (2018) described: the first is the practical life area where the children's experiences are enhanced in physical coordination, care of self, and care of the environment (e.g., wiping, pouring, etc.). The second area is the sensorial area, which includes materials for children to

experience the natural world and the physical environment (shapes, colors, etc.). The third area is the mathematics area, which enhances the children's mathematical concepts like addition, subtraction, multiplication, division, numeration, and value. Fourth, the language area provides the children with various exercises to develop their basic skills of reading and writing (e.g., words and picture matching, books for reading). The fifth area is the cultural subject area, including history, geography, music, and art (e.g., map puzzle, naming and organizing plants).

Notably, the Montessori classroom system allows children to move freely, choose the activities they are interested in, and choose to work individually or with groups (Lillard, 2016). Additionally, Isaacs (2018) presented nine main characteristics of the Montessori classroom: a multi-age group, freedom of choice, appropriate space for children to move, a calm environment, outdoor activities, plain walls, the appearance of nature, natural materials, and materials that are organized. Children's different learning speeds are supported in the environment because the children control their pace and when they begin and end work on their materials of choice (Bahmaee et al., 2016).

Montessori Materials

Montessori (1949) believed that work encouraged children to become more independent, talk, and respect others. Thus, she created scientific classroom materials based on her observations of young children and her philosophy on the nature of children (Montessori & Carter, 1936). Each Montessori material focuses on one of the children's five senses (hearing, touching, tasting, etc.) and supports the children's overall sensory skills (Lillard, 2016). The materials provide the child with basic principles and structural knowledge in each area of the curriculum, and a special material comes with each lesson (Lillard, 2016).

The Montessori materials are designed for the child's interests by pondering over and glorying in "the new things which are revealed to him in the outside world, and in the exquisite emotions of his own growing consciousness" (Montessori, 1912, p. 361). For example, the Sound Cylinders support the child's sensibilities to sounds in the world (Lillard, 2016). Moreover, the child will learn about "the properties of water and basic principles of magnetism and light as they are introduced to floating and sinking, the three states of water and other science phenomena," which supports the development of skills for the next stage and the outside world (Isaacs, 2018, p. 71). Montessori (1949) believed that educational materials refine the sense of children and provide a possibility to control errors. Examples of Montessori materials are the Sound Cylinders, Rough and Smooth Board, Pink Towel, Brown Stair, and Red Rods that allow the children to put each piece in the right place and control their errors (Lillard, 2016). All the Montessori materials lead children to self-correct and find their mistakes by themselves, just as when the children correct their mistakes when they walk (Lillard, 2016). Montessori did not support engaging children in toys, because putting children in real activities allows them to imitate what an adult does in real life (Lillard, 2016). For this reason, Montessori education supports real activities because it has a real connection to the children's spirit and surroundings (Montessori & Carter, 1936).

One of the difficulties of Montessori materials is that they tend to start from the easiest materials to the most difficult ones; on other occasions, these materials can start from left to right or from top to bottom (Gumiandari et al., 2019). Most of the materials that the children used at the primary level are the same ones that they used at their kindergarten level, but this time around, the materials are used for different purposes (Lillard, 2016).

Montessori Classroom Teachers

Montessori addressed that the first organ that appears in the embryos of mammals and human is the heart to beat in the regulated rhythm to provide the cells with what they need to live (Montessori & Carter, 1936). She mentioned this example to show that there are hidden things that we do not see in the creature of the child, and these creatures are doing their job alone without making mistakes and find themselves having the power for transformation (Montessori & Carter, 1936). In other words, Montessori wanted to indicate the role of the teachers as observers and not directors. The classroom teachers should observe the children and not interrupt them when they are concentrating on their work (Lillard, 2016). However, adults see themselves as always right and want their children to be like them. The adults here are egocentric because they view children in relation to their own experience and judge every action based on their expectations (Montessori & Carter, 1936; Sikand, n.d.). Instead, the adults must learn that the discovery of the children's unconscious and the source of the children's potential must be the focus (Sikand, n.d.). Adults should work on their self-knowledge to find the experiences that affect them when acting with children (Montessori, 1949). As a result, the adults might realize that they lacked freedom in their childhood, which affects their current ways when working with children as they do not provide the children with the freedom they need to grow and develop (Montessori, 1949). For instance, when adults restrict a child's freedom, the adults view their actions as actions of love. This is an unconscious problem that adults should discover, be aware of, and work on overcoming to allow children the freedom they need (Montessori, 1949).

In the Montessori classroom, the children's responsibility is to take care of the environment and the teacher's role is to prepare the environment. The teacher is the main connecting link between the materials and the child; hence, the teacher should have a deeper

understanding of the materials (Lillard, 2016). Gumiandari et al. (2019) presented that when Montessori teachers prepare methods, they must prepare themselves as guidance of the environment, maintain their imagination, pay more attention to the task, and evaluate children by observing their work and their cooperation with others. When the adults direct the children to not use their hands and to not touch the objects, the children have a subsequent desire to use their hands to know and explore things about the environment (Montessori & Carter, 1936). Thus, Montessori teachers should not interrupt the children's work but should rather provide them with freedom to explore, unless they use things inappropriately or distribute them to other children (Lillard, 2016). Since children need secure adult attachment, Montessori teachers should show their worthiness and sensitivity and respond to children's needs (Lillard, 2016).

Section Two

Montessori and Globalization

Montessori believed that all children around the world had the same needs. The major objective of Montessori education is to raise global citizenship through peace by completing and linking various areas of the curriculum together at the preschool, elementary, and secondary levels (Brunold-Conesa, 2019). In addition, the widespread impact is due to "Montessori's flexibility internationally as a model. Within Montessori philosophy, there is a room for tolerance as educators, parents, and physicians advocate numerous applications for supporting a child's development" (Aljabreen, 2020, p. 349). Montessori education supports cultural harmony, which has impacted the growth of Montessori schools internationally. Hence, Montessori is viewed as an international curriculum (Coe, 1998). Another reason for the international spread of Montessori education is the fact that Montessori lived in England, Spain,

India, and the Netherlands as she continued to study children and traveled to other countries to lecture as well as to lead teacher-training programs (Thayer-Bacon, 2012)

Unlike many philosophers who only pointed out theories without connecting their theories with practices, Montessori typically aligned her theory with an applied method, which has furthered the spread of her method around the world (O'Donnell, 2013). The increase in governments' awareness of the importance of the Montessori method for children to have a higher quality of teaching and learning is another reason behind the international spread of Montessori education (Isaacs, 2018). Additionally, some parents view Montessori education as a better educational approach when compared to grading and standardized testing-based education (Isaacs, 2018).

Educators worldwide should consider the child's understanding, interests, and needs when adapting an educational method from one culture to another (Aljabreen, 2020). The Montessori method was adopted in Europe, Japan, and Indonesia in the past (Sikand, n.d.). Now, there are over 22,000 Montessori schools around the world in 110 countries (Hiles, 2018).

On the other hand, some countries found some challenges when adapting the Montessori approach, as some aspects of the approach contradict their culture (Liao, 2020) and their educational systems (Kai, 2009). Moreover, some parents prefer testing-based education to follow up on their children's academic progress (Kotob & Antippa, 2020). Government regulations in some countries might prevent the use of Montessori in public schools (Kai, 2009). The Montessori requirements of a teacher training program and classroom space have also limited the growth of Montessori schools (Liao, 2020). As such, Montessori education is restricted from growing in countries such as China (Liao, 2020), Japan (Kai, 2009), and Lebanon (Kotob & Antippa, 2020).

Montessori in Saudi Arabia

ECE in Saudi Arabia does not adapt research ideas without consideration of Islam, Saudi culture, "and the particular needs of Saudi Arabia" (Aljabreen & Lash, 2016, p. 318). Now, as a part of the Saudi 2030 vision, the Saudi MOE has planned to increase the enrollment rate in kindergarten from 17% to 95%, which allows for the establishment of more Montessori private schools (MOE, n.d.). Moreover, the Montessori curriculum can be modified to be implemented internationally and educators can involve different applications, as well as cultural and religious practices (Aljabreen, 2020). Montessori schools might be aligned with the Saudi context, as it would allow for a combination between the Montessori method and Islamic methods to maximize "building character education in early childhood" (Gumiandari, 2019, p. 134). Kai (2009) stated that "Montessori education should be adapted to promote the formation of a synthesized balanced person. This would be achieved by combining the elements of Eastern and Western culture with her holistic pedagogical anthropology and the unity of man" (p. 674).

As previously noted, the first Montessori school in Saudi Arabia was Asrary Schools, which targeted high-income families, but in the following years, Montessori schools became more accessible to the middle class (A. Albasim, personal communication, June 18, 2021). Parents and school investors are the key supporters of the growth of Saudi Montessori schools. Further, since families in Saudi Arabia prefer a formal education with a written curriculum, even at the early childhood level, the Montessori method works best in comparison to Reggio Emilia and Waldorf (Aljabreen, 2020).

There are some barriers to expanding Montessori schools in Saudi Arabia. For example, the Saudi MOE still limits the establishment of Montessori schools to private schools for children from 0 to 6 years old. The reason is that the MOE wants to ensure that all Saudi schools

follow their curriculum and policies (Rajab, 2016) and ensure that all children meet their standards and requested skills. Another barrier is that not all the schools that call themselves "Montessori" apply the Montessori method in the right way. These schools use the Montessori name to raise the school admission fees and to attract families' attention. Currently, in Saudi Arabia, there are only a few Montessori teacher training centers, including Daem Training, whose courses are recognized by the MOE, and Ibn Khaldun Schools, which provide certified Montessori courses (H. Aljad, personal communication, June 22, 2021). Thus, if the number of Montessori schools is to expand, it is essential to also increase the number of teacher training programs.

Montessori in Different Countries

Many countries around the world have adopted Montessori education for its flexibility to involve different cultures and religious practices. This flexibility stems from Montessori's travels around the world. As she traveled, she influenced education in many countries, and in return, she was able to apply her educational theory in many countries. For example, she traveled to India and influenced Indian education as she trained teachers and developed her educational method for children ages 6–12 (Sikand, n.d.). "Students across India had started schools and promoted Montessori education since 1913" (Sikand, n.d., p. 103).

Moreover, Montessori returned several times to the United States and influenced education there. In 1915, she opened an observation classroom at the San Francisco World's Fair (Thayer-Bacon, 2012). Notably, interest in the Montessori method declined in the United States during the 1920s (Jor'dan, 2017) when Kilpatrick, Dewey's student, wrote that Montessori paid too much attention to individualism and her work was based on psychological theory that was 50 years behind the times (Thayer-Bacon, 2012). However, Montessori continued developing her

method, and after World War I, peace education was integrated into Montessori education (Liao, 2020, p. 181). In 1950, Nancy Rambusch, an American teacher, brought back interest in the Montessori method (O'Donnell, 2013). Rambusch added several new activities to the Montessori program for American children (O'Donnell, 2013). It was revolutionary to adapt the Montessori method to education in the U.S. because it was child-centered instead of teacher-centered; however, readapting the Montessori method in the U.S. encouraged children's cooperation and interest in learning (Liao, 2020).

As for Albania, Montessori schools have been established there because the new educational system aims to develop an independent and capable child which aligns with Montessori principles (Leka, 2018). Moreover, a study has shown that Aboriginal Australian children made positive results in the Montessori education setting because the key characteristics of traditional Aboriginal child-rearing techniques are autonomy and independence, and learning by observation is the key component of Aboriginal education. All are accommodated by the Montessori environment (Holmes, 2018).

Montessori also attracted Japanese educators for its focus on freedom, individuality, and child-centered ideas. These concepts were important when the Japanese identified a liberal movement that encouraged democracy (Kai, 2009). Moreover, some Japanese teachers experienced difficulties implementing the Froebel style, as they did not understand the idea based on the Froebel style philosophy; this caused them to adopt Montessori education instead (Kai, 2009). However, the Japanese government does not permit the use of Montessori in public schools; this has contributed to the unpopularity of Montessori in Japan. Unlike in the United States, there are no public Montessori kindergartens and elementary schools in Japan because the

public schools are organized by the Ministry of Education, Culture, Sports, Science, and Technology (Kai, 2009).

In Lebanon, Montessori education was adopted to bring peace after a long civil war (Kotob & Antippa, 2020). The developed peace comes through environmental awareness, self-awareness, cultural awareness, and community awareness in their students (Kotob & Antippa, 2020). However, the Montessori methodology was found difficult to accept in Lebanese society because parents realized that Montessori did not provide homework or grades. Parents were not able to follow up with their children's academic progress (Kotob & Antippa, 2020).

It was also challenging to apply the Montessori method in China because of the needed space, special teachers' training program, and mixed-age classrooms, which are rarely accepted in China (Liao, 2020). In addition, Chinese education is more of a "cramming" education to prepare students for the college entrance examination (Liao, 2020). The Montessori method also conflicts with Chinese traditions where adults have authority over children and use the reward and punishment system (Liao, 2020).

Montessori exists internationally because many countries around the world found that it filled an educational gap and met educational needs in their country. However, Montessori education is not popular in some countries that find it against their cultural and educational system. Also, in a given country, a Montessori school might be successful in one context but unsuccessful in another context. This might be due to variations in the teachers' training programs and the quality of the teachers in that region's schools (Gross & Rutland, 2019; Liao, 2020).

Montessori and Islam

Even though the Montessori method was introduced by a Catholic, some Montessori practices and principles have harmony of value with the principle of Islamic psychology (Gumiandari et al., 2019). Thus, Montessori education has been adapted in many Muslim countries such as Saudi Arabia, Qatar, Kuwait, Oman, Bahrain, the United Arab Emirates, Lebanon, Morocco, Egypt, etc. There are several reasons for the harmony found between Montessori education and Islam. First, Montessori education does not advocate any specific faith or religion; instead, it uses the concept of Cosmic Education to advocate for and support spirituality (Gross & Rutland, 2019). The Montessori ideas of spirituality can refer to education for democracy and cultural diversity (Gross & Rutland, 2019). The second reason comes from some similarities between Islamic philosophy and Montessori philosophy. For example, Abdullah et al. (2018) found that Montessori and Al-Ghazali, an Islamic philosopher, both believed in "child education as the trust from God and therefore children should get the respect they deserve from the adults and be educated accordingly" (p. 470). Also, Fajarwati (2014) found that educators should design Islamic educational programs based on the children's developmental level, which aligns with Montessori allowing children to work on activities based on their abilities. Al-Ghazali and Montessori agreed that there is a sensitive period where children have different characteristics and abilities before the age of 7 and educators should prepare the environment for children to be self-learners (Abdullah & Nazilah, 2018). However, Al-Ghazali encouraged educators to reward children for good manners, which is not supported by Montessori philosophy (Abdullah et al., 2018). For example, Montessori "implied that a teacher does not compliment children as the goal is to gain self-reward and intrinsic motivation" (Abdullah et al., 2018, p. 469). However, Al-Ghazali stressed rewarding children and praising

children for good manners to make them happy (Abdullah et al., 2018). Moreover, Muslim parents are allowed to correct their children's mistakes, which is not a part of Montessori philosophy (Gumiandari et al., 2019). The third reason is that Montessori philosophy has room for various educators to support different applications of children's development and religious practices (Aljabreen, 2020). Thus, when the Muslim countries consider adopting an educational method, they tend to make sure to integrate a method that aligns with what Allah SWT asks them to do and what the Prophet Mohammed (PBUH) guides them to do (Gumiandari et al., 2019). However, Gumiandari et al. (2019) explained some differences between Islamic psychology and Montessori principles. For example, in the Quran, God presented that individuals should be treated based on their nature. Therefore, children must be educated differently based on their nature, which is different from Montessori practices that provide freedom for all children equally (Gumiandari et al., 2019). The fourth reason is that Montessori supports repetition in learning and practicing activities, which are supported by Islamic practices. For example, Islam encourages repeating good habits as it requests Muslims to pray five times a day and always instructs people to speak with kindness (Fajarwati, 2014). However, Islamic education is stronger in its foundation, as it covers broader aspects of the development of human life (Fajarwati, 2014).

Section Three

ECE in Saudi Arabia

This section will provide an overview of education in Saudi Arabia with a focus on ECE. I will begin with the history and then transition into discussing the ministries that support the early childhood field. Following that, I will discuss the curriculum and the roles of early childhood teachers. In the end, I will present the 2030 vision and plan for ECE.

The History of ECE in Saudi Arabia

In 1966, the first public preschool, a preschool exclusively for boys, was opened in Riyadh by the MOE (Badawood, 2006). In 1980, the General Presidency for Girls' Education, which had previously been responsible for only girls' education, was entrusted with the responsibility for preschool education for both boys and girls (Badawood, 2006). After establishing the first preschool and kindergarten classes in 1975 under the care of the Presidency for Girls' Education, many Saudi educators began to realize the need for more children's care centers and educational programs in early childhood settings (Rabaah et al., 2016). One of the problems that faced the Presidency for Girls' Education was the lack of trained and qualified early childhood teachers and educators. Thus, in 1986 some Saudi and Girls' Colleges of Education offered a 4-year teaching program to provide higher quality teachers to support the early childhood settings in the country (Badawood, 2006). For example, "the Gulf Girl Association and King Saud University programs set a solid standard for Saudi ECE; today, many other colleges and universities offer excellent training for early childhood educators" (Aljabreen & Lash, 2016, p. 317). Children in preschools are taught only by female teachers, which restricts all male educators from working inside the early childhood schools. In the past, early childhood schools were for children under the age of 6. However, the MOE set up a new rule to extend the early childhood level from birth to the third grade.

The MOE and ECE in Saudi Arabia

In 1953, the Directorate of General Education was changed to the MOE, which was considered the most significant step in the development of education in Saudi Arabia (Badawood, 2006). The MOE was developed with a commitment "to promoting the interests and needs of educators and students" (Rabaah et al. 2016, p. 2). The MOE in Saudi Arabia has the

power to ensure that all Saudi schools follow its curriculum and policies, which sometimes limits teachers' rights to apply new ideas and adopt new methods. Some teachers in preschools find it challenging to comply with the MOE rules and regulations, as "their training and knowledge of child-centered teaching and learning put them at odds with a system that allows little or no autonomy for teachers or children" (Rajab, 2016, p. 7). Now, the MOE is more flexible and has allowed private schools to apply different educational methods in early childhood settings.

The HRSD and ECE in Saudi Arabia

Private schools and child care centers may have more flexibility in adding new strategies and curricula, but they still have to abide by the general regulations of MOE or the HRSD. The HRSD, along with the MOE, shares responsibility for ECE in Saudi Arabia, and they aim to support working mothers by providing safety and care for children (ages 0-10) in hospitality centers (HRSD, 2019). These hospitality centers do not have to provide any formal education; rather, they focus on delivering optional, free, and fun education that aligns with Arabic culture and Islamic values (HRSD, 2019, p. 22). The HRSD offers permission to implement and adapt different methods that provide free education. Thus, some school investors choose to establish Montessori schools under the HRSD and not MOE to have fewer rules and regulations when implementing the Montessori method in their schools. Therefore, HRSD was one of the reasons for increasing the number of children's hospitality and care centers in Saudi Arabia.

The Early Childhood Curriculum in Saudi Arabia

The Saudi early childhood curriculum is national, and as a result, all the Saudi cities have the same curriculum for all children. The curriculum includes a Royal Decree "with the cooperation of the General Presidency for Girls' Education . . . the Arab Gulf Program for United Nations Development Organization (AGFUND) and the United Nations Educational,

Scientific and Cultural Organization (UNESCO)", which is designed to encourage the teaching materials in kindergarten schools (Rabaah et al., 2016, p. 6). "The curriculum integrates the educational and psychological theoretical perspectives with the practical everyday experiences of teachers in schools in a standardized intellectual and educational framework" (Badawood, 2006, p. 18).

The Saudi early childhood curriculum is shaped by the Islamic religion and the Saudi political system. Therefore, some teachers find challenges in adopting new strategies in their classrooms that are not prescribed by the system. The foundation that is most important to education in Saudi Arabia is to have faith in "Allah as a God, in Islam as a religion, and in Mohammed (peace be upon him) as a prophet and a messenger" (Rajab, 2016). Thus, the Islamic religion is confirmed at all grade levels in Saudi Arabia. The Quran and the *Sunnah* (the Prophet Mohammed's words) are some of the leading educational goals in the Saudi education system (Rabaah et al., 2016). Hence, Saudi educational policy holds students to the following criteria: "1) representing praiseworthy Islamic morals in oneself and with others, 2) positive interaction with other cultures, 3) and wise and honest interaction with others" (Rabaah et al., 2016, p. 3).

The Saudi ECE curriculum went through many changes and improvements (Khomais & Gahwaji, 2019) to include basic life learning skills, important values, and the implementation of a national strategic plan for young children (Al-Mogbel, 2014). In 2015, the Saudi MOE "commenced a huge reform for the whole education system developing EC curriculum for Saudi practice" (Khomais & Gahwaji, 2019, pp. 25–26). The preschool curriculum in Saudi Arabia focuses on children's development based on their learning style when organizing the environment and planning activities (Aljabreen, 2017).

ECE Teachers in Saudi Arabia

Many preschools in Saudi Arabia need more highly qualified teachers and supervisors, because "the well-organized and enthusiastic instructor will provide a greater student response than the routine, reserved one" (Eldakak, 2010, p. 9). Presently, there is a "shortage of well-trained and qualified teachers in many countries, including those of the Arab world" (Aljabreen & Lash, 2016, p. 318). Thus, some universities and colleges in Saudi Arabia offer programs to prepare teachers to teach different subjects for all grade levels, including the early childhood level. Saudi early childhood teachers in training learn about theories and information regarding child development as well as positive attitudes for working with children (Aljabreen & Lash, 2016). However, the schools that are preparing early childhood teachers cannot operate alone; they should engage specialists to consider Saudi culture as they design the teacher education program (Aljabreen & Lash, 2016).

Saudi public preschool teachers' roles are to teach instructional lessons, create worksheets, manage the children's independent practices, and direct the children in various educational and religious activities to complete the MOE goals and objectives (Aljabreen, 2017). The teachers' responsibilities are not only to support the children's academic learning but also to advance the children's personal, emotional, and physical development and mental achievements. Additionally, teachers are expected to aid children in their individual and social growth (Aljabreen, 2017). Unlike the public preschool system, teachers in the private education sector have more authority to develop the curriculum and create activities that support children's interests and learning development.

Saudi 2030 Vision of ECE

The Kingdom of Saudi Arabia is working toward the enactment of the Saudi Vision 2030, a strategic reform initiative to diversify the economy through several public-sector improvements, including the enhancement of ECE. In particular, one of the educational plans is to increase children's enrollment in kindergarten from 17% to 95% by 2030 (MOE, n.d.). One of the Vision 2030 plans is to establish more private kindergartens in Saudi Arabia; Vision 2030 indicates that by the year 2025, more than 900 new private schools will be established (Strategic Gears Management Consultancy, 2018). In a nutshell, the Saudi Vision 2030 considers the improvement of access and the quality of education to be key.

Chapter Summary

In this chapter, I have discussed Montessori theory and classroom main practices in early childhood settings. I drew attention to Montessori's philosophy, which focuses on the inner needs of children and their need to work in prepared environments to grow and develop. This chapter also presented the globalization of Montessori education and an in-depth discussion on the implementation of Montessori in Saudi Arabia and around the world. The last section presented an overview of ECE in Saudi Arabia and the Saudi Vision 2030.

The following chapter will outline the research design for this study, the study context, and the participants. The chapter will then discuss the methods used to collect and analyze the data. Following that, the trustworthiness and ethical considerations of the study are discussed. The chapter is then concluded with the study timeline.

CHAPTER 3: METHODS

The purpose of this study was to reach a better understanding of Montessori teachers' practices in Saudi Arabia. My research question was "How have the teachers in early childhood Montessori classrooms in Saudi Arabia adapted the Montessori method to align with Saudi socio-cultural and Islamic practices?" I chose to use "how" in my research question because it provided a sharp focus that facilitated later analysis and understanding (Simons, 2009). Moreover, the "how" helped to develop a descriptive case study with open questions, which allowed for the documentation of the case (Simons, 2009).

Building on Rogoff's socio-cultural theory, I discuss in this chapter my methodological approach, the study's context, the data sources, and the data analysis process. I then discuss the study's trustworthiness and ethical considerations. I conclude the chapter by presenting the study timeline and a summary.

Research Description

For this project, I conducted a descriptive, qualitative multi-case study to investigate how four teachers adapted the Montessori method to align with Saudi socio-cultural and Islamic practices in two classrooms in Saudi Arabia. Stake (1995) stated that a "case study is the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances" (p. xi). In my study, each teacher was a single case. I chose the case study research design because its fundamental goal is to conduct an in-depth analysis of an issue within its context (natural setting) with a view to understanding it from the perspective of the participants (Harrison, 2017). It was important for my study to involve open-ended interviews

with teachers to document their experiences. These data helped to answer the research question and facilitate a detailed analysis of teachers' perspectives on Montessori education in Saudi Arabia.

In case studies, the data are often unstructured, the analysis is qualitative, and the aim is to understand the case itself rather than to generalize the findings to a whole population (Simons, 2009). I used a descriptive case study design to describe the natural phenomena that occurred within the data in question: that is, the different adaptation practices and experiences of the teachers (Zainal, 2007). I made sure to describe data as they appeared (Zainal, 2007).

Simons (2009) stated that observation, interviews, and documentation are the most popular methods used in qualitative case study research. In my case study, I conducted observations and interviews to collect data related to the teachers' adaptation of Montessori materials and their activities aligned with Arabic culture and Islamic practices. I also investigated the teachers' perspectives on and experiences with the implementation of Montessori education. I used thematic analysis to identify codes and themes within the data to reach the findings of the study.

Case Selection

There is no guideline to determine the minimum sample for qualitative research, but there are some factors that can help determine the sample size, such as the research method and the purpose of the sampling (Sandelowski, 1995). Qualitative approaches involve purposeful sampling, which can include the selection of typical or exemplary "information-rich cases" for in-depth study (Sandelowski, 1995). Such case studies focus on small samples to examine real-life phenomena without making generalizations (Taherdoost, 2016).

In this study, I derived my sample through the use of nonprobability sampling, which measured the study's qualitative research design (Taherdoost, 2016). "The distinguishing character of non-probability sampling is that subjective judgements play a role in the selection of the sample, in that the researcher decides which units of the population will be included in the sample" (Tansey, 2007, p. 14). Teddlie and Yu (2007) presented that the major focus of the investigation with nonprobability sampling is an individual case or a specific group of cases, rather than an issue. In my study, nonprobability sampling allowed me to select which teachers to interview and observe because the sample did not need to be random and generalized to the population (Taherdoost, 2016; Tansey, 2007). Moreover, the nonprobability sampling enabled me to address specific purpose related to research questions in finding in-depth information regarding how teachers aligned the Saudi culture and Islamic practices in their Montessori classrooms and how their cultural backgrounds and involvement in their community shaped their adaptation and perceptions (Teddlie & Yu, 2007).

Selecting the School

The school in my study was located in Dhahran, Eastern Province, Saudi Arabia. I chose Dhahran because it is where I was born, taught, and advised pre-service teachers. My experience in Dhahran provides me with a deeper understanding of the community's expectations for education and insights into the local school culture. Decades ago, many people moved from different Western countries to Dhahran to work with the company Aramco, at which point the city started establishing private schools and adopting different educational methods than were used previously. Thus, the teachers and families in Dhahran have previous experience with private schools and are culturally accepting of the implementation of new programs and methods for educating young children.

I found a few Montessori schools in Riyadh by searching on Google for "Montessori schools in Saudi Arabia." However, Riyadh is around a 5-hour drive from my home. Thus, I searched for "Montessori schools near me." That search returned one school that applied Montessori for 2 hours a day with limited Montessori materials. I later communicated with ECE teachers who provided me with more schools that did not appear in the online search because their names did not include "Montessori." I also extended my search by asking educators and parents of children in the early childhood schools I had discovered, as well as WhatsApp groups, my public Twitter account, and Snapchat accounts that followed parents, teachers, and early childhood educators to find more schools in the Eastern Region of Saudi Arabia.

I ultimately found information on four schools that implemented the Montessori method. I communicated with these schools' administrators or coordinators to ask how they had adapted the Montessori program. I also looked at their websites and pictures on Instagram to see if the classroom materials, spaces, and environments fit Montessori criteria. Three of the schools either mixed Montessori with different programs in their classrooms, rejected my request for information, or did not respond when I asked how they implemented Montessori education in the school or if they followed Montessori organizations.

At Hassan School, the principals and teachers were cooperative with me, the school was licensed by the HRSD, and the students spent their days in Montessori classrooms, along with an outdoor recess. Moreover, Hassan was the only institution in Dhahran with a principal certified by NAMC for the 0–3 and 3–6 programs. The classroom shelves, space, and materials were all designed according to the Montessori standard: each room had five Montessori centers, and each center was filled with Montessori materials. The classrooms were wide, allowing the students to move between the centers without disrupting each other's work. Therefore, I chose this school

because I considered it to have the best implementation of the Montessori program in my location.

Teachers

My study had four cases, corresponding to four Saudi Montessori teachers. After I selected the school, as described above, I selected the teachers when I found that they were Saudis and trained in Montessori by the school principal. The teachers were also encouraged to apply the NAMC curriculum and advised to include Arabic culture and Islamic principles in their classrooms. After I communicated with the principal, I received oral agreements from the four teachers to participate in the study. The rationale behind selecting these four teachers and not using a random assignment was that they were the only Montessori teachers in that school. I did not consider fewer than four participants to be enough data for my study.

All the teachers were women, as Saudi kindergarten teachers are required to be female. They worked in two Montessori classrooms for children aged 3–6, two teachers to a room. Each teacher in a classroom played a different role, teaching and working with the children on different subjects simultaneously. Because each teacher played a different role in the classroom and taught different subjects, it was important to have each teacher as a single case to collect data based on their individual experiences and practices. Moreover, I aimed to explore how the teachers' backgrounds and religious and cultural experiences influenced their practices in the Montessori classroom.

The teachers' participation was voluntary. Six weeks before my study, I sent an email to the teachers in the Arabic language to present the purpose and significance of the study, the Institutional Review Board (IRB) documentation, and my contact information. After I received IRB approval and the participants provided me with official agreement, I arranged dates and

times for observations and interviews with the school advisor depending on their schedules and teachers' preferences.

Data Collection

I collected data for this case study using interviews and observations. Using two tools enabled me to "interview several people in the setting to pursue antecedent meanings and examine these in relation to observations made at the time" (Simons, 2009, p. 18). The interviews provided me with a deeper understanding of the teachers' backgrounds and their perceptions of implementing Montessori in their classrooms. Moreover, they allowed me to ask questions that arose from the observations as well as questions about the teachers' implementations of Saudi culture and Islamic practices in the past. The observations allowed me to connect the teachers' backgrounds and perceptions with their practices in the Montessori classrooms. In the following subsections, I provide more details about how and why I conducted the interviews and observations in my study.

Semi-Structured Interviews

An interview is a conversation between the researcher and the participants that provides the researcher with rich qualitative data through which to obtain a deeper understanding of the participants' experiences and perceptions (Castillo-Montoya, 2016; Ritchie & Lewis, 2003). I conducted interviews to find the core issues of my case "more quickly and in greater depth, to probe motivations, to ask follow-up questions, and to facilitate individuals telling their stories" (Simons, 2009, p. 2). Simons (2009) stated that "interview time length varies depending on the availability of interviewees, the precise purpose of the interview, and the nature of the topic" (p. 7).

My interviews were semi-structured. Ritchie and Lewis (2003) presented that the semi-structured interview takes place when the "interviewer asks key questions, in the same way, each time and does some probing for further information, but this probing is more limited than in unstructured, in-depth interviews" (p. 111). Rapley (2001) concluded that semi-structured interviews "minimized the extent to which respondents had to express themselves in terms defined by the interviewers and encouraged them to raise issues that were important to them. It was thus particularly well suited to . . . discover respondents' meanings and interpretations" (p. 306).

Interview Procedures

All the interviews were one-on-one because I was examining each teacher as a separate case. Moreover, each teacher played a different role in the classroom, such as teaching Arabic or English. Thus, it was important to meet them individually to collect data based on their individual teaching experiences, practices, and perspectives. I conducted a total of eight semi-structured interviews: one interview of each teacher pre-observation, and a second post-observation. I asked several key, open-ended interview questions to allow them to express and describe their experiences and perceptions.

The first interview was conducted after the participants signed the consent form and were presented with the IRB approval. Next, I communicated with the school's administrator to obtain the teachers' preferences for the day and time of each interview. I provided them with the option to meet in person or on Zoom. In-person interviews were conducted on-site in the classroom after the children's dismissal. I also conducted them in the teachers' meeting room when the school needed to clean and sanitize the classrooms. However, three out of eight interviews were

via Zoom, due to teachers' schedules, COVID-19, and the school's planned move to a different location a few weeks after my study.

In both situations, I audio-recorded the interviews after the participants agreed to the recording. I also used paper and a pencil or my laptop to record participants' answers. The act of writing in the field has some important benefits, such as recording body language and breaking eye contact between the interviewee and interviewer, which might allow for more personal space and comfort (Simons, 2009).

I started the interview by giving an overview of the interview scope and goals and then welcomed any questions and concerns they had regarding the research and the interview. Each interview took 50 minutes to 1 hour. This time covered my research questions and worked with the teachers' schedules because they left school 1 hour after the children's dismissal. However, the first participant's second interview took more time because I was not yet sure how long each interview question would take the participants to answer. Thus, for the first participant, the first interview lasted 50 minutes and the second approximately 90 minutes. After that experience, I decided to pull up the first few questions from the second interview and limit the questions that had the same focus in the interview. I then ended up interviewing the rest of the participants for approximately 55–60 minutes each.

The First Interview

I started the first interview with an ice-breaking activity (see Appendix A) and talked about subjects other than the research to build a relationship with the teachers (Simons, 2009). After that, I briefly explained myself and my background and described how the research might affect Saudi ECE. I also presented the interview procedures and explained their right to stop at any time or retract any information they were not comfortable with publishing (Taherdoost,

2016). These techniques helped make the teachers feel more comfortable and build a trusting relationship with them, which led them to become more open to answering the questions (Taherdoost, 2016).

The first interview included three parts (see Appendix A). The first part explored the teachers' backgrounds and life experiences, such as education and work experience. My goal was to access personal factors that might influence how they implemented Saudi socio-cultural and Islamic principles in the classroom and help me understand their experience of their classrooms' adaptations.

The second part inquired about the teachers' participation in family and community cultural and religious events, their perceptions of their schools, the HRSD rules and regulations, and the Montessori program. For example, I asked about what Montessori meant to them and how the school's rules influenced their classroom practices. The second part was essential because it provided me with a deeper understanding of the surrounding culture that shaped their perceptions and practices.

The third part gathered general information about their classrooms, students, and daily routine. This was to provide me with prior knowledge and a better understanding of the context before I observed the classrooms. The semi-structured nature of the interview allowed me to extend the questions and ask for more clarification when needed. I concluded the interview with a question that allowed the participants to extend the information when they needed it (Castillo-Montoya, 2016).

I extended the data as soon as I finished each interview, as the discussion was fresh in my mind, allowing me to make accurate additions. I used approximately double the interview time to transcribe data. As I went through the interview transcript, I analyzed the data, highlighted

missing information, and formulated questions to ask in the second interview. I stored the hard copy of the data on a locked desk in my home and I transformed the data on my secured laptop.

In summary, the teachers' answers in the first interview provided me with a deeper understanding of their surrounding culture, training, work experiences, and perceptions about Montessori education (see Appendix A). My understanding of these teachers supported my classroom observations, allowing me to identify how they aligned Saudi socio-cultural and Islamic practices in their classrooms.

The Second Interview

The second interview included more open-ended questions about the teachers' experiences and practices (see Appendix B). The teachers explained how they adapted the Montessori method to develop their classroom materials and activities and incorporate Saudi culture and Islamic practices. I also highlighted in my notes the teachers' social norms and traditions when they described their perceptions.

Moreover, the second interview allowed me to ask questions that supplemented the first interview and the observations with important details I missed. For example, I added questions to get a deeper understanding of the background and surrounding culture that shaped their practices in the classroom. I also included a few questions that captured specific teachers' cases in the classroom to understand the teachers' perceptions of why they implemented such practices. I concluded the interview with a closing question that was easy to answer and gave the participants the opportunity to share any additional information (Castillo-Montoya, 2016). After I conducted the second interview, I transcribed the answers and recorded my field analysis in the same way as the first.

In summary, the second interview evaluated the teachers' roles and their adaptations of materials, activities, and classroom practices to include Saudi socio-cultural and Islamic principles. It also allowed me to ask further questions derived from the first interview and the observations.

Interview Protocol

Castillo-Montoya (2016) presented a four-phase process for developing and refining an interview protocol: "interview questions align with research questions, constructing an inquiry-based conversation, receiving feedback on interview protocols, and piloting the interview protocol" (p. 811). In this study, I used the first three phases. When I was writing my interview questions, I ensured that each aligned with my research question. However, I did not create "interview questions directly from the research question without attention to the contexts shaping participants' lives including their everyday practices" (Castillo-Montoya, 2016, p. 813). Rogoff et al. (1995) believed that, when conducting research through a socio-cultural framework, the researcher should draw out social and cultural practices when analyzing the case. Therefore, the first interview questions requested some general information to support my understanding of the teachers' backgrounds and cultural environments. My interview protocol also examined the practices of teachers within the Saudi context (Rogoff et al., 1995). For example, I asked the teachers to talk about the social and contextual factors that shaped their perceptions of adapting Montessori education to Saudi Arabia. For the second phase of refining my interview protocol, I constructed an inquiry-based conversation with my participants where I would use gestures that indicated understanding, ask clarifying questions, avoid interrupting them, use their answers to transition to the next question, and communicate any intentions to follow up before the end of the interview (Castillo-Montoya, 2016). The third phase of refinement was receiving feedback on

the interview protocol from my committee members to "enhance its reliability—its trustworthiness—as a research instrument" and to make sure that the interview questions were understandable and related to the research objectives (Castillo-Montoya, 2016, p. 824). Castillo-Montoya's interview protocol refinement method might strengthen the reliability of interview protocols in qualitative research and improve the quality of data collection.

Simons (2009) states that the "role of the interviewer is to listen actively rather than question or answer questions" (p. 6). Thus, when I asked questions, I was an active listener and allowed my participants to answer the questions. I did not rush or interrupt the teachers. At the same time, I controlled the discussion and the time, especially when the teachers wandered off topic or provided unnecessary information as they were answering the open-ended questions.

After I conducted each interview, I transcribed the interview manually from the audio recording. "The process of transcription" was an "excellent way to start familiarizing" myself with the data and develop a deeper understanding of my participants' responses (Braun & Clarke, 2006, p. 17). After that, I translated each interview transcription manually from Arabic to English and checked the English transcripts against the Arabic transcripts. Then, I had a bilingual professional translator check my translation accuracy. I made sure to save the Arabic and English transcripts in files where each participant had a separate folder on a secured laptop to be more organized for the data analysis.

Observations

I also used another popular method of qualitative research: observation (Simons, 2009). Harrison (2017) presented that interviews and observations are primary and favorite data collection methods. The researcher may use observations to identify classroom objects, define participants' actions, and describe the meaning of the situation (Emerson et al., 2011). In my

study, I observed the teachers in their classrooms to paint a full picture of the classroom setting, which was not obtained in the interviews (Simons, 2009). I observed the teachers working with children aged 3–6, as the school only provided Montessori classrooms for children at this age. Simons (2009) suggested that observations that take place over time are better than those occurring in one instance. He stated that "we may need to be a participant–observer over some time to develop appropriate meanings and insight in any particular setting" (Simons, 2009, p. 18).

My observations lasted a total of 16 days in both classrooms, where I observed each teacher four times. I observed the teachers from 7:50 a.m. until the end of the day at 12:30 p.m. The total observation comprised approximately 70 hours to reach a thick description of the four teachers' practices and the materials they used. I planned for a range of days to allow me to observe for more hours when needed, as the teachers presented different activities on different days. However, when I analyzed the first participant, I found that much of the data collection was repeated and similar teacher actions were captured many times in the classroom. Thus, for the other three teachers, I decided to exclude the final observation, which helped me to focus more on the meaning of the data and dedicate my full time to the analysis rather than being distracted by the repeated information. Thus, the observations that I analyzed lasted a total of 13 days in both classrooms, where I observed each teacher three to four times. The total analyzed observations comprised approximately 56 hours. I used descriptive field notes to describe the meanings of the situations, the teachers' actions, and the classroom materials (Emerson et al., 2011).

Observation Procedures

After the first interview, I reviewed the observation schedule and discussed the details of the study with the teachers. I made it clear to them that all the observations would take place in the classroom, that I would not judge their teaching practices or interact with the children, and that I would keep these observations confidential. I answered their questions and reminded them what time I would start the observation.

During each classroom observation, I sat in a place where I could see the teacher and the children. I observed how the teachers adapted Montessori practices and how they presented Saudi and Islamic practices in the classroom. I highlighted the verbal and oral activities, interactions, and materials that were related to Saudi socio-cultural and Islamic principles. I did not involve myself in the classroom lessons, and I did not talk to children or provide them with instructions. I used a folder and a pen to write down the data as soon as I observed them. In some observations, I brought my laptop to write down the data in a Word document. I also took pictures of the classrooms and materials, which helped me describe the materials in my jotting notes. I have included a few pictures in this dissertation to help readers visualize the setting and materials.

Observation Protocol

Stake (1995) stated that

> During observation, the qualitative case study researcher keeps a good record of events to provide a relatively incontestable description for further analysis and ultimate reporting. He or she lets the occasion tell its story, the situation, the problem, resolution, or irresolution of the problem. (p. 62)

Moreover, based on Simons' (2009) suggestions for conducting observations, I provided my readers with the experience of what it was like to be on-site and observing. I started by recording the field, describing the teachers' actions as they welcomed the children into the classroom. I then watched the teachers' teaching practices, starting from the class's morning circle. I focused on the Islamic and Arabic cultural practices such as reading the Quran. I also observed the teachers' presentation of cultural and religious materials in the practical life area and in circle time.

I made sure to take photos of the materials related to Islamic practices and Saudi culture. The reason for taking photos was to remember each material and describe it in detail when I had more time after the classroom observation. The objectives of these materials supported my understanding of cultural and religious involvement in the classroom, and they also clarified the school culture that led the teachers to choose such materials. For example, I observed the teachers making breakable materials, such as glass cups, available for children in the classroom. During periods of work, I observed the teachers' roles, such as directing the children to a certain behavior or guiding them to work on a certain activity, and when they encouraged them toward self-learning. I also observed how and when they assessed the children and for what reason. For example, I described the evaluation steps that the teachers used to measure each child's progress. I recorded the skills that the teachers used to assess the children. Moreover, I observed the teachers as they communicated with the children and applied religious and cultural practices in front of them, such as modeling religious supplications.

In addition, I recorded whether the materials and classroom environment enabled the children to work independently and freely and promoted self-learning or self-correction. I looked at the classroom space and the set of shelves that encouraged the children to move and choose a

place to work. I made sure to balance recording the children's role in the classroom and the teachers' practices. For example, as I observed the teachers, I recorded the role that they provide the children in the classroom environment. Also, I recorded the children's roles when the teachers observed them in the classroom without providing intervention or guidance, such as when the children worked during the morning cycle and the teachers spent time observing and working with small groups of children. I recorded the role of the children in the classroom as they moved, chose, and worked on the materials independently.

While I observed, I wrote quick "jotting notes" to describe what I saw and quote some of their conversations. Following the jotting, I found a quiet place in the school to extend my notes and capture rich details to reach thick descriptions. I also created some analytical memos (Emerson et al., 2011), which included my thoughts and concerns: for example, I recorded notes when I interpreted the meaning of my participants' body language or described the feeling of a situation. I scheduled twice the amount of time that I spent in observation to extend the field notes. When I finished doing so, I had a complete dataset of field notes.

When I observed the teachers, I was careful not to fall into the trap of confirming what I already knew. Instead, I reported "what is actually in a setting" (Simons, 2009, p. 16). This point was a challenge because of my experience and knowledge of Montessori education, Saudi culture, and Islamic principles; however, by recording the information and asking the teachers about practices I was unsure of, I focused on providing a real picture of Montessori implementation in these Saudi classrooms.

I found that it was faster and more accurate to take notes in the teachers' spoken languages without taking more time to process the meaning. For the teachers who spoke Arabic (Teachers 1 and 3), I then translated the data manually and had the professional translator check

my accuracy. After that, I rechecked the translation by comparing the Arabic version with the English version. For the other teachers, I collected data in English, since they used English in the classrooms. I transcribed each participant's data into a file on my secured computer.

I spent a total of 34 weeks conducting my study. I started by receiving the participants' agreement to participate in this study. After that, I collected and analyzed the data and wrote the findings. Finally, I spent some time reviewing the overall study (see Table 1 for more details).

Data Analysis

Simons (2009) described data analysis as "those procedures—like coding, categorizing, concept mapping, theme generation—which enable you to organize and make sense of the data to produce findings and an overall understanding (or theory) of the case" (p. 2). Thematic analysis is a common type of analysis in basic qualitative research (Ellinger & McWhorter, 2016). Clarke and Braun (2017) explained that thematic analysis is used to identify, analyze, and interpret patterns of themes. What distinguishes thematic analysis from most other qualitative analytic approaches is its accessibility and flexibility, which lead to a wide range of applications (Clarke & Braun, 2017). During my data analysis, I referred to the research question, theoretical framework, and study purpose to guide my focus and decision-making.

I applied an inductive approach when I coded data. Saldaña (2021) presented that "coding inductively is entering the analytic enterprise with as open a mind as possible—a 'learn as you go' approach that spontaneously creates original codes the first time data are reviewed" (p. 40). The inductive approach helped me to "see what the site has to say rather than [be] determined to force-fit the data into preexisting codes," which meant it took me a longer time to compose words and phrases into meaning (Saldaña, 2021, p. 40). In my study, I generated codes from the interviews and observations to understand the teachers' perceptions and adaptations of

Montessori in the Saudi context. In addition, the inductive approach helped to establish "clear links between the research objectives and the summary findings" and "to ensure these links are able to be demonstrated to others and defensible where it provides the objectives of the research" (Thomas, 2006, p. 2).

For my study, I implemented thematic analysis in two ways to analyze the live practices, perspectives, and experiences of the teachers' adaptations of Montessori to the Saudi context. I followed Braun and Clarke's (2006) six phases of data analysis: becoming familiar with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and writing up the finding. For the first participant, I performed the thematic analysis manually; for the other three participants, I used NVivo software, as described in the sections below.

Data Analysis for Teacher 1

Becoming Familiar with the Data

Braun and Clarke (2006) suggested spending some time reading and rereading data in order to develop a deeper understanding of the transcript. Thus, after I conducted each interview, I listened to the audio recording and transcribed it myself, instead of using software to transcribe. I translated the two interviews from Arabic to English, which also made me more familiar with the data. When the participant spoke English, I collected the observation data directly in English. I saved the data to my laptop and then read and reread the data many times before I started coding (Saldaña, 2021).

Generating Initial Codes

Coding is the "process of analyzing qualitative text data by taking them apart to see what they yield before putting the data back together in a meaningful way" (Elliott, 2018, p. 2850). A code in qualitative research is a short phrase or a "word that symbolically assigns a summative,

salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (Elliott, 2018, p. 2855). Significantly, I used coding to understand the data and spend time with them before I reported them to the reader (Elliott, 2018). The rationale behind coding and categorizing is that it builds "understanding or explanations" (Simons, 2009, p. 6).

For the manual coding, Braun and Clarke (2006) suggested using "highlighters or colored pens to indicate potential patterns" to identify the codes initially "and then match them up with data extracts that demonstrate that code" (p. 19). In this phase, I initially identified the codes by using different highlight colors. In addition, I jotted down analytic memos and provided phrases for codes by adding comments to the text to record ideas for analytic consideration so I did not forget (Saldaña, 2021). For example, I made some reflections, recorded my thoughts, and made some connections between the data.

I read the transcript carefully line by line and used highlights to code all of my text data. The highlight colors helped me to categorize the related codes, and each color represented a different category. In this process, I was looking for codes related to my research question and the theoretical lens. Thus, each highlight color indicated a different area: Saudi culture, Islamic practices, Montessori principles, school culture, etc. I reviewed the data many times to find related codes and highlight the missing codes. After that, I transferred all the codes from the transcripts and collected each code together in a separate Word document (Braun & Clarke, 2006).

For the second coding cycle, I created a table with three columns in each Word document. I placed the codes from the transcript in the first column, the primary codes in the second column, and the final code in the last column (Saldaña, 2021). In the primary section, I used phrases or participant words to sort the teachers' implementations and perceptions of

Montessori education, Islamic religion, Saudi culture, school culture, and their perceptions. In the last column, I recorded and revised some of the initial codes and wrote the new codes. After I finished coding, I checked the codes with their meanings in the transcripts to ensure they represented the real meaning.

Searching for Themes

Themes are broader pieces of data that contain several codes combined to form a common idea (Elliott, 2018). In this stage, I focused on sorting different codes into potential themes, "collating all the relevant coded data extracts within the identified themes," and "organizing them into theme-piles" (Braun & Clarke, 2006, p. 19). I took the final codes from the first Word document I created in the initial code process and placed them in the first row under the final code column. I then used the second row to place the final codes from the second Word document, and so on. During the process, I started thinking about the connections between the codes, subthemes, and main themes (Braun & Clarke, 2006). I combined each code with similar codes, then combined each group of codes with related groups and gave it a name as a subtheme. I placed the names of the subthemes under the second column. For example, I found similarities between the "practical life skills" and "self-correction" codes. Thus, I combined them in one group with other codes and named it "children's self-learning" as a subtheme. After that, I combined the subthemes into major themes. In the example above, I combined the subtheme with related subthemes (e.g., children's independence, children's freedom, children's cooperation in learning) and gave it the name "Montessori principles." At the end of this stage, I began to have a sense of the meaning of the themes (Braun & Clarke, 2006).

Reviewing Themes

In this stage, I read all the collected extracts for each theme, regrouped and merged similar codes, created new themes based on the codes, and merged similar themes (Braun & Clarke, 2006). I reviewed the codes, subthemes, and themes by rereading all the data to ensure that they aligned with their meaning.

Defining and Naming Themes

In this stage, I reviewed data and reorganized some codes and subthemes into a more coherent narrative of the teacher's perceptions and implementations of the Montessori method in the Saudi context. In addition, this stage focused on "identifying the 'essence' of what each theme is about (as well as the themes overall), and determining what aspect of the data each theme captures," such as by summing up each theme in a few sentences (Braun & Clarke, 2012, p. 22). Thus, I wrote a summary of each main theme where I defined it, capturing its core focus and its purpose. I included the subthemes that were related to the main theme and provided a few sentences briefly describing some essential codes to highlight the uniqueness in each theme. I also kept in mind Braun and Clarke's (2012) recommendations for good thematic analysis: each theme had a single focus, they related to each other but did not overlap, and they addressed my research question directly. I reread the data, examined the coding, and revisited some theme names to represent the participant's implications and perceptions more clearly.

Producing the Report

The purpose of writing up the report is to tell a story based on the data to convince the reader of the quality and validity of the analysis (Braun & Clarke, 2006). I made sure that my written report included the data extracts and linked analysis with my research question and socio-cultural theory to provide concise, logical, coherent, and embedded narrative data (Braun &

Clarke, 2006, p. 23; Saldaña, 2021). I used thematic analysis not only to present the findings, but also to capture the teacher's real words and experiences within the narrative. Written descriptions that represent the teacher's perspectives and implications about Montessori education under themes, subthemes, and codes are presented in Chapter 7.

Data Analysis for the Other Three Participants

Coding data manually for the other three teachers was challenging, due to the time it would require to code three observations and two interviews for each teacher. Saldaña (2021) suggested that "if a student's dissertation project…require[s] multiple participant interviews or extended fieldwork and extensive field note taking, the CAQDAS becomes a vital and indispensable tool for the enterprise" (p. 44). Thus, I decided to use the computer-assisted qualitative data analysis (CAQDAS) program NVivo 12 Plus to analyze the remaining data. The software supported my organization of the data under codes and categories and enabled me to look across the files. "CAQDAS programs such as NVivo can apply multiple codes to the same passage of text . . . permitting the analyst to select a word or short phrase from the data, clicking a dedicated icon, and assigning the selected text" (Saldaña, 2021, pp. 126, 142). When researchers use CAQDAS programs, they still play the role of generating the codes and interpreting the data. I continued to follow Braun and Clarke's (2006) six phases of data analysis, but modified the implications when I applied the steps to align with the NVivo program.

Becoming Familiar with the Data

Braun and Clarke (2006) presented that "the time spent in transcription is not wasted, as it informs the early stages of analysis, and you will develop a far more thorough understanding of your data through having transcribed it" (p. 18). Thus, I read and reread the observation transcripts multiple times to make myself familiar with them. For the interviews, I listened to the

interview recordings multiple times, then translated and transcribed all data for each participant (Saldaña, 2021). Since I collected observation data from two participants in Arabic, as previously noted, I had a professional translator review my English translations for accuracy. I then used the "import" button in NVivo to upload each transcript. I put each teacher's interviews and observations into a separate file in NVivo, and worked though the steps for each teacher at one time, so I had a fresh mind for each participant's data.

Generating Initial Codes

I generated initial categories for each transcript with some additional codes under each category based on my research question and framework. For the initial categories, I created four "nodes" in the NVivo file for each participant to highlight data that represented the Montessori method, Islamic practices, Saudi culture, and the teacher's surrounding culture. I then placed additional codes under each category; for example, I created a node named "teacher background and perception" under the Montessori method node to highlight the teacher's opinion and experience of Montessori. I also jotted notes on some codes in a memos file that I created in NVivo, so I did not forget the meaning of the codes (Saldaña, 2021). For example, I noted details about the meaning of the environment, time, safety, school culture, etc. codes. Saldaña (2021) suggested that in recording data, one should highlight the missing information and delete the unimportant information. Thus, I created a fifth node and named it "excluded" for the information that was unimportant. Some excluded information was from the observations, where I collected information from different participants, and some was from the interviews, where the teachers shared details that were not relevant to the aim of the study.

Then, I read each file carefully line by line, started coding, and placed additional codes into the nodes list as a second cycle of coding (Braun & Clarke, 2006). Saldaña (2021) explained

that “descriptive coding summarizes in a word or short phrase—most often as a noun—the basic topic of a passage of qualitative data” (p. 133). Thus, I provided a phrase to represent the meaning of each passage of data, such as “freedom of choice,” “independence,” “teaching strategies,” etc.

Searching for Themes

Braun and Clarke (2006) presented that “this phase, which re-focuses the analysis at the broader level of themes, rather than codes, involves sorting the different codes into potential themes, and collating all the relevant coded data extracts within the identified themes” (p. 19). Saldaña (2021) suggested “cutting and pasting together the codes into clusters of what ‘looks alike’ and ‘feels alike’” (p. 106). Braun and Clarke (2006) made a similar suggestion:

> to use visual representations to help you sort the different codes into themes. You might use tables, mind-maps, or you might write the name of each code (and a brief description) on a separate piece of paper and play around with organizing them into theme-piles. (p. 19)

Thus, in this stage, I used a mind map to start grouping similar codes together, which helped me to sort the groups into different themes. During the process, I started thinking about the relationships between the codes, main themes, and subthemes, and I ended up with a sense of the themes (Braun & Clarke, 2006). For example, I grouped the codes “Islamic behavioral practices” and “Islamic social practices” together under the subtheme of “teacher’s Islamic practices in the classroom.” This in turn was placed under the major theme of the teacher’s alignment with Islam in the classroom. I also sorted some codes into different themes, such as moving the “children’s ability” code to be under the “teaching and assessment” subtheme.

Reviewing Themes

In this stage, I reviewed the coded data extracts for each theme, renamed some of them, and regrouped others to ensure that they belonged to the related themes and subthemes (Braun & Clarke, 2006; Saldaña, 2021). I also reviewed the codes, subthemes, and themes by rereading the entire data set to ensure that they aligned with their meaning. NVivo supported me in this process, because when I clicked each code, subtheme, or theme it presented all the associated texts on one side of the page. Also, it was faster to go back to the original text by clicking the blue link located at the top of each code. In addition, I merged similar codes and combined similar themes and subthemes. Braun and Clarke (2006) suggested that in this phase you reread your entire data set for two purposes. The first is, as discussed, to ascertain whether the themes "work" in relation to the data set. The second is to code any additional data within themes that has been missed in earlier coding stages (Braun & Clarke, 2006, p. 21).

Thus, for the second purpose, I went through the entire data set and coded until I felt that I was not adding anything substantial. During my rereading of the data, I coded some important parents that I recognized in this process. For example, there were some essential practices the teachers did by default and not as part of the classroom lessons or school rules; thus, I did not see the importance of them in earlier stages. However, in this stage I recognized that they were derived from Saudi culture.

Defining and Naming Themes

Braun and Clarke (2012) suggested that when defining themes, the researcher needs to be able to clearly state what is special and specific about them, summing up their essence in a few sentences, which is a good test of the process. Thus, as I had in the manual coding process, I defined the main themes and captured the core of what each theme focused on and its clear

purpose so that "each in turn builds on and develops the previous theme(s); and together the themes provide a coherent overall story about the data" (Braun & Clarke, 2012, p. 66). I also kept in mind Braun and Clarke's (2012) recommendations for good thematic analysis, where each theme should have a single focus, be related to the others but not overlap, and address my research question directly. In this stage, my themes were Montessori education, Islamic and cultural implementations, and children's roles.

Producing the Report

Even though I had a full set of themes when I reached this stage, I continued to a final analysis where I made final decisions to rename and regroup some codes and subthemes. Then I wrote up the report. The purpose of writing up the report is to tell a story based on the data to convince the reader of the quality and validity of the analysis (Braun & Clarke, 2006). I made sure that when I wrote the analysis, I included the data extracts and linked the analysis with sociocultural theory to ensure it was concise, logical, coherent and "embedded within an analytic narrative that compellingly illustrates the story" (Braun & Clarke, 2006, p. 23; Saldaña, 2021). Written descriptions are presented in the results chapters, with findings for each teacher in an individual chapter.

Trustworthiness

Lincoln and Guba (2016) defined trustworthiness as the quality of an inquiry that allows the interpretations and findings to be trusted. Cultivating trustworthiness requires establishing credibility, transferability, dependability, and confirmability (Amankwaa, 2016). My study included all four of these qualities. I achieved credibility by collecting data from multiple sources—observations and interviews—to determine whether the sources provided different information (Lincoln & Guba, 2016). One type of triangulation "involves checking out the

consistency of findings generated by different data collection methods" (Amankwaa, 2016, p. 122). Using two sites of data collection allowed me to cross-check the observation data with the interviews and find consistencies between the teachers' backgrounds, perceptions, and classroom practices (Amankwaa, 2016; Simons, 2009).

Amankwaa (2016) explained that transferability appears when the researcher describes a phenomenon in sufficient detail "to evaluate the extent to which the conclusions drawn are transferable to other times, settings, situations, and people" (p. 122). Thus, I achieved transferability by providing all the details surrounding the teachers' backgrounds, practices, classroom settings, and contexts in which they adapted Montessori practices with the children.

Dependability and confirmability are externally determined and require the "establishment of an audit trail and the carrying out of an audit by a competent external, disinterested auditor" (Lincoln & Guba, 1986, p. 19). Dependability is the result of an audit that examines the process's results (Lincoln & Guba, 1986). Confirmability, however, is "that part concerned with the product (data and reconstructions) results" (Lincoln & Guba, 1986, p. 19). Amankwaa (2016) stated that confirmability is when the findings are shaped by the respondents and not by the researcher's bias, motivations, or interests. To achieve dependability and confirmability, my committee members examined the process and the product of the study to evaluate the accuracy and confirm whether the data supported the findings, interpretations, and conclusions (Amankwaa, 2016).

Ethical Considerations

The most important ethical principle in any research study is to do no harm (Simons, 2009). In my study, I ensured that I applied procedural ethics to reduce harm and ensure the participants' privacy (Tracy, 2010). The first step in establishing an ethical research approach is

to obtain the approval of the IRB (Simons, 2009; see Appendix C for the IRB certificate of completion). One of the IRB's requirements is to have a consent form signed by the participants. The consent form presents the purpose of the research and the participant's rights, and it discloses any harm that the research might cause. The participants were also notified that they had the right to leave the study at any time during the research process. The form was sent via email to the participants a few weeks before the study to give them enough time to complete it and ask me any questions they had about the study. I also asked the school principal to sign a letter of support articulating her agreement to conduct the study with the teachers at her school. All the participants were involved voluntarily.

Since my topic focused on Islamic principles and Arabic culture, I ensured that ethical and cultural considerations were built into my study. For example, I formulated the interview questions in a way that respected the adaptation of Saudi culture and Islamic practices. Moreover, I avoided asking questions that might cause harm for the participants. For example, I did not ask for specific details about their Islamic practices. Instead, I asked open-ended and general questions about the Islamic and cultural practices they engaged in within their families, communities, and school. Even though my questions were general, discussing cultures and beliefs might still have been a sensitive topic for the participants; to avoid this challenge, I also sent a copy of the interview questions to the teachers for them to review before we met.

I informed the participants that the information was saved in a secure place and that all of their shared responses are confidential. For example, I stored the written field notes in a locked cabinet and a secured box folder on my laptop. Further, I changed the participants' names to numbers and pseudonyms. Such sharing techniques not only ensure confidentiality but also validity, given that such strategies established a relationship and trust between me and the

teachers (Simons, 2009). Finally, when I discuss the study's findings, I neither provided any judgments about the teachers' perceptions, experiences, and practices nor generalized the results to other Montessori teachers in the Saudi context.

Table 1

Study Timeline

Week/Month	Task
Week 1	• Received the participants' verbal consent • Discussed the study details with the participants • Arranged the preferred day and time to collect the data
Week 2	• First semi-structured interview with Teacher 1 • Expanded the data after conducting the interview • Transcribed the interview, translated to English, and saved it on my secured laptop • Conducted a thematic analysis to identify themes and codes in the interview transcript • Generated new questions for the second set of interviews
Weeks 3-4	• Observed Teacher 1 in Classroom A • Expanded the data after conducting the observation • Transcribed the observations, translated to English, and saved them on my secured laptop • Conducted a thematic analysis to identify themes and codes • Generated questions for the second interview • Reviewed the gathered data • Second semi-structured interview with Teacher 1 • Expanded the data after conducting the interview • Transcribed the interview, translated to English, and saved it in a folder on my secured laptop • Conducted a thematic analysis to identify themes and codes

Table 1 (continued)

Week/Month	Task
Weeks 5-6	• First semi-structured interview with Teacher 2 • Expanded the data after conducting interview • Transcribed the interview, translated to English, and saved it on my secured laptop • Conducted a thematic analysis to identify themes and codes • Observed Teacher 2 in Classroom A • Expanded the data after conducting the observation • Conducted a thematic analysis to identify themes and codes in the observation transcript • Generated questions for the second interview • Second semi-structured interview with Teacher 2 • Expanded the data after conducting the interview • Transcribed the interview, translated to English, and saved it on my secured laptop • Conducted thematic analysis to identify themes and codes in the interview transcript
Week 7	• First semi-structured interview with Teacher 3 • Translated and transcribed data into a file in my secured laptop • Expanded the data after conducting the interview • Conducted a thematic analysis to identify themes and codes in the interview transcript • Generated questions for the second interview
Week 8	• Observed Teacher 3 in Classroom B • Expanded the data after conducting the observation • Translated and transcribed data into a file in my secured laptop • Conducted a thematic analysis to identify themes and codes • Generated questions for the second interview
Week 9	• Second semi-structured interview with Teacher 3 • Expanded the data after conducting the interview • Translated and transcribed data into a file on my secured laptop • Conducted thematic analysis to identify themes and codes

Table 1 (continued)

Week/Month	Task
Weeks 10-11	• First semi-structured interview with Teacher 4 • Expanded the data after conducting each interview • Conducted a thematic analysis to identify themes and codes in each the interview transcript • Generated questions for the second interview • Observed Teacher 4 in Classroom B • Expanded the data after conducting the observation • Conducted a thematic analysis to identify themes and codes • Generated questions for the second interview • Second semi-structured interview with Teacher 4 • Expanded the data after conducting the interview • Translated and transcribed data into a file on my secured laptop • Conducted the thematic analysis to identify themes and codes
Weeks 12-34	• Coded and identified themes in the whole data set • Conducted across-case analysis • Wrote the results • Reviewed the overall study

Chapter Summary

In this chapter, I presented this study's research design, discussed the methodology and data collection process, and explained the six phases of my data analysis. Following that, I presented how I established credibility, transferability, dependability, and confirmability and ensured the ethical approval of this study. I concluded the chapter by presenting the study timeline.

CHAPTER 4: FINDINGS FOR TEACHER 1

Introduction

This multi-case study investigated four Montessori kindergarten teachers, exploring their implementations of Montessori to align with Saudi socio-cultural and Islamic practices. Interviews and classroom observations with each teacher were conducted. Ultimately, each data source demonstrated the teachers' implementations of these practices and indicated socio-cultural influences on the teachers' classroom practices. The in-depth interviews and close observations made it clear that the teachers cared about aligning the Montessori method with the Saudi context, as they used different tools and strategies to implement Saudi socio-cultural and Islamic practices in the classroom. The teachers' implementations of Montessori, Saudi socio-cultural, and Islamic practices were connected to each other (more details in Chapter 8). The four teachers' reflections in the interviews confirmed their practices as observed in the classrooms, and each practice reflected a combination of influences from the teacher's background, beliefs, perspectives, and public and school cultures.

The four teachers' varying backgrounds, experiences, and beliefs led to some differences in perspectives and classroom practices. However, this study confirmed that most of the teachers' practices were the same because of the guidance of Montessori, school culture, and their shared identity as Muslims and Saudis. As I explored the four case studies, focused on the teachers themselves, my purpose was to answer a primary research question: How have teachers in early childhood Montessori classrooms in Saudi Arabia adapted the Montessori method to align with Saudi socio-cultural and Islamic practices?

This chapter presents the findings from the first case—Teacher 1—in sections following four major themes: adapting Montessori principles and strategies in a flexible school culture; integrating Saudi knowledge and socio-cultural practices in daily classroom activities; integrating Islamic knowledge and practices in daily classroom activities; and organizing the environment through children's roles and classroom rules and management. Sources of data are indicated as interview (I) or observation (O). Before presenting the results, I provide overviews of Teacher 1 (Ms. Asma) and Classroom A.

Teacher 1 Overview

Ms. Asma was an Arabic teacher in Classroom A. She was 30 years old, was born in Dammam, and had lived in Dammam and Al Khobar in Saudi Arabia. Ms. Asma had a bachelor's degree in mathematics and previously taught second-grade mathematics for approximately 4 years. She volunteered in different organizations in her community. Ms. Asma had a previous relationship with the principal of the school in this study, who strengthened her knowledge about Montessori education and guided her toward working in the school. She had worked in this school for 3 years, teaching children aged 3–6. She was trained in the Montessori method by the principal, who was certified by NAMC. Ms. Asma also mentioned self-learning, as she searched different applications and websites to strengthen her knowledge of Montessori in addition to reading the books provided in the school (I). She worked with Ms. Leena in the same classroom, teaching and observing children simultaneously.

Classroom A Overview

Based on the information provided by Ms. Asma, Classroom A had 16 students, aged 3.5–6.5, all originally Arabs from Muslim backgrounds: 13 Saudis, one Syrian, one Palestinian American, and one Egyptian. Eight of the children were girls and eight were boys. All of them

were from middle-class families, except for two children of lower SES who received scholarships to attend the school.

Classroom A had a cabinet for each child to store belongings such as worksheets and notebooks, jackets, water bottles, and shoes. On the top shelves there was space for the teacher to put some artwork (for next-day use and not for the children to access). The classroom also had a desk and chair for classroom teachers; I saw Ms. Asma sit there during free time, but not during work time or when children needed to be observed during the classroom lessons. Next to the table was a wall with a plant and a black screen where the teacher would sit during circle time to teach the lesson. On the same wall were English and Arabic calendars, a children's task poster, and a ruler made of paper with the children's pictures indicating their heights. On the opposite wall (to the right of the door) was the practical life corner, with three shelves of materials for children to practice pouring water, zipping and buttoning clothes, tightening shoes, and so on. On top of the shelves were three plastic paper holders for the children to use based on the activities they chose in the sensory materials. Another shelf held stories in Arabic and English, and a math shelf held nine math activities in Arabic and English. Next were a real plant, a box holding a large gray mat, and the Number Rods (a math Montessori material). On the next wall was an English language corner with English materials such as sandpaper letters, wooden letters, containers to present letter sounds with different objectives based on the sound, and so on. On top of the next shelf, a basket held sand timers, Metal Insets, towels, and a water sprayer. This shelf also held some English letters and pictures to match, a blackboard, and a mirror. Next, there were Arabic letter bags on the wall, each bag holding objects that started with the same letter sound. Below the bags were a trash can and an Arabic shelf with different activities such as cards to match words with pictures, sandpaper and wooden Arabic letters, a sandbox, and so on. There

were different levels of wooden cylinders on the floor. Another set of three shelves held different activities such as cylinders in small boxes to work on different skills (length, width, height), Color Tablets, Metal Insets in different shapes, Pink Towers, Brown Stairs, and so on. The classroom had four small tables with chairs for the children. All the classroom furniture (shelves, cabinets, tables, and chairs) was made of wood (see Figure 1).

The Montessori school culture influenced teachers to use real materials in the classroom. For example, during mealtimes, the children used metal spoons and glass cups, as well as plastic plates and bowls. They also used glass cups for water-pouring activities in the practical life area. Ms. Asma explained that using breakable materials helped the children pay attention, and accidents rarely happened (O). Another reason for using real materials was to teach life skills as they would be done at home (O). Ms. Asma also applied the Montessori principle of not hanging many materials on the classroom walls. According to Lillard (2016),

> Montessori classrooms are supposed to be beautiful. The classroom walls are kept relatively uncluttered . . . with only a few works of art on the walls . . . The furniture (usually shelves, tables, and chairs) is generally made of smooth wood . . . The purpose of this was to create an environment that Dr. Montessori believes would most interest children in work, and thus be most conducive to learning. (p. 21)

Figure 1 shows the wooden furniture and lack of clutter in Classroom A.

Figure 1. Classroom A materials made of wood.

In addition to these materials, Ms. Asma provided supplementary activities because she believed some children needed a break when they had "worked with the working life, sensory, mathematics, Arabic and English . . . [and were] fed [up] of working with [these] tools" (I). She said the introductory "activities don't have deep concepts like the Montessori materials" and thus the children used them to break the routine as they "dissociate [themselves] a little" (I).

Theme 1: Adapting Montessori Principles and Strategies in a Flexible School Culture

The data analysis showed that Ms. Asma made several adaptations of the Montessori method within the Islamic religion and Saudi socio-cultural context. Five subthemes in the data are discussed here to present Ms. Asma's background and admiration of Montessori education; how she adapted Montessori principles regarding children's independence and freedom of choice; her guidance, teaching, and assessment in mini-lessons; and the effect of the flexible and cooperative Montessori school culture on her classroom practices.

Admiring Montessori Education for Its Flexibility

Ms. Asma appreciated the fact that the Montessori method worked with children based on their developmental needs, and she stated, “When I contacted Montessori, I loved and adored it and knew that it was the right one” (I). She believed the Montessori method worked based on the children’s intellectual needs, saying, “the Montessori method keeps up with a child’s progress,” and she found the curriculum flexible enough to work with children based on their needs: “I don’t stop with him at a specific point, freedom, and set off to teach children is something, more beautiful when you challenge yourself” (I). She appreciated that the Montessori curriculum was flexible enough to include different subjects:

> There is no one specialized in this subject more than the others. Everyone gathers and we put existing tools and tools that we might think of . . . Because the world of Montessori is open and vast, and the same skill can be applied in more than one way . . . For example, this method is not suitable . . . Let’s try something else. (I)

Ms. Asma’s beliefs regarding Montessori’s flexibility were based on not only her current practices at this school, but also her previous experience in a traditional school (Rogoff et al., 1995, 2003), which she described by saying,

> I had a problem that I had five outstanding female students for whom I could not do anything because I had to follow the curriculum with others at the same speed, so, it made the non-superiors frustrated because they have to progress at a certain level. (I)

When asked for a suggestion to improve the Montessori method, the teacher supported Montessori by saying, “So far, I have not had a problem, on the contrary, I see the Montessori system motivates older children’s social skills to improve for the young because they are involved with adults in many things, thank God” (I).

Societal Ignorance of Montessori Education

Ms. Asma shared that some Saudi educators did not support the Montessori method: "There is a lot of ignorance [on] the subject generally from the society because they do not understand what this system is" (I). When she explained Montessori classroom practices to some educators, they still did not understand because their experience in the traditional school system had formed their beliefs (I; Rogoff, 2003). Ms. Asma referred to such beliefs as part of the "standard committee, which exists in Saudi society . . . [such as] a child with less skills and learning [should be] in another school with the traditional way [because] he will improve more" (I).

Ms. Asma explained that other educators believed in not waiting for the "sensitive period" because they focused on seeing fast results in academic development, but the Montessori method encouraged "taking more time not in the *quality* [quantity] of learning, but in the way that the children learn" (I). Thus, she believed "the society has ignorance of the subject and needs more awareness" (I). On the other hand, she experienced no challenges from those who believed in the Montessori approach and preferred to enroll their children in Montessori: "Inside the school, we have children whose parents are interested; therefore, there are no challenges" (O).

Allowing for Children's Independence in the Daily Routine and Freedom to Work on Classroom Activities

The Montessori method is based on a child-centered approach that allows children to be independent in their learning and daily routine (Montessori, 1949). Thus, the Montessori school culture influenced the teachers to support children's independence in movement, dressing, eating, cleaning up after themselves, and so on (Rogoff, 2003). The children moved in and out of

the classroom through the transitioning period, washed their hands, drank water, and put on jackets and shoes by themselves. However, the teacher might provide some direction and guidance for children who needed help and support to follow the classroom daily routine. The following sections describe how the children were independent and Ms. Asma's role in supporting or limiting their independence.

Encouraging Independent Dressing and Eating, Assisting Only with Difficult Steps

Montessori (1949) believed in independence as a major principle that led to freedom: "Giving the child the opportunity of growing, gives him independence and at the same time leads him to freedom" (p. 127). Therefore, the Montessori school culture influenced Ms. Asma's belief in supporting children's independence (Rogoff, 2003). Ms. Asma encouraged her students to be independent in taking off their coats and shoes when they came to school in the morning, and putting them on when they went out for recess. For example, when Rami finished his food and the children were preparing to go outside, she said, "Rami, wear your shoes," and then Rami went to get his shoes (O). The other children were familiar with the classroom routine and did it by themselves without direction (O). When children asked for Ms. Asma's help, she assisted with the difficult step and encouraged them to continue the rest of the task themselves. Also, while she helped children, she provided verbal directions. For example, when a child was struggling to put on a coat by herself, Ms. Asma held the coat at the top and asked the child to insert her right hand first inside the sleeve (O).

Children in many traditional schools "do not engage in activities to sustain daily functioning—working in the cafeteria to prepare food or do dishes, sweeping the hall, and so on" (Lillard, 2011, p. 81). However, teachers in Montessori classrooms expect children to prepare their own meals, eat by themselves, and follow their desire to eat more or less. The children's

independence at mealtime started when they lined up and headed to the bathroom to wash their hands (O). On the task poster, a few children were assigned to arrange the table for mealtime. Thus, they did not go to wash their hands with their peers before they had done their tasks. For example, Yusra had the task of arranging trays: she placed one green plastic tray in front of each chair (O). On the plastic trays were pictures of a plate, spoon, and cup, and the children put each item in the right place (O). There were bowls and tongs for each kind of fruit and vegetable in the introductory corner. Ms. Asma encouraged children to serve themselves if they wanted more food, saying, "Whoever wants to eat, serves himself . . . take for yourself what you need. Be careful to finish your food" (O). The classroom was quiet, and the children ate comfortably and served themselves extra fruit and food as needed (O). After eating, the children put their dishes, cups, trays, and spoons back on the food cart without the teacher's direction (O). Then they washed their hands, chose books from the story shelves, and sat down in a circle to read (O). They were also free to walk around the classroom and communicate with the teachers and their friends (O).

Freedom to Work with Activities

During work time, Montessori classroom practices encourage children to choose their activities freely and move to a place they are interested in (O; Rogoff, 2003). Montessori believed "that we must set to work to enable the child to manifest himself freely" (Montessori & Carter, 1936, p. 129). The children in Ms. Asma's classroom also had the freedom to work individually or in small groups, based on Montessori's approach (O; Lillard, 2016). They had the freedom to use different shapes than usual and to mix up to three activities to create a new activity and shape. For example, two children used a piece of the Pink Tower, a piece of Brown

Stairs, and a chair to climb the tower. Children placed one piece after another and cooperated during building (O; see Figure 2).

Figure 2. Children mixed two materials to create different shapes.

Ms. Asma allowed the children to work with the activities freely, as she explained: "Sometimes the child does the work properly, but then he wants to play, so he does it differently; the most important thing we have is a rule that means we don't ruin the tools" (I).

Montessori (1949) was disappointed when educators ignored children's movement in the classroom and focused more on promoting information: "In education as a whole movement is sadly neglected and all importance is given to the brain. Only physical education which up till recently held a very inferior place considers movement, although disconnected from intelligence" (p. 198). The Montessori principles influenced movement in Classroom A during work time. For example, the children had the freedom to move in the classroom without the teacher's permission and choose whether to work on the floor or at the tables (O; Rogoff, 2003). Once children finished working with an activity, they returned it to the shelf following the

classroom Montessori rules, as Ms. Asma shared: “We have certain class systems; for example, at work time, when we take the work, we return it” (I, O).

Guiding Children’s Learning and Directing Their Mistakes in Mini-Lessons

The teacher’s role in the Montessori classroom is to observe children’s work and work with them on some activities based on their abilities to improve their skills (Lillard, 2016). Ms. Asma’s practices with children were influenced by both the Montessori school culture and the school’s rules and expectations. She did observe the children during work time and work with them on mini-lessons based on their abilities (O). However, the school community might have been affected by “traditional schools and . . . national and educational policies” (Rogoff, 2003, p. 60), which might have encouraged Ms. Asma to believe that the children should master certain skills that are popular in many schools in Saudi Arabia.

She described her practices by saying, “I take an overview of the class, ensure that I direct all the children, and based on my schedule, I see the child whom I should work with now . . . and take the child and work with him in language or sensory skills” (I). She indicated the importance of teaching children academic lessons, especially the older ones, to prepare them for the first grade: “If a child will graduate from us shortly, we like to give him more [lessons]” (I). For example, on one occasion when Ms. Asma noticed Jude had finished her work, she said, “Come on, Jude,” led her to the Arabic classroom center, then said, “We took the Ka, Ka, Ka letter,” and worked with her on the mat (O).

In the lessons, the children had limited opportunity to work freely because Ms. Asma had a particular goal for them to master specific skills. For example, when she worked on Color Tablets with a child, she took the role of asking questions, directing their mistakes, and moving to different skills (O; see more details in the Teaching and Assessment in Mini-Lessons section).

At times, when the children wanted to leave a lesson, Ms. Asma encouraged them to stay. For example, she worked with Yusra on sandpaper numbers and plastic keys, but the child was not interested in working and sat inappropriately. Ms. Asma said, "Yusra, if you do not want to work, I'll go to someone else. You shouldn't sit on the mat." Then she completed the lesson with the child on the mat (O). She explained that when she called children for a mini-lesson, "they know that it is now the time for the teacher to explain this thing to you and then you can do anything," because "when you start your class with clear rules for all, I mean, clarity for a child makes it easier for him to follow the rules" (O). Thus, the children did not refuse to go with her to the mini-lesson (O).

Montessori (1949) stated that "the child seeks for independence by means of work: independence of body and of mind" (p. 91). Thus, one of the Montessori principles is children's self-learning and control of their errors (Lillard, 2016). Ms. Asma supported the idea of controlling errors and encouraged children to learn by themselves. She described that what made the "Montessori [method] unique . . . [was] respecting individual differences and the idea of controlling mistakes" (I). However, despite her belief in the importance of self-learning, Ms. Asma pointed out children's mistakes. For example, in mini-lessons, children learned new skills and needed guidance to master the skills. Thus, she pointed out the children's mistakes and guided them to make the right choices after she allowed them some time to try to say the correct answer. For example, she worked with one child on the Color Tablets tool to organize colors from darkest to lightest (O). Ms. Asma took out the green colors and asked the child, "Which color is darker?" After the child gave the wrong answer, she said, "What is the darker, this or this?" and pointed at the two colors; one was darker than the other. When the child insisted on the wrong answer, she finally said, "No, this is the darker" (O).

Ms. Asma said that it was “danger . . . great danger” when teachers did the job instead of the child because “the child must do his job even [if] he does [only] a quarter of it” (I). However, in the classroom, she helped the children to clean up if they found it challenging to do the whole task. For example, she helped a child clean up flour that he dropped by letting him clean the table and sweeping the floor herself, saying, “It’s hard for him to collect all of it, it’s hard to get it into the broom” (I; O).

Montessori Mini-Lessons to Teach and Assess Children Based on Their Individual Ability

Involving Montessori Strategies in Teaching Mini-Lessons

Montessori used a three-period strategy to present mini-lessons for children. For example, first the teacher points at and pronounces the sound of a letter; second, she pronounces the letter and asks the child to point at the correct letter; and third, she points at the letter and asks the child to pronounce it (Montessori, 1912; Lillard, 2016). Ms. Asma’s training in the Montessori method influenced her to use these three periods to present lessons to individual children or small groups (Rogoff, 2003). For example, when she worked with a child on the letter *Ha*, she presented the objects that started with the same letter, then asked, “Where is the *Helal* [crescent], where’s the *Hatif* [phone], where’s the *Hadiya* [gift]?” and the child pointed at each object. Then, she pointed and asked, “What’s the name of this?” The child answered, “Hadiya,” and she continued with the other two objects (O). Ms. Asma also followed the Montessori strategies in teaching the sound of a letter and not the letter’s name (Lillard, 2016). In the same situation, she asked the child to say the letter the objects started with, and he responded, “*Ha*” (O).

Another Montessori teaching strategy influencing Ms. Asma's practices was tracing the sandpaper letters (Lillard, 2016). For example, in a one-to-one lesson, she used two fingers to trace a sandpaper letter, and the child traced the letter in the same way (O).

Working on Abilities with Individualized Practices

Montessori believed that children aged 0–6 were in a sensitive period where they had different characteristics and abilities, and educators should consider that when preparing the environment (Abdullah et al., 2018; Montessori, 1949). Ms. Asma believed that "respecting individual differences" was what made Montessori unique and, as she described, "a very good thing and I wish that it is applied in the society" (O).

Ms. Asma's previous experience in a traditional school influenced her appreciation of the Montessori systems for understanding and working with children based on their abilities in the classroom (Rogoff, 2003; Rogoff et al., 1995). For example, she described:

> When I was teaching in [*K]* schools, I had a problem that I had five outstanding female students for whom I could not do anything because I had to follow the curriculum with others at the same speed, so it made the non-superiors frustrated because they have to progress at this level [same pace], and the superiors got tired because they had nothing to do. (I)

In Ms. Asma's classroom, a few children needed extra effort from the teachers to engage them in classroom rules, activities, and daily routines. For example, she described: "We have a special case, which is Lolo, it is the special case that exists this year. But the rest [of the children], no, everyone takes all the tasks." Lolo was less interactive with the teachers in the classroom, and refused to learn or do activities, but did not get mad or upset when a teacher directed her (O). The circumstances of COVID-19 limited Lolo's life skills, and the 10-day

vacation affected her unwillingness to interact, as Ms. Leena shared. For example, the teachers dressed Lolo in her coat and shoes before she went to the playground, unlike the other children who did that with little or no help (O).

In terms of social skills, these children had difficulty following the classroom rules. Ms. Asma shared that some children sat alone when they heard the teacher repeat, and some needed directions from Ms. Leena to help them sit in the circle (I). In addition to Lolo, two other children needed extra direction from the teachers to follow the classroom rules and daily routine. Because Ms. Asma understood the children's different personalities, she dealt with them based on their "difference of characters" (I). For example, she said that 4-year-old Jude was a stubborn child, cried easily, and used her hands to express her feelings. Ms. Asma instructed her several times to respect others and to express herself by talking, not by using hands and crying (O).

Three Levels to Assess Children's Skills

Montessori education focuses on children's learning more than assessment. Cossentino (2009) presented that "Montessori theory drives Montessori practice. Rather than aligning curriculum with assessment, teaching is aligned with learning" (p. 526). In the classroom, Ms. Asma spent most of her time working with children on mini-lessons to teach them and assess their academic progress (O). She said that for the "existing evaluation tool . . . we have the Montessori Canvas" (I). This teaching practice was likely affected by traditional schools and national education policies, as Rogoff (2003) presented. Even though the Montessori method encourages children to follow their interest in learning more than focusing on certain skills for assessment (Montessori, 1937), the school system led the teachers to assess the children by using Montessori Canvas and sending assessments to the parents (I; Rogoff, 2003).

Ms. Asma used three levels to evaluate the children's skills. The first was having the lesson presented, the second was doing the skill with help from the teacher, and the third was mastering the skill alone (I). For example, on one occasion she worked with a child to create words by comparing letters, then turned to her laptop and said that she put "presented" because the child needed more time to master it (I).

"Very Comfortable" and Cooperative Montessori School Culture

Ms. Asma described her relationship with other teachers and administrators in the school as "very comfortable." In terms of decision making, she said that all the teachers shared ideas to "exchange and apply directly" (I). The school staff met daily before school and also weekly. The members of the meeting included the four teachers in both classrooms and "the administrators; teacher Foz . . . [and] teacher Sahar. We sit and talk, I mean, everyone participated . . . We all plan together" (I). The school administrators participated in the meeting to offer better ideas to implement in the classroom, but as suggestions and not rules (I). Ms. Asma shared that this made her feel more comfortable in her work, and said:

> Truly, it is not rules . . . it is not an instruction, it is the teacher's way of the direction of the children. For example, we have a weekly meeting where we discuss that if a teacher notices a mistake committed by another teacher, she notifies her. (I)

The teachers' meetings before school helped them plan the curriculum and classroom tools (I). The teachers cooperated and shared ideas on the unit subjects that they used in circle time and the activities for work time (I).

The teachers also discussed their ideas about topics that attracted the children's attention in the classroom: "We try to make it new; we try to make it different . . . We try to look at the sources of things that the child likes" (I). The English teachers used Ms. Asma's ideas as basic

knowledge to implement in their lessons: “Teacher Nouf and teacher Leena do the applied things for me as the result of our meeting . . . I mean, my meeting is the base” (I). In addition, Ms. Ola (the Classroom B Arabic teacher) trusted Ms. Asma’s perspective on the lessons because she had more experience. For example, Ms. Asma said that “teacher Ola gives me the presentation and asks me what I think” (I).

In addition to the staff meetings, Ms. Asma met with the Classroom B Arabic language teacher to discuss materials that they presented for circle time: “I’m with the second-class Arabic teacher, who is teacher Ola, we meet together, I mean, we talk . . . We do the presentations, and we do the applied things” (I). She and Ms. Nouf also had separate meetings: “We have a plan for Quran curriculum . . . teacher Nouf and I are responsible for it, we arrange it . . . Then it is reviewed and approved by the administration” (I). In the classroom, Ms. Asma and Ms. Nouf led the Quran circle time (O). The teachers also cooperated in providing an equal experience for all children as part of the school rules, which supported the teachers’ meetings to ensure that they shared strategies and implemented them in both classrooms (I; O; Rogoff, 2003).

The culture of this school was not strict about using only Montessori materials in the classroom centers. It was open to including supplementary materials, allowing the teachers to bring different tools into the classroom (Rogoff, 2003). For example, Ms. Asma explained, “We have ready tools we bought, and . . . [if] any one of the teachers sees something . . . suitable . . . she brings [it]” (I). She believed that the teachers’ passion for their work led them to cooperate and follow their interests to bring new materials to the classroom, “because we are passionate about [it] . . . and anyone has an idea” (I; Rogoff et al., 1995). In addition to the teachers’ interest and the school administration rules that encouraged them to be flexible in adopting supplementary classroom materials, Ms. Asma believed the Montessori method also supported

the idea of flexibility: “The world of Montessori is open and vast, and the same skill can be applied in more than one way” (I; Rogoff, 2003).

The teachers were cooperative and shared responsibilities during their work with the children. Every classroom had two teachers working simultaneously. For example, during circle time, one teacher stayed in front of the circle while the other teacher sat beside the children to observe their behaviors and showed her engagement with the lessons (O).

Theme 2: Integrating Saudi Knowledge and Socio-Cultural Practices in Daily Classroom Activities

This section presents findings about the perspectives, beliefs, and school rules that led Ms. Asma to integrate Saudi socio-cultural practices in her Montessori classroom. The three subthemes discussed are Ms. Asma’s belief in the importance of integrating Saudi culture, teaching about Saudi socio-cultural knowledge and different cultures around the world, and enhancing Saudi socio-cultural practices.

Integrating Saudi Culture to Support Children’s Identity

Ms. Asma believed that integrating Saudi culture into the school and curriculum was essential for the children to understand their identity: “With the cultural currents that are taking place in this world, [we] want to clarify the nature of this child . . . and this child’s instinct” (I). In addition, the school culture supported integrating Saudi socio-cultural practices into school activities and developing the activities for better practices. For example, Ms. Asma described, “Promoting the Arabic language was from the first year. . . this year we are doing more events and more competitions and trying to involve them [to understand] the greatness of the Arabic language more, so they feel it” (I).

Thus, Ms. Asma's beliefs influenced her to involve, celebrate, and teach about Saudi culture (Rogoff, 2003; Rogoff et al., 1995). She believed a Montessori school could be flexible in involving cultural events in the school and curriculum (Aljabreen, 2020), unlike her previous experience in a traditional school, where she found it difficult to integrate Saudi culture in her math class (I).

Teaching About Saudi Arabia and Different Countries Around the World

Integrating Saudi Knowledge in Topics, Pictures, and Materials

Ms. Asma taught the Arabic language by presenting, speaking, and working with children in mini-lessons. She presented material about Saudi Arabia in circle time as part of the school curriculum, which thus influenced her practices (I; O; Rogoff, 2003). Her belief in supporting the children's cultural identity influenced her practice of presenting pictures representing their identity and cultural background during circle time (Rogoff, 2003). "We try as much as possible . . . [to present] images, a little bit revealed from our culture . . . I mean, not a white boy with blond hair and blue eyes" (I). One of the pictures Ms. Asma presented during circle time related to Arabic culture: "If you noticed the next one, an Arab or Saudi boy wearing traditional clothes kissing his grandfather's head . . . this may be considered Saudi culture" (I, O). In addition to the pictures, she included Arabic songs in circle time (I, O).

The culture circle time was also an opportunity for the teachers to support the Saudi children's nationality and identity. For example, Ms. Asma explained, "We talk about my identity at the beginning of the year, who I am, and my country" (I).

During the morning circle time, children met in the inner yard and Ms. Asma engaged with them to sing the Saudi national song and pointed with her hand like a flag while chanting with the children (O). Ms. Asma presented the *Hijri* calendar (an Islamic calendar used in Saudi

Arabia) in the classroom by explaining the day, month, and year. She used a month rhyme and an Arabic calendar poster to present the classroom routine during circle time (O).

Ms. Asma expected children to remain quiet and ask for permission to leave the classroom during the culture circle time. She was influenced by traditional Saudi Arabian school culture and national policies that gave teachers more authority to control children's movement, which shaped her practice of directing children to be silent in the classroom (Rogoff, 2003).

The school culture and Ms. Asma's perspective on involving Saudi culture in the classroom influenced her practice of using Arabic and cultural classroom materials (Rogoff, 2003; Rogoff et al., 1995). For example, the story shelf beside the Arabic language center included stories in Arabic and English (O). Moreover, among the practical life materials were a *Dalla* (coffee pitcher) and *Finjan* (small coffee cup) to practice water pouring. "Pour water from a teapot, a coffee pitcher . . . These things are good for our culture, they are not in Montessori [materials]" (I, O).

Another material related to the Saudi context that she used was Arabic letters and numbers. Ms. Asma shared that "everything from these curricula, we tried to make it in a nice and tidy Arabic form . . . we try to make our products in a neat way and in a way that enriches the child more" (I). For example, there was a whole shelf in the classroom containing Arabic language materials that followed Montessori principles, including letter bags (see Figure 3).

Figure 3. Small bags for Arabic letters with objects in each bag.

In addition to the cultural materials, Ms. Asma chose to present subjects related to the Saudi context that involved real sensory materials, as Montessori (1936) suggested for a connection to their spirit and surroundings. For example, "when we talked about the palm tree, we brought a tray of many kinds of dates, they start to describe them, they saw the dates' honey coming out of them, and so on" (I). Ms. Asma also shared,

> When we talked about the desert, and we got a frond, we got the palm pulp . . . These things attracted the children strongly, and that's it; they stuck in their minds . . . because they checked with their hands, grabbed, saw, and smelled it. (I)

Teaching About the World

In each unit, Ms. Asma presented something related to the Saudi context and other countries to extend the children's knowledge, a practice influenced by the principle of Montessori cosmic education (Rogoff, 2003). Cosmic education in Montessori can refer to

education about democracy and cultural diversity (Gross & Rutland, 2019). For example, Ms. Asma shared:

> We talked about the Saudi regions which are desert, mountains, etc. . . . when we talk in a unit, we try to take an example from Saudi Arabia and another from abroad as well . . . All of them are in the same circle of culture. (I)

When she talked about monkeys in circle time, she said, "This is the lemur monkey; who remembers this monkey from last year? Where does it live?" A child said, "Madagascar." Ms. Asma confirmed his answer (O).

She also encouraged talking about different countries worldwide to support the children in the classroom who were not Saudis and to strengthen their knowledge about other cultures (Gross & Rutland, 2019). For example, Ms. Asma shared:

> When we talked about "the world around me" [unit] . . . We introduced their countries, which are Egypt, Syria, Palestine . . . Egypt, for example, as a country, we talked about it for two weeks probably . . . And we always said, who is in the class from Egypt, raise their hand. (I)

Celebrating Events to Support Saudi Moral Values

Ms. Asma believed that celebrating the Saudi event should be about teaching moral values, as she presented: "The national belonging is not in huge events, for example, dancing, singing, and these things. This is not the case [but] it is by teaching them responsibility . . . how I help my country, how I help the environment around me and so on" (I). Her background practices with her family influenced her point of view, as they did not see the importance of gathering to celebrate cultural events—"Truly, we do not do these things"—but they gathered for religious events (I; Rogoff et al., 1995).

Speaking in Formal Arabic

Ms. Asma considered it important to communicate in Arabic with children at all times in the classroom, as she shared: “We talk about the Arabic language, so that we can enhance this aspect more” (I). Ms. Asma also encouraged children to speak formal Arabic and not slang and tried to extend the children’s knowledge by providing new Arabic vocabulary. For example, in circle time, she asked: “What family? Breastfeeding and covered by hair?” A child said, “Mammals.” She said, “Well done, mammals, say it once more,” and the children repeated the word (O). On another occasion in circle time, one child said “monkey” in English. Ms. Asma said, “I want an Arabic word.” Then the child said “*Gerd*,” which means monkey in Arabic (O).

Enhancing Saudi Social Practices Through Gender Separation and Classroom Conversations

Teaching Gender Differences

Every morning, the teachers and children from both classrooms had circle time in the school inner yard; the boys sat on the right and the girls on the left behind a U-shaped line (O). Ms. Asma shared that the segregation was based on the teachers’ decision: “It is at the beginning of the year, I mean before we start school” (I). The teachers used to implement these rules in the inner yard and the classroom; however, since they did not see gender segregation as a priority in the classroom, they changed the rule when they found some difficulties with the children’s behaviors, such as becoming more active and “annoying” if each gender sat together in the circle time (I; O).

Ms. Asma encouraged gender segregation during circle time. For example, at one time when she had finished explaining a *Surah* (chapter), she said, “Now I want a boy to be the teacher of boys and a girl the teacher of girls. Where are the boys? Raise your hands” (O). She

chose one of the male children and said, “Now you’re teacher of the boys,” and instructed the rest of the boys to repeat after him (O). Ms. Asma also supported the idea of gender differences in the classroom curriculum:

> At the beginning of [each] year we always have a unit called “Me” . . . we talk about gender difference . . . I mean, you are a boy; you are a girl . . . how a boy looks and how a girl looks, what a boy wears mostly, what a girl wears mostly, so we try to show them this difference. (I)

Ms. Asma clarified that what she meant by gender differences was not separation or making differences between genders, but providing the children with future ideas about dealing with the other gender, which is part of Islamic and Saudi culture. She said,

> Personally, I do not mean gender segregation, but . . . the way to deal with the opposite sex . . . These things are all big [important] and deep concepts . . . And it is not presented now [to the children], of course, but these simple graduations affect it [them] in the future. (I)

In addition to Ms. Asma’s perceptions of the importance of teaching gender differences, the school culture also encouraged gender segregation, providing different bathrooms to separate boys and girls, which influenced the children’s practices in the school (Rogoff, 2003). For example: “They [bathroom cards] are two colors, the ones for boys are blue, and ones for girls are pink . . .. when a child needs the bathroom . . . he/she carries the card assigned to his/her gender and goes to the right place in the bathroom” (I, O).

Encouraging Conversations to Develop Children’s Social Skills

“Socialization in traditional societies is often seen as the procedures and methods that are adopted by the community to transform the child, who is relatively peripheral, into the adult who

is the child's central link to community social life" (Khalifa, 2001, p. 125). This school scheduled times where the teacher encouraged children to express themselves and communicate with each other (O; Rogoff, 2003). For example, in the Show and Tell circle time, each child had the opportunity to lead the circle and present a subject in front of the other children, then answer their questions. The teacher's role was to help the child manage the conversation by asking the child some questions and organizing the others to ask questions (O).

In addition, this Saudi socio-cultural practice was evident during work time, when most of the children talked to each other while working with the activities (O). Even though Ms. Asma advised the children to talk quietly before choosing the activities, she allowed conversations in a normal tone (O).

Theme 3: Integrating Islamic Knowledge and Practices in Daily Classroom Activities

This section describes how Ms. Asma integrated Islamic practices and encouraged Islamic faith at different times and for different purposes. Rogoff (2008) suggested that researchers should record not only classroom practices, but also the teacher's background and perspectives that drive them to engage in such practices. Thus, the first subtheme presents the teacher's belief in the importance of integrating Islamic practices. The second and third subthemes discuss the teacher's enhancement of Islamic beliefs in the classroom and the enhancement of Islamic social and behavioral practices.

Importance of Integrating Islamic Practices for Children's Morality

The children in Ms. Asma's classroom were Muslims; thus, she felt responsible for involving them in the Islamic religion. "We have the next generation in our hands, so it is necessary . . . we try as much as we can to link the Islamic religion to everything so that they know" (I). Ms. Asma believed in integrating Islamic practices from a young age because "three

to seven is a very important period in building the Islamic faith of a child" (I). She said, "Islamic culture is essential, and patriotism is also necessary" (I).

For Ms. Asma, the focus of integrating the Islamic religion was to encourage children to practice Islamic morality (I). She believed that the idea of raising children to be responsible was also aligned with the Montessori approach: "This is one of the things that are from the heart of Montessori, but for us, it is also at the heart of our religion" (I).

Ms. Asma linked her belief in encouraging Islamic practices with children to her family background: "We are originally, thanks to God, from a conservative community . . . So, we [were] raised this way . . . And then, we raised [our children the same way]" (I). She shared that her family gathered to celebrate religious events such as "Eid, Ramadhan, Arafah [the pilgrimage day]" (I). Moreover, they gathered weekly to have religious conversations (I; Rogoff et al., 1995). Ms. Asma's interest in reading Islamic books also influenced her belief in the importance of integrating Islam in the classroom (I).

Enhancing Islamic Beliefs and Practices in Quran and Meditation Circle Time and Classroom Curriculum

Teaching Islamic Practices in Circle Time as a Universal Practice

Ms. Asma led many circle times during the day to present Islamic practices. In the morning circle time, all children from both classrooms gathered in a circle and reviewed Quran verses, *Hadith* (the sayings of the Prophet PBUH), etc., before they entered their classrooms (O).

When the children finished their circle time, they divided into two lines based on their Quran memorization. The children who had memorized fewer Quran chapters (*Surah*) entered Classroom A. Ms. Asma led the circle, and Ms. Ola observed the children. The children who had memorized more chapters went to Classroom B, where Ms. Nouf led the circle and Ms. Leena

observed the children (O). When the children sat with Ms. Asma in the classroom, she recited chapter *ALASR* and the children repeated after her; then she chose children to read individually (O). In the Quran circle time, Ms. Asma used traditional strategies and avoided technology devices, tools, and pictures (O). She also led a second Quran circle time around the middle of the day.

In addition to Quran memorization, Ms. Asma used circle time to teach children about the Islamic faith. For example, she said, "We talk about the identity of the child; who is your Lord, who is your prophet? What's your religion?" (I). She looked at the bigger picture when teaching about Islamic morality because she believed Islamic morality was universal and not limited to Saudi culture. For example, one picture she presented at circle time showed a neighbor who went to another neighbor's door holding a plate of food, about which she commented, "When we talk about the morals of Islam, and so on, it is often a universal thing and not for specific people" (I). Thus, she did not relate the picture to the Saudi culture of feeding others, but linked it with Islamic practices (O).

The school culture also supported teaching Islam in classrooms by offering meditation circle time. As part of the school schedule, Ms. Asma had a meditation class once a week to interpret God's name (O). For example, she said that in the meditation circle time "we took two of God's best names in Surat Al Samad," which were "Al Ahad" (the unique) and "Al Samad" (the greatest patron). She presented the names on the big screen and explained, "It means everything needs God, even the plants" (O).

Directing in Reading and Sitting

During Quran circle time, Ms. Asma tried to have the children memorize and pronounce the words correctly. She read the Quran verses first with clear and audible pronunciation and a beautiful voice, and then pointed at the children to repeat after her (O).

When words were difficult for children to pronounce, she repeated them three times (O). Ms. Asma explained that when the children got the wrong pronunciation, she avoided waiting for self-correction, which is against the Montessori principle (Lillard, 2016). She said, "I do not wait for the child to correct the pronunciation, but I try once, twice, or three times, if he does not fix it, I just [pass over] and continue . . . I don't focus on it more" (I). This was not based on the Islamic point of view, as she did this for all children regarding their abilities:

> It's the letter's pronunciation . . . We have learned that we should not tell him no, this is wrong . . . or say this, no. We [just] repeat the word for him the right way. In everything, not only in Quran . . . because they're kids, it means they are trying. (I)

When they sat in the circle, before reading, Ms. Asma recited a Quran verse translated as "So when the Quran is recited, then listen to it and pay attention that you may receive mercy" (Al-Araf, verse 204). Her practices of controlling the children's movement during the Quran circle time came from her belief in this verse, as she shared: "We always associate it with this verse . . . so I must be, properly, sitting down and quiet, and consider other things related to the reading of Quran" (I). For example, she modeled the right sitting position by crossing her arms before she started reciting Quran (O). Ms. Asma was in the front, and the children sat behind the tape line on the floor (O). When she heard a child talking, she called the child's name, then put her index finger to her mouth to indicate quiet (O). She also explained the correct position by

using verbal directions, such as pointing at a child lying down and saying, “Please sit properly . . . crossed legs” (O).

Ms. Asma commented that proper sitting was a rule for all circle times and not limited to Quran time: “Proper sitting is always desired” (I). However, she still believed that reading Quran should be given greater respect than other subjects:

> The correct sitting in the Quran circle is emphasized, especially while reading . . . Not all the time, just to give Quran its virtue and importance . . . I am sitting properly, not lying down or moving while I am reading. (I)

Modifying the Montessori Curriculum as an Islamic Curriculum

Ms. Asma believed that integrating Islamic practices in the classroom was a core principle for Muslim educators adapting Montessori to Muslim countries:

> The one who takes Montessori from them [Westerners] must revise it and correct the meaning of the principles, so they are in line with religious principles . . . as an example, in the sensory skills there are many things that suit their [Western] holidays, for example, stones in different forms, or Easter day, there are activities presented in brochures . . . the teacher can speak in another way, so she can achieve the same goal but without these different themes. (I)

Ms. Asma also presented special events to the children during circle time and school activities:

> Eid al-Fitr, Eid al-Adha, the big seasons like the Feast of Hajj . . . [the month of] Ramadan . . . we start talking about it with culture, we do simple things about it . . . artistic or sensory, so that we prove to them that this day, or this month, is a great month which is not like any other month. (I)

Enhancing Islamic Social Practices in the Daily Routine and Compatibility Between Islamic and Montessori Behavioral Practices

Reminding and Modeling Verbal Practices in the Daily Routine

Ms. Asma believed in teaching Islamic verbal practices during conversations with children all the time in the classroom, not limited to a significant time or lesson: "We try, in all our dealings and not just as a lesson . . . [to] include [the religion] in everything . . . topics that are directed to Islamic culture, which are Quran, and daily dealings, so there is nothing very tangible" (I). However, the Islamic practices did not involve the classroom centers:

> Mathematics and sensory skills at work time, [but] the Islamic teachings are more initiated by the teacher. I mean when we start working [we say] … "in the name of God" . . . these simple things . . . But [they] are very basic in the teacher's dealings with the child. (I, O)

She involved Islamic practices in the children's daily routine by modeling and reminding children of them. For example, she started circle time with the Islamic greeting "Peace be upon you," and the children replied, "May the peace, mercy, and blessings of Allah be with you too." Ms. Asma then said, "In the name of God, we start [presenting] the calendar" (O). When the children forgot to say the Islamic greeting, she reminded them. For example, when a child entered the classroom, Ms. Asma asked her, "What do we say when we enter?" The child said, "Peace be upon you," and the other children replied to her (O).

Ms. Asma also used different strategies to encourage children to say *dua* in the classroom. "In Islamic terminology, *dua* is the act of supplication. It is calling out to God; it is a conversation with God, our Creator, our Lord, the All-Knowing, and the All-Powerful" (Stacey, 2018). She modeled the saying without asking the children to repeat it after her. For instance, in

the culture circle time, when she showed a video of an eagle picking up a fish from the sea, she commented loudly, “Glory be to God” (O).

Ms. Asma shared that integrating Islamic verbal practices into the daily routine was based on the teachers’ personal Islamic beliefs and not a school rule:

> When you start something, you say “in the name of God,” you say “God’s blessing,” or you praise God for something beautiful; all these things are not rules. I mean, the administration does not impose them; [they are] from us, from a personal source (O).

Assessment in Islamic Verbal Practices

Ms. Asma shared that all the teachers and administrators had decided to evaluate children in religious practices: “[It is] from us as teachers and administrators” (I). She clarified that Islamic practices evaluation was more general: “For religious things, which are like the Quran and repeating *duas*, these things merge with the observations of the final assessment . . . not based on each individual verse or *Hadith* as much as a general picture of his/her memorization” (I). Thus, the teachers used general reports for this assessment and not Montessori Canvas: “For religious skills, we do not use the Montessori Canvas, but they are included in general notes about repeating of Quran [and] the *duas*” (I).

Aligning Islamic Behavioral Practices with Montessori Principles

Ms. Asma also encouraged children to follow Islamic behavioral practices, which were aligned with the Montessori principle of having the older children help the younger children (Lillard, 2016). For example, when she explained the name of God as unique and the greatest in the meditation circle time, she said, “One of the things that God, the unique and the greatest patron, likes is to help others . . . for example, my friend doesn’t know how to wear a coat . . . I help him” (O). Ms. Asma also believed that the Montessori principle of independence and

responsibility was compatible with Islamic education. For example, she said, “The subject originally is the responsibility of putting the work back in its place . . . cleaning up after me, all these things mean, hopefully, is the responsibility of an individual . . . All of these are from our Islamic teachings” (I).

In the classroom, Ms. Asma guided children to respect each other as part of her Islamic belief that is also supported by Montessori principles. For example, Aljabreen (2017) wrote, “the aim of Montessori education is to help children become competent, socially conscious citizens of the world who respect themselves and others” (p. 67). The Montessori method aligns with Islamic practices in the sense that all Muslims are encouraged to respect other human beings no matter their race or beliefs, such as when Allah (SWT) said, “وَقُولُوا لِلنَّاسِ حُسْنًا” (speak nicely to people; Al-Baqara, verse 83).

In school, Ms. Asma established rules from the beginning of the year for children to respect each other (I). Her belief in the Islamic religion has influenced her practice of connecting the rules with sayings of the Prophet Mohammed (PBUH) when she presents to children. She gave the example that “a girl was talking [badly] about another girl, so we talked about the Prophet’s saying, ‘The Muslim is one who avoids harming other Muslims with his tongue and hand,’ and explained it and taught it to the children to stop these behaviors” (I; Rogoff et al., 1995).

In addition, Ms. Asma believed that Islamic social practices encouraged children’s self-discipline, which is also supported by Montessori. She said, “One of the greatest values is self-discipline, as we teach children discipline because it is followed by many things; one of them is respect” (I). Ms. Asma also saw the importance of discipline to develop children’s classroom concentration: “For example, discipline is in lowering voices at working time, which increases

his focus stage, and the period of sitting at work becomes a quality and good time" (I). Ms. Asma's view of the importance of concentration was influenced by Montessori (1949): "If we want to organize, we must have a concentration diffused over everything connected with the work in hand" (p. 316).

Implementing Rewards and Consequences

Islamic educational psychology encourages rewarding children for good manners and discourages punishment (Abdullah et al., 2018; Gumiandari et al., 2019). Thus, it aligns with the Montessori philosophy regarding punishment; however, Montessori saw rewards as discouraging children's interest in learning (Montessori, 1949). The Islamic practice has influenced Ms. Asma's classroom behavior, as she praised children for good behavior or correct work. For example, when a child came in front of the circle to read the Quran, his voice was loud and audible, so she gave him a thumbs-up. When he finished, she said, "God's blessing upon you, well done, your voice is loud and perfect" (O). Ms. Asma also repeatedly used consequences with children when they broke the classroom rules. For example, children with repeated behavioral problems were restricted from doing classroom activities or playing outside. Ms. Asma said, "[When] a child breaks a rule several times, so the child can see the consequences. And then the punishment is done. God bless, he/she will not repeat it again" (O). For example, during Quran circle time, Jude was making noises. Ms. Asma looked her in the eye and said firmly in a normal tone, "Jude, this [is the] first warning . . . three warnings, then you become late for the activity. Thank you" (O). Ms. Asma confirmed that when the children were under punishment, they could move around the classroom, and there was no time-out or punishment area in the room (O).

Theme 4: Organizing and Managing the Classroom Environment

This fourth theme focuses on the classroom environment and how it affects children's and teacher's practices (Rogoff, 2003). The first subtheme is children's roles in the Montessori classroom, and the second is how Montessori classroom rules and management influenced the teacher's practices.

Children Notifying the Teacher, Reminding Each Other, and Helping Keep the Classroom Environment Organized

Montessori (1949) encouraged a well-prepared environment to attract the children's attention to learn: "The environment must be rendered pleasing, beautiful [and] made as attractive as possible" (p. 136). The Montessori classroom encourages children's independence and responsibility to care for their environment without the teacher's directions (Lillard, 2016). I observed the children in Ms. Asma's classroom caring about their classroom environment. For example, when the children finished working on a playdough activity at the classroom tables, they stood up and put the scissors in the designated bag, and one of the children grabbed a bag of plastic rolls and passed by the tables to collect them. Another child put the small plastic dividers in the bag without the teacher's direction (O). During working time, when a child worked on the activity of transferring flour to a bowl using a spoon, she wiped the table several times to clean up the flour she dropped, then returned the broom to the designed area (O).

The children notified the teacher when they saw something was not in order. For example, when Ms. Asma was working on a mini-lesson, a child interrupted her and said, "There is no water in the pot for pouring material." She said, "Okay, get the water by yourself," and the child did (O). The children also reminded each other to follow the classroom rules. For example, one of the classroom rules for work time was to have only three or fewer children at one table.

Thus, when Jude wanted to sit at a table of three, Yusra, one of the three children, said, “No, you can’t sit down!” She pointed at the children sitting at the table and counted them: “One, two, three.” Jude respectfully understood the rule, so she went to sit somewhere else and did not show any anger or resentment (O).

One of Montessori’s main principles is the multi-age classroom, where children of three different ages (e.g., 0–3, 3–6, 6–9) work together in one classroom (Isaacs, 2018; Lillard, 2016). Ms. Asma’s classroom included children aged 3–6 (I). The multi-age classroom allows the younger children to learn from the older children and the older children to care about the younger children (Lillard, 2016). Ms. Asma admired the mixed-age classroom because it provided the older children with social skills to work with younger ones. She explained, “The Montessori system motivates older children’s social skills to improve for the young because they are sitting [involved] with adults in many things, thank God” (I). In Ms. Asma’s classroom, the children, no matter their age, helped each other when needed. For example, when two girls were going out for outdoor activities, one helped the other put on her jacket, and they were the same age (O).

The Montessori classroom culture influenced the children, as they worked comfortably in the classroom, showed their enthusiasm for the work, used normal voices, and displayed few behavioral problems (O).

Teacher Directives to Keep the Classroom Organized, Safe, and Rich in Learning Different Skills

Montessori principles encourage children’s independence in the classroom (Lillard, 2006). However, in addition to the teacher’s role of observing children and preparing the environment (Montessori & Carter, 1936), Ms. Asma directed children to manage the classroom environment based on the Montessori classroom system and school requirements.

Explaining and Repeating Rules and Reviewing Tasks to Organize the Classroom Environment

Ms. Asma started by teaching the children the classroom rules: "From the beginning, we were explaining the rules to them, and then we were firm and practicing the rules, which we do not break" (I). For example, she reminded the children to return the materials when they finished working on an activity. When Boddor left her work on the Pink Tower and Brown Stairs, Ms. Asma called to her, "Boddor, Boddor, we finish the arrangement, please . . . come on, my love." The child then put the tools back in their places (O). Ms. Asma explained that the rules were "repeated every [once in a] while, depending on the situation; I mean if we saw that the children . . . started not to return the trays in the right place, we [would] start to reestablish the rule in the morning circle" (I).

In addition, she encouraged children to organize the classroom environment by assigning them classroom tasks: "On Sundays, we change the tasks and present them to the kids, and every week they have [new tasks]" (I). During circle time, she reviewed the tasks with the children (O). The children were responsible for doing their tasks even if they needed a teacher's support: "He must follow it . . . even if the teacher [helps him by] moving his hand in order to do it" (I). For example, while the children were getting ready to go outdoors, the child who had the task of caring for plants was cleaning the leaves of the tree, then folded the towel and put it in the designed tray (O).

Directing Children to Maintain a Safe Environment

Ms. Asma's classroom practices were affected by the Saudi educational philosophy that teachers "should protect children from dangers, [and] watch for signs of abnormal behavior" (Aljabreen, 2017, p.72). Thus, she was concerned about providing a safe classroom environment

(Rogoff, 2003). This influenced her practice of directing the children and putting limits on their freedom during work time. For example, when two children were building with the Pink Tower and Brown Stairs, they used a wooden chair to climb up higher and increase the number of cubes. Ms. Asma sat on the floor near them and gave a mini-lesson to another child about letters, but paid more attention to the children's building (O). When she noticed that the building was higher, she said, "Don't throw it away, darling . . . my darling . . . that's enough, that's enough . . . you can't increase it" (O). When the children continued to add to their tower, she said again, "That is enough," and she left the mini-lesson and went to the tower. Ms. Asma shook the tower and said, "It is shaking," then balanced the tower from the bottom so it would not fall and asked the children to make another small tower next to the big one. One of the children left, and the other child tried to make the small tower, then quit (O). Ms. Asma explained this situation: "[It is] for more safety because it could fall on one of them . . . or maybe even when [one of them] tries to put [a cube on] it, she could fall on it. They could build another one next and close to it" (I).

COVID-19 was also a safety issue that affected the Montessori classroom culture, in that the children depended on the teacher when they needed food:

> In the previous years, children used to go and take everything. Then, when we came back, after Corona . . . we serve children to lessen problems . . . [because] no one [could] take the food by hand . . . and the space could be crowded. (I)

Time Directing to Encourage Learning

Ms. Asma worked following the school's schedule, from 7:30 when the children arrived to 12:30 when the children were dismissed (I). Thus, she had 5 hours to meet all the school requirements; as she explained, "Time is very important for a teacher because . . . you have many

requirements, and you have a good number of children" (I). Therefore, the school culture influenced classroom activities because they were based on the school's schedule (O; Rogoff, 2003). See Appendix F for more examples of how Ms. Asma guided the children based on the school schedule.

During working time, Ms. Asma used sand timers to time some activities (O). The idea was suggested at the school meeting, "according to the new rules that [the teacher] decides the class needs them" (I). She explained,

> Sometimes there are kids who do one work activity all the time, without changing to discover other things . . . so for this reason, we give them a certain time, so that this work takes, for example, ten minutes and then [he/she] does something else. So, instead of the teacher directing . . . [children] are responsible for time themselves. As soon as this time is over, you get up alone and go choose something else. (I)

After presenting mini-lessons, Ms. Asma also used the timers to provide some free time for children to work. For example, when she finished a letter lesson, she brought a timer for a child, placed it on the mat, and said, "You're going to work for five minutes" (O).

Ms. Asma also cared about the children getting the benefit of working with different activities in the classroom. Thus, she directed the children not to work on activities past the time limit. For example, while she was working with another child, she noticed that one child had his five-minute timer run out and was still working on the same activity. Thus, she told him, "Adeel, the five minutes is over" (O). The child returned the tools.

Table 2 summarizes the major themes and subthemes found in Ms. Asma's final results.

Table 2

Summary of Results for Teacher 1 (Ms. Asma)

Theme	Subthemes
Adapting Montessori principles and strategies in a flexible school culture	Admiring Montessori education for its flexibility Societal ignorance of Montessori education Allowing for children's independence in the daily routine and freedom to work on classroom activities Montessori mini-lessons to teach and assess children based on their individual ability "Very comfortable" and cooperative Montessori school culture
Integrating Saudi knowledge and socio-cultural practices in daily classroom activities	Integrating Saudi culture to support children's identity Teaching about Saudi Arabia and different countries around the world Enhancing Saudi social practices through gender separation and classroom conversations
Integrating Islamic knowledge and practices in daily classroom activities	Importance of integrating Islamic practices for children's morality Enhancing Islamic beliefs and practices in Quran and meditation circle time and classroom curriculum Enhancing Islamic social practices in the daily routine and compatibility between Islamic and Montessori behavioral practices
Organizing and managing the classroom environment	Children notifying the teacher, reminding each other, and helping keep the classroom environment organized Teacher directives to keep the classroom organized, safe, and rich in learning different skills

Chapter Summary

Ms. Asma praised the Montessori method for the flexibility that encouraged teachers to work with children based on their abilities, interest in the sensitive period, and the freedom to

integrate different subjects into the curriculum. The Montessori school culture influenced her to support the children's independence at meals and work times (Rogoff, 2003). However, when teaching mini-lessons and circle time, Ms. Asma controlled the children's freedom, as she chose the activity, asked questions, and corrected their errors. In teaching lessons, Ms. Asma applied the three periods and traced the sandpaper letters (Montessori, 1912; Lillard, 2016), and she assessed the children's skills using Montessori Canvas. The school rules were designed based on the teachers' discussions with the school administrators. The school environment provided comfort and cooperation for all teachers.

Ms. Asma believed in integrating Saudi culture into the school events and classrooms to support the children's identity. She also considered it important to teach the Islamic religion to young children. Ms. Asma used circle time and classroom centers to present Saudi culture, materials, and the Arabic language in her Montessori classroom. For the Islamic implementations, she focused on teaching and modeling Islamic practice more than on religious concepts. Ms. Asma encouraged proper sitting at circle time, but especially during Quran time to respect the Quran. She was influenced by the Islamic educational practice of rewarding children for positive manners, and she involved them in Islamic events and school celebrations.

The children's role in Classroom A was to keep the environment organized. They returned activities to the shelves and reminded each other of the rules. In different situations, Ms. Asma directed children to manage the classroom based on the Montessori school system and the school rules. The Montessori school culture of encouraging children's independence was affected by COVID-19 safety protocols around food. The need to follow the school schedule played a significant role in teachers' control over children during work time and other classroom activities.

CHAPTER 5: FINDINGS FOR TEACHER 2

Introduction

This chapter presents the findings from the second case—the English-language Montessori kindergarten teacher in Classroom A. It shows the teacher's adaptations and implementations of the Montessori method in the Saudi early childhood classroom. The chapter is organized in thematic sections to align with the research question and the themes presented based on the collected and analyzed data. Three major themes are discussed: adapting Montessori principles and Strategies in a flexible Montessori school culture, integrating Saudi and Islamic education in circle time and classroom activities, and organizing the classroom environment through children's roles and school and classroom rules. Data sources are designated as interview (I) or observation (O).

Overview of Teacher 2

Ms. Leena was 37 years old and an English-language teacher in Classroom A. As a child she lived in different countries, including Saudi Arabia, moving with her family based on her father's work. She got her bachelor's degree in information management systems and worked for ten years in HR. Ms. Leena was tired of working in her previous jobs because sometimes she left her "work at 8–9 at night, so it was a lot of pressure" (I). Thus, she shifted to work in the school system after several years of volunteering experience as an after-school assistant. Also, her children encouraged her to be in the educational field because she helped during volunteering events. Ms. Leena volunteered at the same Montessori school where she worked during this study. However, she realized she needed more education experience: "I do not have a lot of

experience about children" (I). Therefore, she took courses and read books to support her knowledge, in addition to receiving Montessori training sessions from the school principal. In Classroom A, Ms. Leena presented the Montessori materials in English and spoke only English with children during the school day. She also presented lessons in English during circle time and worked simultaneously with Ms. Asma, the Arabic classroom teacher.

Theme 1: Adapting Montessori Principles and Strategies in a Flexible School Culture

The data analysis for Ms. Leena presented multiple teacher adaptations of the Montessori method within the Islamic religious and Saudi socio-cultural context, and the results fell into five subthemes. The first subtheme discusses the teacher's admiration and Saudi society's ignorance of Montessori education. The following subtheme addresses the children's independence and freedom of choice in the classroom. The next two subthemes provide details of children's dependence in mini-lessons and the home environment, as well as Ms. Leena's teaching and assessment of children's skills. The last subtheme addresses the Montessori school culture that influenced Ms. Leena's practice in the classroom (Rogoff, 2003).

The Montessori Principles "Will Create the Feeling of Initiative"

"It is very, very unique," Ms. Leena said, describing Montessori education as different than the traditional methods: the children "learn . . . from your surroundings, and not just sit and everything will come to you" (I). Ms. Leena believed that children were capable of learning when an adult provided them with the appropriate environment (Montessori, 1949): "They have good energy, let us use it wisely" (I). Moreover, she admired the concept of Montessori: "It is true that the Montessori concept is very wonderful" (I).

When I asked Ms. Leena what was the most valuable thing in school, she answered, "The child . . . I mean he is the center of the school" (I; Montessori, 1949). She believed in focusing

on children because "they will grow up and build the society" (I), which aligns with Montessori's (1949) philosophy that educating the "small child will in the future become the most basic and important consideration of society" (p. 151).

Moreover, Ms. Leena admired how Montessori principles taught children to be responsible. She said, "It will create the feeling of initiative, you do not see it in everyone . . . sadly it is not that common" (I). Based on her experience working with some adults, she found responsibility important, which affected her beliefs and practices in that she encouraged children's independence and responsibility. Rogoff et al. (1995) wrote, "When a person acts on the basis of previous experience, that person's past is present" (p. 56). Ms. Leena shared that in her previous job, some employees were "like children, you tell them what to do, one, two, three, [because] the responsibility feeling sadly is not there" (I).

Society Not Seeing the Importance of Multi-Age Classrooms or Young Children's Learning

Ms. Leena thought that her family and cultural community might affect the implementation of Montessori practices in Saudi Arabia, and explained that "some people support [it] and others do not" (I). Some educators were not interested in the Montessori method of a multi-age classroom: "Why I mix . . . it is confused . . . but it is a few [people] that I see" (I). In addition, some teachers did not support mixed-age groups, as she shared, believing "it is easier . . . put them in one classroom and give them one letter [lesson]" (I).

Ms. Leena described that some educators thought children should have free learning at the kindergarten age: "[There] is still the mentality that children should only play, so why do they go to kindergarten . . . There is still, unfortunately, and with the family . . . I mean, he is still four years old and does not need to go to school" and do nothing (I). This family belief contradicts Montessori's (1949) philosophy of encouraging children to learn through a prepared

environment. On the other hand, Ms. Leena mentioned that some people supported Montessori education: “Montessori to them is something that is perfect . . . maybe because it is something from the West” (I).

Children’s Independence in Serving Themselves and Freedom in Work Time

Independence is a major principle in the Montessori method, as Montessori (1949) presented: “To be able to say: (Now the children work as if I did not exist). She has become nothing, and the children have become all” (p. 404). During my observation in Ms. Leena’s classroom, I noticed that most children were independent starting from their arrival at school. For example, a child entered through the front door, took off his shoes, went to his classroom, put his shoes in his cabinet, and then went to wash his hands. The child then sat in the inner yard with the other children without the teacher’s direction (O). The following sections provide more details about Ms. Leena encouraging children’s independence and freedom of choice.

Providing Only Verbal Directions to Support Children’s Independence

When Ms. Leena started teaching, she did not find it easy to wait for children to do things by themselves: “It wasn’t easy because it is completely out of my comfort zone” (I). Ms. Leena also explained, “Not helping a child was to me is something that . . . I don’t know how not to help him! It is not easy in the beginning; you sit and see him putting on the shoes for 15 minutes” (I). However, the Montessori school culture has changed her perspective, as she believes in children’s independence (Rogoff, 2003). She said, “He sits and spends 15 minutes putting on his shoes. It is okay. Eventually, he will learn” (I). She added, “So even me, I learn that [I should] give [him] a chance” (I). For example, when Ms. Leena called the children to play outside, a child asked her to help him put on his jacket. Ms. Leena did not put his jacket on; instead, she provided verbal directions such as “Put the sleeves out” to teach the child how to put on his

jacket and helped him only when needed (O). Ms. Leena explained that some children expected the teachers to dress them when they forgot the classroom routine, "standing waiting for us to put his clothes on, or if he is absent . . . or he came from a vacation" (I).

During mealtime, a few children had tasks to prepare the table for the other children; some were independent and did the task without the teacher's direction or help. For example, Ms. Leena noticed Amer doing his task of putting the plates on the tables without her direction, and said, "Thank you, Amer" (O). Ms. Leena and the children who had the meal tasks were working on the table in that area (O). However, a few children were confused and needed the teacher's directions to do their tasks (O). I think this was because it was the beginning of the week, and the teacher changed their tasks each week, so the tasks were new to them. When a few children were confused about doing their tasks (O), Ms. Leena directed them to work on their tasks and not do other tasks instead.

At the second meal, the children were more independent in serving; they served food to themselves after the teacher put the food on the shelves and asked them to do so (I; O). During both meals, all children ate independently in terms of using their hands or spoons to feed themselves (O). The children were also comfortable in the classroom during mealtimes, and the teachers gave them the freedom to speak and chat with each other without interrupting them, even when they were getting louder (O). Once the children finished their meal, they returned their trays, dishes, and cups to the right place and went to the bathroom to wash their hands (O).

Allowing for Children's Freedom of Movement and Choice in Work Time

Montessori pointed out the importance of allowing children freedom to move and work in the classroom according to their needs: "Whereas the secret of the child is barely hidden by his environment. It is on the environment that we must set to work to enable the child to manifest

himself freely" (Montessori & Carter, 1936, p. 129). The children's practices in Ms. Leena's classroom were influenced by the Montessori classroom environment, which allows them freedom of movement and choice during work time (Lillard, 2016; Rogoff, 2003). For example, after Ms. Leena finished circle time, the children stood up and moved to the centers to choose activities from the shelves. Two children chose to work on their notebooks and color the letters at the table, two chose the color cylinders to sort by size on the floor, and one child worked on a water-pouring activity (O). Moreover, the children could choose whom to work with, individually or in a small group. For example, I observed one child ask to join two others in a shared activity, but it looked like they did not agree to work with her, because they had argued when they were playing outdoors. The child understood that they had a choice, so she left quietly (O).

In addition, she allowed them to work with the materials differently after they had mastered an activity's objectives and skills. For example, she explained: "The Metal Insets, it is an essential thing for you [the child] to draw the basic shape and then do whatever you want . . . zigzag or whatever" (I). In the classroom, I noticed that a child built a tower using the Brown Stairs but made it look like a house, rather than stacking the traditional way, from largest to smallest (O).

Making Children's Desires a Priority for Work in Mini-Lessons

Ms. Leena believed in the importance of children mastering some skills based on their age level, as she explained: "KG2 they should master three skills, KG1 introductory and not include [lots] of skills, KG3 . . . should master the letters and numbers" (I). This belief came from the school culture, which required her to evaluate children on assigned skills (Rogoff, 2003). Also, the school required evaluation reports to be sent to the parents: "We send them [the

parents] that we reviewed these letters and presented these letters, and told the parents . . . [to] print letters and words at home and play games with them. The report [is] basically for language and mathematics" (I). Most Saudi private kindergartens support teaching these skills to prepare children for the first-grade level, which further shaped Ms. Leena's practice of directing them in mini-lessons (Rogoff, 2003).

Even though Ms. Leena directed the children toward mini-lessons, she made the children's desires and interests a priority when working on the mini-lessons. For example, she asked Adel to work on a numbers mini-lesson, but he was holding the bee activity and looked at her to show his interest in the bee activity. Ms. Leena sat down, looked into his eyes, and said, "Adel, you want to work with the bees now? Okay, I will set up a time for you." She went to bring him the sand timer, but he changed his mind and returned the bees. Ms. Leena said, "Okay, you do not want to work with it." She and the child sat on the floor and worked on the activity (O). Another time, Ms. Leena was working with a small group of children on letters, and Azzam was sitting and not working. She did not engage him in reading the letter or tracing—I think because he had already mastered the letters. Thus, Ms. Leena said, "Can you go and work with something else?" Azzam said, "Can I just watch?" Ms. Leena replied, "You want to just watch? Okay." Then she completed the lesson with him there (O). When she started the mini-lessons, she guided the children by presenting the materials and asking questions (more details on her flexibility in teaching the mini-lessons in the next section).

Adult Intervention in Mini-Lessons and at Home

Pointing Out and Correcting Children's Mistakes in Mini-Lessons

Montessori materials lead children to self-correct and find their mistakes by themselves (Lillard, 2016). Montessori (1949) wrote, "The materials have two requirements to meet: (i) to

refine the senses of the child, (ii) to provide a possibility of control of error" (p. 372). Ms. Leena supported Montessori's idea of self-correction, saying she believed "the control of error . . . should be in the hands of the child who feels that there is something wrong" (I). The Montessori school culture affected the teachers' choices when selecting supplementary classroom materials, as Ms. Leena presented: "Even when we bring a puzzle, we ensure that it [the pieces] do not match together unless it is in the correct side" (I; Rogoff, 2003).

In mini-lessons, Ms. Leena provided the opportunity for children to think about the answer, but gave hints if they did not know the answer. For example, Ms. Leena opened the container with the letter V and showed a child a toy of a small vest. The child did not know what it was. Ms. Leena said, "It is like a jacket but no sleeves." The child still did not answer. She said, "We call it a vest" (O). When Ms. Leena noticed children working incorrectly, she provided them with the opportunity to find their mistakes. She clarified that if "a child forgets a vowel . . . I pronounce the word without a vowel, so it does not make sense," to allow the child to find the mistake (I). She explained that in some situations, she got involved in correcting the children's mistakes instead of having them self-correct because they couldn't figure out the right answer: "For example, the letters P, D, B, these are always the three letters they misspell . . . I always correct this for them and I remind them" (I).

Misunderstanding of Children's Abilities in the Home Environment

"To understand the cultural basis of human development in all communities . . . it is crucial to examine other ways of doing things" (Rogoff, 2003, p. 85). Ms. Leena explained that children were less independent in their home environment, where people did things for them (I). A problem that she mentioned facing at the beginning of the school year was a child thinking that "it is normal … to spill something and walk away because he knows that somebody will

wipe up after him . . . [Or] standing waiting for us [the teachers] to put his dress on" (I). Rogoff (2003) believes that "broad cultural experience allows us to see the extent of cultural processes in everyday human activities and development" (p. 11). Ms. Leena explained that part of the problem was some middle-class Saudi parents who had workers, such as housemaids and nannies, to help with the house and children, which affected the children's behavior (I). For example, Ms. Leena said, "We have parents who say, 'We try, but the nanny comes and destroys things, so she [the nanny] puts his clothes on, feeds the child'" (I). She described observing the nannies doing things like carrying children when they dropped them off at school. "Please do not carry her! Please, she can walk!" Ms. Leena said. "If she carries her, you can imagine the shoes and brushing teeth and combing hair" (I). Montessori (1949) wrote, "The child who is capable of walking alone must walk by himself because all development is strengthened by exercise and all acquisition confirmed by exercise" (p. 220). Thus, the Montessori school culture supported the teachers in encouraging children to be independent and responsible for themselves and their environment (Rogoff, 2003). Ms. Leena believed the parents played as much of a role as the nannies in not supporting the children's independence: "If it is not the parents, it comes from nannies" (I). She said these parents "do not understand what the child is able to do" (I). And when they saw the children being independent, they were "surprised [by] how they could do it" (I). She also mentioned that some parents supported independence: "Recently I can see in the society that it is okay to let [the child] learn, [they] read and see and apply [it] at home, so their children have their things at home and they ask to organize their stuff" (I).

Flexibility in Teaching and Assessment of Children's Skills

Flexibility in Integrating Montessori Strategies with Other Strategies in Mini-Lessons

Ms. Leena used Montessori's three-period lesson strategy to present some new concepts to the children. "The three-period lesson is essentially first teaching the child a new concept, then asking the child to recognize the concept, and then finally asking the child to recall the concept" (Lillard, 2016, p. 24). However, the Montessori school culture allows flexibility for teachers to involve different strategies in the classroom, which influenced Ms. Leena's practice of teaching lessons based on the children's interests and needs (Rogoff, 2003).

For example, in a mini-lesson to teach the letters K and B, she started the lesson by presenting the sound "ka," then traced the letter using her two fingers, and the children did the same after her. After that, she picked up letter K objects and pronounced their names separately: "Kangaroo, key, and kit." Then, she showed them the sandpaper letter B and said, "This is ba, ba, ba. I will trace it first." She traced the sandpaper letter two times, then asked the children to trace them one by one. The teacher asked, "Can you think of a word that starts with *ba*?" The children answered, "Bird, bottle." She then brought out the objects from the container, and as she held each object, she said its name. "Ba ba, boat, ba ba, bat, ba ba, banana. Can you show me how to trace it?" (O). At the end of the lesson, Ms. Leena said, "Okay, we will play the game." She moved all the objects into the middle of the mat, with B on the right and K on the left. She said, "Yusra, can you give me something that starts with the letter K?" The child picked the key. Ms. Leena said, "Good job, can you trace it for me?" She did (O). Thus, the teacher here used the first two steps to present the letter (Lillard, 2016).

Another example of Ms. Leena's flexibility in presenting the Montessori lessons was when she played a hiding game at the end of the mini-lessons. For example, she closed her eyes,

and the child took the tiger toy from the "T" mini-lesson and hid it behind his back. She then asked, "What is the sound of the thing you hid?" When the child answered, she guessed, "Tiger!" (O). At the end of each mini-lesson, Ms. Leena asked the children if they needed 5 more minutes for the activity. For example, when Ms. Leena finished presenting letters to two girls, she asked them if they wanted 5 minutes to play. When they agreed, she gave them a timer and said, "Okay, 5 minutes," and then moved to the other children (O). The two girls played with the objects, such as moving the bat up and imagining it flying (O).

Ms. Leena explained that she also modified some Montessori strategies:

> I mix two tubs [containers of objects]. This [idea] is from me. It was not in the curriculum. But I felt that I wanted them to differentiate, and then I [ask them] to choose something that starts with the sound F. So, he [begins] running [his brain] more . . . This was not in the curriculum. (O)

Grouping Children Based on Their Abilities

Montessori suggested teachers should work on the children's abilities in the classroom or small group lessons (Isaacs, 2018). Ms. Leena implemented these suggestions in that she worked with an individual child or up to three children at one time based on their abilities and personalities (O), because sometimes "this child needs this thing and that child needs that" (I). For example, when she was working with children in the English language corner, she put her laptop on the shelf and looked at the Excel sheet she had created to follow the children's academic skills, then worked with them on a letters lesson (O). Ms. Leena also considered the children's abilities when she presented the one-to-one or mini-lessons. She described, "I see children whose primary language is English, so I introduce the sensory item. Then, Ms. Asma . . . continues [in Arabic]" (I).

Reporting Children's Academic, Islamic, and Social Skills to Parents

Based on the school rules for assessing children's developmental skills, Ms. Leena pulled several children during work time to teach them mini-lessons and assess their performance (Rogoff, 2003). She used an "Excel sheet and Montessori Canvas as the most basic" evaluating tools (I). Ms. Leena was not comfortable working with Montessori Canvas directly, so she recorded data in Excel and then transferred it. She used the Excel sheet for "letters, but the sensory, math, and practical life skills are all on Montessori Canvas" (I). She assessed practical life skills, such as "how to roll a rug," based on three levels: "The first thing, I present the activity . . . secondly, the child is good when he starts to know how to do it . . . then he has mastered the skill" (I).

The school administrators had access to the assessment reports, and parents received "the academic assessment report every week and the Islamic and social skills report every semester" (I). The Montessori method encourages aligning teaching with learning rather than assessment (Cossentino, 2009); however, the school rules were influenced more by the traditional school culture, in that the school expected teachers to assess the children and send evaluations to the parents to inform them of their children's progress (Rogoff, 2003).

Setting High Expectations in a Flexible, Cooperative, and Supportive Montessori School Culture

"This Curriculum Is Not Only From Me but From All of Us"

"There is still loyal cooperation" in the school on all social and academic bases (I). Ms. Leena stated that the teachers' cooperation was sincere: "Everyone who works here, [their] hearts are in [this] place" (I). The first day I observed Ms. Leena, I felt that she was overwhelmed because Ms. Asma, the other classroom teacher, was absent due to COVID-19.

Thus, Ms. Leena took on both teacher roles in preparing activities and observing children (O). However, I did not see that she was upset or disappointed.

Montessori designed a flexible method that could integrate into different cultures and religions around the world (Aljabreen, 2020). Thus, it encourages teachers' cooperation in sharing ideas and discussing them at school meetings. For example, the teachers at this school discussed strategies they used in the classroom to boost "cooperative work" about the curriculum subjects. Ms. Leena shared, "Of course, this curriculum is not only from me but from all of us," as were the classroom activities (I). The teachers met "approximately every week" (I) to plan, choose unit topics, and discuss the instructions and materials: "We all try to come up with ideas and come up with new things" (I). In addition, the school administration encouraged the teachers' meetings and implementation of their ideas in the classrooms (Rogoff, 2003). Thus, Ms. Leena remarked that they had unique practices at this school: "As you say, another perspective, which is not like the traditional stereotype of the teachers who already have experience or have had the curriculum for a longer time" (I).

High Expectations and Supportive School Culture

The school principal set high expectations for teachers, which encouraged Ms. Leena to work there. For example, when the principal asked Ms. Leena to work at the school, she said, "Leena, we see it in you" (I), even though Ms. Leena considered herself less experienced in educating young children. Ms. Leena provided different examples of how much she was encouraged, supported, and helped by the other teachers and administrators. For example, she said, "Thank God there is very high support, whether it is from teacher Asma or even teacher Sahar [the principal]" (I). She shared that the English-language teacher with more experience at the school also supported her: "Ms. Nouf trained me in the English curriculum, and we sat for

about two weeks, we worked through the whole curriculum. I mean, we read word by word, we understood it [and] she explained the activities" (I).

Ms. Leena described her role in the classroom and the teachers' support, especially at the beginning of her work in the school:

> I create the slides . . . [and] usually I give it to her [Ms. Nouf] and ask her to view it after I finish to ensure everything is okay, [for example,] if the pictures are appropriate or not, if the videos are clear or not, especially in the beginning. But now I can do it fluently and faster. (I)

Theme 2: Integrating Saudi and Islamic Education in Daily Classroom Activities

This theme presents Ms. Leena's integration of Saudi socio-cultural and Islamic practices in the classroom. When exploring classroom practice, Rogoff (2008) suggested that researchers should record not only the practices, but also the backgrounds and perspectives that drive teachers to engage in such practices. Thus, the first subtheme is how Ms. Leena saw the importance of integrating cultural and religious practices based on her background and perceptions. The following subthemes cover how she enhanced the children's knowledge and social and behavioral practices related to Saudi culture and Islamic religion in her classroom.

The Importance of Aligning Montessori with Cultural and Religious Principles to Support Children's Identity

Montessori designed a flexible method that could integrate into different cultures around the world (Aljabreen, 2020). Even though the Montessori method came from a western country, it has been implemented in eastern countries, such as Japan, China, and Malaysia, and countries in the Middle East, including Saudi Arabia. Ms. Leena believed that integrating the Montessori method to align with the Saudi socio-cultural context was important: "I believe that if they bring

the Montessori, they bring it in the right way [to] align with the Arabic language, with the identity, with the religious principles" (I). She insisted, "There is something special about us, whether it is in the Kingdom, Arabs, or Muslims, whatever out there" (I).

Ms. Leena shared that she focused on educating children starting from a young age: "The younger the age, the more the child absorbs . . . I mean, this is the age at which you build the foundation of the child" (I). Montessori influenced Ms. Leena's belief that children from birth to 6 years old have absorbent minds (I; Montessori, 1949; Rogoff, 2003).

Ms. Leena also believed it was essential for children to practice the Arabic language, even though she taught English: "I am an English [teacher], I am not an Arabic teacher, but for parents who come to me and say, 'We do not speak to our child other than in Arabic,' I tell them that it is excellent" (I). Her belief was based on her experience of noticing many Saudi children without Arabic as a primary language (I; Rogoff et al., 1995). Moreover, Ms. Leena critiqued schools that adapted international methods without paying attention to Saudi identity and cultural practices: "We are international [schools] and we just [present] English . . . [but] they lose a big, big part in identity, Arabic language, or even religion and Quran" (I).

Ms. Leena's beliefs also reflected her childhood background of engaging in religious activities with her family: "My father . . . [told] stories of the prophets and the Prophet Mohammed's (PBUH) friends, and [the stories] are still in my mind until now. My mother . . . [read stories] as well" (I). Thus, her beliefs, experiences, and family background shaped her perspective and practices of involving Islam and Saudi culture in her classroom (Rogoff et al., 1995).

Admiring Saudi Vision 2030 to Develop Education in Saudi Arabia

Ms. Leena's past experience led her to working on Vision 2030. "I remember when we used to make a vision and mission for the authority [in previous work], so I went deeper into it a lot . . . I was leading the workshop" (I). She admired the 2030 plan's focus on developing education in Saudi Arabia: "There are wonderful things in it, especially that touch the child and family attention . . . that is a clear development of interest in the area of education" (I).

Using Daily Circle Time to Implement Islamic and Saudi Social Knowledge and Practices

Integrating Saudi and Islamic Culture in Classroom Units, Lessons, and Materials

Ms. Leena believed in the importance of teaching Saudi cultural and Islamic practices in the classroom: "Our identity as Arabs, as Muslims, and as builders of leaders, God willing, as thinking and exploring everything" (I). The school culture also encouraged her to educate children about Saudi Arabia and Islamic practices (Rogoff, 2003). Like Ms. Asma, she used circle time as an opportunity to introduce these practices. For example, as part of the school's daily morning routine, all children and teachers read the Quran and *Hadith* and sang the anthem of God's names and the Saudi national song in the inner yard before entering their classrooms (O). Ms. Leena explained, "The national anthem is almost memorized. This is the main thing we have in circle time" (I). I noticed that if Ms. Leena was busy in the teachers' room while the children were with the other teachers in the morning circle, she still came out to chant the anthem and the Saudi national song with them (O).

In addition, the school assigned culture circle time for the teachers to explain different subjects to build students' knowledge about Saudi Arabia and the world (O). Ms. Leena explained:

> We talk about the world of mountains. So Saudi Arabia, for example, we go back to the continent of Asia, what is in it in Saudi Arabia, the shape of the Kingdom's map and what the terrain is, so we focus more on what is in Saudi Arabia. (I)

She found ways to educate children about the country even if the teaching unit was not related to Saudi Arabia. For example, she would say, "We are now in the world of forests . . . as we mentioned, in Saudi Arabia, there are no forests, but it has deserts and mountains." (I). When she taught the forest lesson during culture circle time, she also integrated Islamic beliefs. For example, when she presented pictures of trees on the screen, a child asked, "Who created a tree," and she said, "Allah, Allah created it" (O). Ms. Leena also shared that when she talked about honey to the children, she said, "The Prophet, peace be upon him, recommended it, and it is mentioned in the Quran . . .[and] our God gave it to us" (I). She said that she linked everything to the Islamic faith when teaching: "We always remind [them] that God Almighty created this thing for us. God is the one who gave us this thing" (I).

I recorded when Ms. Leena shared that she included cultural activities and materials in the classroom. She used real materials to align with Montessori's (1949) belief: "If we then give him a real thing to imagine about, this is a help to him and places him in more accurate relation with his environment too" (p. 273). Thus, Ms. Leena shared examples of real cultural materials she used in the classroom:

> We brought palm tree leaf, a mat made from a palm tree . . . these are the things we have in Saudi Arabia that they see in their homes . . . we talked about the dessert, and brought nets, different kinds of dates, etc. (I)

Materials aligned with Saudi culture were also provided in the classroom centers, such as "*Dallah* [pitcher] and *finjan* [small coffee cups]" on the practical life shelves (I).

In addition to the religious beliefs that Ms. Leena shared with the children during the lessons, the materials she presented aligned with Islamic principles and Saudi culture. For example, she said, "You do not bring [pictures of] people who wear very short clothes . . . finding people who wear hijab is excellent, or at least decent pictures" (I).

"Quran Comes Number One, Then Comes Culture" for Appropriate Sitting

Ms. Leena had the role of observing the children during Quran and culture class and ensuring that they sat appropriately (I; O). For example, Ms. Leena noticed a child was not sitting properly in the culture circle; she went to him, put her hands on his back, and asked him to sit right and behind the line. She used a very soft voice to avoid disrupting the lesson (O). When a child made noises during Quran circle time, Ms. Leena looked at him from her place on a chair behind the circle and asked him to stop (O). When the child repeated the noise, she gave him a stricter look. The child stopped for a few seconds and then made another noise; Ms. Leena heard that, but ignored him. The child then stopped by himself (O). She explained, "Quran comes number one, then comes culture [circle time], the culture is somehow strict almost like the Quran" (I). She clarified that "respecting Quran time [means] to sit correctly, to respect the Quran that is being read" (I). Before Quran time, the teachers reminded the children of the rules: "We always remind them that if the Quran is read, we should listen and be quiet . . . so it is calmness and sitting" (I).

Enhancing Islamic and Saudi Social Practices Through Modeling, Teaching, Praising, Evaluating, and Communicating

Modeling Verbal Practices and Directing Physical Practices

Ms. Leena involved Islamic practices in the children's daily routines by modeling the practices rather than directing children to do them. Montessori (1949) supported the idea that

children observe the people around them to learn: “The child observes his surroundings, and experience has shown us that he tends to take in everything” (p. 145). In the classroom, Ms. Leena modeled Islamic greetings when she sat down on the floor for circle time, saying, “*Alsalmu Alaikum warahmatu All wa barakato*” to the children (O). Also, she demonstrated responding to Ms. Asma’s greeting before she started her lesson (O). In addition, she modeled *duas* in different situations, such as saying “*Alhamdu le Allah*,” which means “thank God,” after she asked a child if she needed extra food to eat and the child said no (O).

Muslims usually say “*Bism Allah*,” which means “by the name of God,” before doing anything, to wish for God’s blessings. Thus, the teacher modeled this as well: “Saying *Bism Allah* is always, whether the beginning of working or the beginning of eating . . . so try these things by default” (I; O).

Ms. Leena directed children if she noticed them making physical mistakes in Islamic practices while eating and drinking. For example, when she saw a child use his left hand while eating, she said, “Right hand, Rami, right hand.” After the child used his right hand, she said, “Good job” (O).

Planting Gender Segregation

Rogoff (2003) stated that “gender differences appear to be nurtured by differences in the tasks usually assigned girls and boys” (p. 74). Moreover, gender segregation is another part of Saudi culture and Saudi school policy that affected Ms. Leena’s practices with children (Rogoff, 2003). For example, Saudi school culture mandates separate buildings for boys and girls starting from the first grade. At the school in this study, the children were separated by gender during the morning circle time in the inner yard, where the boys sat on the right, the girls on the left, and the teacher in the middle of the circle (O). Ms. Leena clarified that “this is the only time” the

children were separated (I). However, she noted that this was a school rule and she supported it: "Excellent . . . I feel it is implanted in the inner brain that there is a difference." Ms. Leena said both cultural and religious goals shaped her perspectives: "I feel both" (I; Rogoff et al., 1995). She believed it was important to teach children that "you are separate, you are not the same thing" (I). Her reason for wanting children to feel that they were different than the other gender was to take comfort in sitting and talking with the same gender when they grew up: "We are together and even if she takes her comfort and she laughs" (I). The school culture involved gender segregation in the morning circle and the bathrooms, as well as in some classroom subjects such as "how the girls have special parts, and the boys have special parts" (I).

However, Ms. Leena did not ask boys and girls to sit separately during circle time in the classroom or during other activities when she noticed them sitting together (O). She added, "Even in Quran circle time, [mixed gender] is normal . . . it's just the morning circle . . . they are together in playing outside, in the [classroom] lessons, [and] in the eating" (I, O).

Teaching and Modeling Respect

Respecting others is one of the leading Montessori goals for self-discipline. Montessori (1949) stated that work time taught children to respect each other as they waited for their turn to work with the classroom activities. Ms. Leena believed that respecting others was also part of Saudi culture and Islamic principles: "It is a religious or a societal principle" (I). She found connections between the Montessori principle and the Saudi and Islamic practices of encouraging respect, as she explained: "In terms of Saudi Arabian [culture], respect for elders and respect for your friends . . . I mean, how does the concept of Montessori [match] with the things we believe in" (I).

Montessori (1949) wrote that "the child is endowed with an absorbent mind which takes from the environment without fatigue, so that culture, if properly prepared and presented, can be taken . . . with the greatest ease" (p. 255). Thus, Ms. Leena also modeled respect in her daily routine as a part of the Montessori classroom culture (Rogoff, 2003). For example, when she sat with the children during circle time and took their answers, the time was up when the last child answered. When another child wanted to share, Ms. Leena looked at him and told him that later she would listen to him; she did not interrupt the first child because the time was up and also did not ignore the second child (O). Ms. Leena encouraged children to say thank you and modeled it in different situations in the classroom.

Furthermore, the teachers taught children to be respectful to each other, but also to respect elders and all other people. Ms. Leena explained, "Yes, respect for anyone older in general, even the workers. We call them [the school maids] teachers. Teacher R and teacher B, there is no difference, I mean, we are all equal" (I). At mealtime one day, Ms. Leena asked the children, "Do you know who made the muffin? Ms. R made it. We say thank you." The children said thank you to Ms. R, who was there serving them food (O). In addition, Ms. Leena taught the children to respect food as part of her Islamic belief that it was a blessing from God. She told them, "If we do not like the food, we say *Alhamdulla*" (which means "thank God") and "we don't say we hate it or whatever, but just leave it" (I; O).

"Who Can Tell Me, What Did You Do on Holiday?" to Enhance Social Skills

The idea of socialization in Saudi education has been implemented through teachers encouraging the children to talk and express themselves and build social relationships to engage them in social life (Khalifa, 2001). This school encouraged students to be social by scheduling a circle time to talk and share about special events or activities that they did with their families (O;

Rogoff, 2003). Ms. Leena said, “We had a long holiday; who can tell me, what did you do on holiday?” (O). When the children shared their answers, she showed her excitement (O). She also asked Yusra, “Tell us what you did on holiday . . . I know Yusra had a great holiday.” The child said that she turned 5 years old. Ms. Leena excitedly said, “Yes, you turned five!” (O). Another example of acknowledging children in circle time was when Ms. Leena pointed to a child who had been absent for a long time and welcomed him back in front of the other children. He explained that his mother had COVID, and both Ms. Leena and Ms. Asma said a special prayer for his mother (O).

Reporting Islamic Social Skills to Parents

Ms. Leena sent a report to parents to notify them about the Islamic skills and social practices their child learned during the semester:

> The last semester has a full report that goes to the parents. For example, the child said Athkar [a prayer] with us and read Quran with us . . . From a societal point of view, if he said ‘Salam’ [peace be upon you] or not, [if he was] cooperative or not cooperative . . . we put [it] right on the skills and write a simple comment. (I)

Using Different Strategies for Praise in Different Classroom Situations

While Montessori principles do not support the idea of reward or punishment (Montessori, 1949), Islamic educators are encouraged to reward children’s good manners (Abdullah et al., 2018; Gumiandari et al., 2019). Also, the school culture in Saudi Arabia uses praise to encourage children, which might have affected Ms. Leena’s practices in the classroom (Rogoff, 2003).

During my observation of Ms. Leena, I noticed that she praised children in different situations using different strategies. For example, she used praise to confirm the children’s

answers and encourage them to work on a mini-lesson (O). On one occasion, she asked, “Yusra, can you give me something that starts with the letter K?” The child picked up a key. Ms. Leena said, “Good job, can you trace it for me?” When the child did, she said, “Excellent job” (O). Moreover, when she worked with Azzam on the letter sounds and the objects, she praised him by giving him a high five and tapping his back (O).

Ms. Leena also encouraged the children’s good behavior and praised it to show her support. For example, when Jamila helped a younger child put on her jacket, she said, “Thank you, Jamila, for helping your friend, thank you, honey (O).” Ms. Leena explained, “There are children, glory to Allah, they initiate . . . so we encourage [them]” (I).

Theme 3: Organizing and Managing the Classroom Environment

The child in the Montessori classroom “must be liberated”; thus, the classroom rules and management support independence and freedom of choice (Montessori & Carter, 1936, p. 129). However, Saudi Montessori classroom rules might have different implementations to align with the larger Saudi school culture. This section presents the third theme: organizing and managing the classroom environment. The first subtheme presents how the children organized the classroom environment. Following that is how Ms. Leena implemented school rules and directed children based on the classroom’s rules about organization, safety, time, and learning.

Children Working on Classroom Tasks and Directing/Helping Each Other to Organize Their Environment

The Montessori classroom system encourages children to care about their environment and to work by themselves without the teacher’s direction to organize the classroom (Lillard, 2016). The children cared for their classroom and felt it was part of their responsibility to keep it organized. For example, after Yusra finished working with an activity, she rolled the mat and put

it in the right place in the classroom (O). In addition, the children also followed the classroom rules as they directed each other to remember good discipline (Montessori, 1949). For example, Salem was working at the table on the water-pouring activity, and Azzam was standing near Salem holding the glass cup and acting like he was drinking the water. He then poured water on the table. Salem told him, "Azzam, do not do that!" Ms. Asma was closer to the children, and asked Azzam to bring another towel to clean up the water. Salem said to Azzam, "I told you" (O).

The teachers assigned daily tasks for children to organize the classroom, and each week the children had new tasks (O). In the morning, Ms. Leena looked at her laptop, checked the tasks for the children, and showed them their tasks (O). Thus, the children had roles in organizing the environment, and their roles were affected by the Montessori school culture (Rogoff, 2003). For example, when Fahad finished his meal, he went to the story shelf to organize the stories, which was his task, without a teacher asking. Ms. Leena said, "Thank you, Fahad" (O).

In addition, as previously stated, the Montessori system features a multi-age classroom, which encourages children to help each other and keep the environment organized (Lillard, 2016). Montessori (1949) explained, "Our schools have shown that children of different ages help each other, the small one sees what the elder one does and asks about it, and the older one gives an explanation" (p. 332). In the classroom, Ms. Leena said, "The older will feel responsible, and I am a role model for the younger" (I). When the children started queuing to go outside, I noticed Jamila help a younger child put on her jacket and zip it for her. Ms. Leena also noticed that and thanked her. Ms. Leena agreed that it was beneficial for the children to be in a

mixed-age classroom: “This is very useful for personality and building self-confidence. Even if [a child] wants to make mistakes, he is ashamed to in front of the young children” (I).

School Rules and Montessori Classroom Management Enhancing Teacher Directives

Directing Children Based on the School Rules

The teachers did not create the classroom rules and management processes alone: all the teachers met to design and agree on the rules. The school principal (Ms. Sahar) also ensured that they followed Ministry rules and regulations: “Sahar has control, and she knows what she wants in the school, and we follow that” (I). Thus, the directions the teachers provided to the children were based on the school rules and school culture (Rogoff, 2003).

Directing Children to Keep Classroom Materials in Order

Ms. Leena believed it was easy for the children to follow the rules when the teachers explained them and it became a daily routine: “From the beginning give a rule, and they will take it from there” (I). In some situations, during the day, she directed children to ensure they followed the classroom rules. For example, the children were not to work on more than two materials simultaneously. Thus, when two children mixed four activities at one time, Ms. Leena noticed and said, “We can’t use the colors like this, please put the colors back . . . the Red Stairs is enough” (O). She also cared about having the environment organized and reminded children to clean up. For example, she passed a mat where nobody was working and said, “Get your mat, Adeel,” to remind the child to come and clean up his activity (O).

Safety Through Teacher Direction and Children’s Responsibility

The school’s cultural rule was to ensure safety for children in their classrooms and at all times in the school, which affected the teachers’ practices (Rogoff, 2003). Thus, Ms. Leena put the children’s safety first, as she explained: “You hear accidents . . . I mean, thank God, we have

not faced it until now, but unexpected things happen . . . so you want to avoid it as much as possible" (I). Ms. Leena referenced that her safety concerns were driven by her awareness of the school culture (Rogoff, 2003). For example, she shared:

> There are many things I did not understand, and then she [Ms. Asma] alerted me because it was a long time ago [I had experience] with children. But she notified and alerted me . . . then [by the time] the one is going to learn and by default from a safety side (I).

In the classroom, I noticed that Ms. Leena was conscientious about the children's actions, as she directed them immediately when she saw something was not safe for them. For example, when Ms. Leena was working with Lolo on a mat during circle time, she noticed Azzam running across the classroom holding scissors. Ms. Leena moved to Azzam and said, "Azzam, honey, we do not run around holding a scissors." She ensured that he sat on his chair before she left him (O).

Also, in the water-pouring activity, a child put two glass cups on top of each other on the table and then asked her to look at what he did. Ms. Leena raised her finger right and left (which means no). She said, "It will break, honey." The child then put the cups beside each other (O). Thus, Ms. Leena provided direction for the children's safety and reminded them of their responsibility to act safely. For example, she did not take the scissors from the child, but only ensured that he understood the rules and stayed in his place when working with sharp materials.

COVID-19 also put some pressure on teachers to reform the classroom to give priority to children's safety, and the teachers decided not to allow children to serve themselves food at some meals (I).

Directing Children for Time and Learning

Montessori suggested that children have the independence to control their time and that "physical education or recess time is a choice children can make, rather than something imposed by the clock and adults' schedules" (Lillard, 2016, p. 38). However, in the Hassan School, each teacher had a schedule for work time, classes, and breaks, assigned by the school administration. Thus, I noticed that Ms. Leena provided some direction for the children to encourage them to follow the schedule.

For example, she would ask the children to finish eating faster, saying, "There is no time to play." She repeated this same direction with Azzam, who ate slowly, many times during my observation. Ms. Leena explained that she directed him because she wanted "him to have fun and this is part of the day, he comes out and shows his energy because if he doesn't spend it outside, he spends it in the class . . . so he needs it to let it go" (O).

During work time, she directed children for a different purpose, as she explained: "I don't feel it's time" (I). She noted that the school extended work time to more than 1 hour, unlike at the beginning of the year when the time was shorter. Ms. Leena believed the adjusted work time was beneficial: "Thank God it is perfect" (I). She also explained the purpose of the sand timers: "To not spend the time on one activity or one work, because it is exciting, but we should learn something else, so we have to put the timer to [have them] move on to the next [activity]" (I). The children were expected to follow the rules and end each activity after the timer ended. For example, after Ms. Leena worked with the children in a short lesson on the floor, she asked them if they needed 5 more minutes to work on the activity. When they agreed, she provided them with a sand timer and said, "Okay, five minutes," and then moved to the other students (O). The teacher caring about the children's leaning was based on the school culture that enhance the

teacher to work with children in small lesson and evaluate their performance (Rogoff, 2003). (more details see the sub-themes, working in mini-lessons and teaching and assessment).

Table 3 summarizes the major themes and subthemes found in Ms. Leena's final results.

Table 3

Summary of Results for Teacher 2 (Ms. Leena)

Theme	Subthemes
Adapting Montessori principles and strategies in a flexible school culture	The Montessori principles "will create the feeling of initiative" Society not seeing the importance of multi-age classrooms or young children's learning Children's independence in serving themselves and freedom in work time Adult intervention in mini-lessons and at home Flexibility in Teaching and assessment of children's skills Setting high expectations in a flexible, cooperative, and supportive Montessori school culture
Integrating Saudi and Islamic education in daily classroom activities	The importance of aligning Montessori with cultural and religious principles to support children's identity Using daily circle time to implement Islamic and Saudi social knowledge and practices Enhancing Islamic and Saudi social practices through modeling, teaching, praising, evaluating, and communicating
Organizing and managing the classroom environment	Children working on classroom tasks and directing/helping each other to organize their environment School rules and Montessori classroom management enhancing teacher directives

Chapter Summary

Ms. Leena admired the Montessori method because it is a child-centered approach that encourages children's independence, environmental organization, and learning by doing. Ms. Leena encouraged implementing the Montessori classroom system, where she allows the children independence in eating and dressing, and provided freedom for children in work time. She believed that integrating Islamic practices and Saudi culture was important for children from a young age. Thus, she involved Islamic practices in circle time and the classroom daily routine, and Saudi culture in circle time and classroom materials. Moreover, the Saudi school culture in general and the Montessori school culture in particular support the teacher's Islamic implementations, as it is part of Saudi educational policy (Rogoff, 2003). The school culture also supports the Saudi cultural alignment, in that they assign days and times for children to learn more about their Arabic identity and Saudi culture.

Ms. Leena's perspectives on and support of the Montessori method and the school culture encouraged her to implement Montessori practices within the Saudi early childhood context. The directions she gave the children were based on the school's rules and Montessori classroom system to ensure a safe classroom environment that followed the school time frame and objectives (Rogoff, 2003). Ms. Leena assessed children in academic performance and Islamic skills and shared reports with parents as part of the school system to evaluate children's skills. Ms. Leena valued the teamwork present in the cooperative Montessori school culture and appreciated the other teachers' cooperation to strengthen her professional career.

CHAPTER 6: FINDINGS FOR TEACHER 3

Introduction

This chapter presents the findings from the third case—the second Montessori Arabic teacher—in thematic sections similar to the previous chapters. Data sources are presented as interview (I) and observation (O). Before the presentation of the results is an overview of Ms. Ola, the Arabic teacher in Classroom B.

Overview of Teacher 3

Ms. Ola was a 43-year-old Arabic language teacher from the city of Jeddah. She had a bachelor's degree in accounting and 12 years of experience working in a children's club where she engaged children with artworks, stories, and moral values. She also had a few years of volunteering experience in schools, as they needed teachers to support the schools' organization and help with events. She heard from her neighbors and relatives about this Montessori school, and the principal hired her and gave her Montessori training. Ms. Ola had been working at the school for 3 years, teaching children the Arabic language using different classroom activities, such as circle time and working with individual pupils or small groups of children. She taught math, reading, practical life skills, and cultural lessons in Arabic. Ms. Ola was also responsible for teaching the Quran during circle time and meditation sessions. She collaborated with Ms. Nouf in the classroom, teaching and observing the children simultaneously.

Classroom B Overview

Based on the information provided by Ms. Ola, Classroom B included 17 children, all 3–6 years old and from middle-class families. All the children were Muslim and Saudi except one

child, a Muslim Iraqi with an Egyptian mother. The classroom had four small tables with chairs for each child. All the classroom materials (shelves, cabinets, tables, and chairs) were made of wood (see Figure 4). Classroom B had 18 cabinets for the children to store personal belongings like notebooks, coats, and shoes. There was a space at the top of the shelves for the teacher to put some artwork (for the next day's use—the children were not supposed to access the artwork).

The classroom also had a desk and chair for the teachers (I did not see Ms. Ola sit at her desk except when she took notes for evaluating the children). Next to the teachers' desk was the second wall, adjacent to a plant. There was a small TV table, a black screen, a remote control on the desk, and a basket where the children disposed of used towels. Next to the screen were Arabic and English calendars hung at child height. The date, day, year, month, and weather in the English calendar were in pockets so the teacher could edit them daily. However, the Arabic calendar had embedded information. Above the calendars was the classroom chores poster, showing eight tasks, each having its picture and a picture of the child assigned to the task. The tasks included adjusting the day's information in the calendars; putting trays, dishes, spoons, butter knives, glass cups, *zaatar*, and *labna* on the tables; organizing the story shelf; and cleaning the mirror.

At the top of the second wall, the children's pictures were hung in stars. Next to the second main wall was a small wall facing the window where letters were hung in bags. The next wall had a cabinet fixed at a reachable height, labeled as the Arabic language center; next to it was the math center with some activities for Arabic and English numbers. The Arabic language center featured Arabic sandpaper letters and Arabic letters on wooden boards, a sandbox, chalk, blackboards, and Metal Insets. Next to the Arabic shelf were the English language shelves, which included English sandpaper numbers, English number cards, and a marker for children to

trace the numbers. Also, it included a box divided into two sections: the right had Arabic numbers on a wooden card, and the left had plastic circles for children to count and place in the right numbers (see Figure 5). The classroom shelf also included Arabic and English stories. In addition to the Arabic language materials, there were Saudi cultural resources in the practical life corner such as "the small coffee pot, teapot" (I). Another example was a material that had flour and lentils to be separated from each other. Ms. Ola explained, "Sifting [flour sifting], this is pure Saudi [activity]" (I, O).

After the story shelf was the Number Rods material and a box of mats. On the next wall was the English language center. The following shelf had a plastic plant in the top section and a packet with towels next to it. The shelf had more English language activities, too, including an English letter box, small plastic containers with pictures (this activity was for writing two words), a blackboard, and a tray with chalk and an eraser, among other things. Next was the practical life center, which included 12 activities for the children to practice pouring, pushing, and using tongs, among other activities. The top shelves of the practical life center had colored pencils and two containers for paperwork. Next to the practical life center were the wooden cylinders, the trash can, and a mirror at the corner. On the last wall was a basket for mats, then shelves with more practical life skills materials for the children to practice zipping, buttoning, tightening, and cutting (among others). Next, at the corner, were the sensory materials, which included Metal Insets, Brown Stairs, 3D shapes, cylinders in different colors and sizes, and other items. Next to the sensory materials were a Pink Tower and Red Rod on the floor. A picture of a rural view, a meter-tall ruler (for children to fix their pictures on according to their height), and the feelings poster with children's pictures were all on the same wall. Beside the classroom door was an attendance poster with a picture of each child.

Figure 4. Tables and shelves in Classroom B.

Figure 5. Arabic numbers materials.

Theme 1: Adapting Montessori Principles and Strategies in a Flexible School Culture

Ms. Ola was responsible for teaching the Arabic language and supporting children's activities in Classroom B within a child-centered educational framework. The first subtheme presents the background and perspectives that influenced her to admire Montessori education for enhancing children's responsibility. The following subthemes provide details about how she adapted Montessori classroom practices such as independence, freedom of choice, and teaching strategies. The following theme discusses the adults' intervention in children's learning. The last subtheme details how the flexible Montessori school culture influenced her cooperation and practices in the school.

Montessori Education Enhanced Children's Responsibility

Ms. Ola believed Montessori education was unique because it encouraged children to take responsibility. From her experience, she had found that children were "able to take responsibility" (I). She also discussed her thoughts on incorporating the Montessori approach in Saudi Arabia, emphasizing the importance of the children "taking responsibility, commitment to the role, initiating the work, and initiative that '*I am* helping'" (I). Ms. Ola believed that a sense of responsibility encouraged children to try by themselves until they mastered their work. Her opinion was that the Montessori method allowed the curriculum to work based on the children's ability: "It is individual education, which is according to the child's abilities" (I). Based on her experience with children, she believed they could learn fast from their environment and thus educators should enhance the educational environment for children to learn, which matches Montessori's (1949) belief. For example, Ms. Ola shared, "I learned from children that the child is a sponge . . . he will absorb. . . so pay attention to the talk . . . the way you deal with the tools around" (I).

Ms. Ola's perspective on the Montessori method came "from reading, the school community and the course I took with Sahar, the school principal, and the regular meetings that happen with the teachers" (I).

Children Are Independent Until They Do Not Know How to Work by Themselves

Montessori's (1949) approach supports allowing children to be independent in their learning: "The child seeks independence by means of work: independence of body and mind" (p. 135). The daily routine in Classroom B was influenced by the Montessori method, which encourages children to be self-sufficient as they move, clean themselves, dress, eat, and correct their mistakes (Rogoff, 2003). The following sections highlight when the children were independent while dressing and eating in Classroom B, as well as Ms. Ola's interventions when the children needed it.

Support Children's Independence in Dressing and Eating, Providing "Little" Physical Help as Needed

The Montessori school culture influenced the children in Ms. Ola's classroom. They were independent when taking off or putting on their shoes and coats (Rogoff, 2003). For example, at the beginning of the school day, two children entered from outside, put their shoes and jackets in the cabinets, left for the bathroom to wash their hands, and attended the circle without the teacher's direction (O). Sometimes, Ms. Ola only reminded the children to take their shoes off or put them on when they forgot to do so (O). Ms. Ola provided physical help for children to put on their shoes when they did not know how. When she asked a child to take his shoes off after she helped him a little to put his coat on, the child took his shoes off by himself (O).

Ms. Ola encouraged children to be independent at mealtime, which was affected by the Montessori classroom system (Rogoff, 2003) of children helping arrange the tables for mealtime,

serving themselves food, and eating by themselves (O; Lillard, 2011). When Ms. Ola set up the food in the middle of the classroom, she said, “There are cucumbers and carrots, whoever wants some can take it for himself” (O). Ms. Ola also noted that the Montessori classroom materials supported the children’s independence during meals: “We have tongs that are already available for practical life skills and are present at work time . . . This arrangement is alive for the thing in front of him. I mean, here you connect the Montessori to the mealtime” (I).

Children Freely Working and Chatting in Work Time

Dr. Montessori’s (1949) philosophy says that “the child seeks for independence by means of work: independence of body and mind” (p. 91). When work time started in Classroom B, Ms. Ola and the children sat in the circle time area to think about what they wanted to choose. Ms. Ola said, “A minute of thinking, what you want to work . . . If you know what to do, put your hands above your head” (O). After a minute, she called the children’s names one by one to select an activity from the centers and sit in any place in the classroom. While observing, I saw no behavioral problems with the children choosing their activities or moving around the classroom (O).

Ms. Ola supported the idea of preparing the Montessori classroom environment to allow children to work by themselves. She stated that “one of the nice things in Montessori is that the child would keep trying for two or three times. He gets bored, he might stop but return to it again because it is in front of him” (I). While in the classroom, most of the children worked in harmony, and the teachers observed and worked with small groups to present and evaluate skills (O; I).

Children in Ms. Ola’s classroom had the freedom to choose and use different activities in a way they felt comfortable with. For example, a child was working at the table classifying the

different colors of cotton balls. She picked each cotton ball and placed it on the right button that matched its color. At the same time, the child was chatting with another girl working on a different activity at an adjacent table. She said, “I make cake,” meaning she used the cotton balls to represent a cake image. The other child sorted button colors and said, “I do the pancakes” (O). The two children seemed to enjoy working together even though they had different activities.

Ms. Ola promoted the children’s freedom of movement and mode of working according to her Montessori training and the school culture that influenced classroom activities (Rogoff, 2003). For example, although Ms. Ola moved around observing the children’s work, she did not comment on their choices (O).

Ms. Ola spent most of the work time with children individually or in small groups to teach or evaluate skills (O, I). Montessori (1949) encouraged educators to provide freedom for children: “Giving the child the opportunity of growing, gives him independence and, at the same time, leads him to freedom” (p. 127). Thus, Ms. Ola was influenced by the Montessori school culture to provide freedom in letting the children decide whether they wanted to work with her or not (Rogoff, 2003). For example, during work time, she watched the children from a distance, putting both hands behind her back and walking around in the classroom. A child came to ask her something, and then Ms. Ola said, “What do you think [if] I work with you?” The child expressed her desire by nodding yes (O). Ms. Ola explained her reason for asking children about mini-lesson work: “Sometimes you have an evaluation, you have something, so you want to see [their skills]” (I).

Adult Intervention in Children's Learning

Encouraging Children to Complete Mini-Lessons

During the mini-lessons, Ms. Ola did encourage children to stay in the lesson. When Ms. Ola was teaching a child the names of the shapes in a one-to-one lesson and the child was bored and stood up to leave, she brought him a Metal Inset and taught him the same skill using different materials. The child was more engaged in the second material and was more interactive in answering her questions (O). Influenced by general Saudi kindergarten practices, Ms. Ola also encouraged children transferring to the first grade the next year to do the academic work to prepare for the next level: "Maybe we have a primer, maybe we focus on language and mathematics because he has transferred [child], but before that no . . . most of the children at first refuse and then they come to you [to ask for the work]" (I; O).

Providing Hints and Pointing Out Children's Mistakes

The Montessori method encourages children to learn by themselves and correct their mistakes without the teacher's direction, and the Montessori classroom tools support the idea of self-correction (I; O; (Lillard, 2016). Ms. Ola observed the children as they worked at different places in the classroom and in mini-lessons, allowing them to identify and control their errors (O).

In the mini-lessons that needed a teacher's guidance to teach academic skills, Ms. Ola supported the children's self-correction but provided them with hints to correct their mistakes. She did so because such activities did not include self-correction. For example, in one mini-lesson she showed the children the letters *Dhad* and *Saad,* which look the same except for the dot at the top of the *Dhad.* After presenting the letters, she showed the *Saad* to the children and asked what it was. The child said, "*Dha,*" instead. Ms. Ola said, "Think. Think . . . Does it have a

dot? It doesn't have a dot. Think." The child did not get the correct answer even when she tried to present different words that started with *Saad*, but in the end, the child answered correctly (O).

Ms. Ola also pointed out the children's mistakes and allowed them to find the answers by themselves. For example, she asked a child to arrange the numbers from zero to 10 when seated on the floor for a mini-lesson. The child started arranging them but skipped the number four. Ms. Ola asked, "What is after three?" The child pointed at different numbers until she indicated the correct one. Then Ms. Ola said to her, "Yes, four." (O). Ms. Ola explained when and how she corrected children's mistakes in some situations: "If he doesn't ask and you see his mistake . . . I may give him a sign . . . Maybe as an aid, not me who's doing it" (I).

There was one classroom observation where Ms. Ola assisted a child even when the activity had self-correction instructions and without the child's asking for help. The puzzle material contained a family picture and a view of trees. The child working on it was supposed to align the pictures to create the right view. On the back, there were pictures to check if the pieces were placed correctly. Ms. Ola noticed the child had not done the puzzle properly and stood behind the child's chair, saying, "So, right? No, wrong, this goes with this," showing how the puzzle pieces should be beside each other (O). However, Ms. Ola seemed to regret this, as she noted, "I'm supposed not to correct him. He should correct himself" (I). Thus, the Montessori culture influenced her belief that the children should self-correct their errors with minimal teacher assistance (Rogoff, 2003), but her practice was also influenced by the larger Saudi school culture that encouraged the teacher-centered approach (Rajab, 2016).

Societal Misunderstanding of Children's Abilities

Saudi social parenting styles initially influenced Ms. Ola's belief that children were unable to be independent at a young age (Rogoff, 2003). However, Montessori (1949) wrote that

"we are taught not to help him, whereas we always fall on him to help him" (p. 220). Thus, as Ms. Ola was affected by the Montessori educational system, she became aware of the children's abilities, which shifted her perspective on them (Rogoff, 2003). For example, she said,

> When I entered the Montessori course . . . all she [the school principal] was talking about [was] how the child was impacted by it, how the child was capable, and how we were raised or raised or got experience from the society. (I)

Flexibility in Teaching Mini-Lessons and Assessing Children's Developmental Skills

Integrating Songs and Stories in Mini-Lessons

Ms. Ola used different strategies when working with children during the mini-lessons. Some of these strategies were based on her Montessori training, such as the three-period lesson plan, tracing letters on sandpaper, and involving tangible objects that match the letters' sounds (Montessori & Carter, 1936). The Montessori school culture also influenced her to be flexible and include different strategies with the Montessori strategies to teach the mini-lessons (Rogoff, 2003). For example, a child was working on the floor, and Ms. Ola asked her to arrange the sandpaper numbers on the carpet from zero to 10. When the child reached number seven, Ms. Ola sang an Arabic number song that linked the shapes of the numbers with the presented objects (O). She presented these songs during circle time and brought them into the lessons to remind children of the numbers (O). She also used stories in the mini-lessons: for example, when she taught the letter *Za*, she read, "Ziad ate bread and *zaatar"* (thyme). She asked the children where the sound of *Za* was in the words and whether it was connected or separate. The children were excited about the story as the teacher read it (O).

Working on Children's Individual Abilities

Ms. Ola defined Montessori education not only as taking responsibility but also as an "individual education, which is according to the child's abilities" (I; Isaacs, 2018). Her education and practice influenced her belief in the Montessori idea of educators understanding children's different abilities and working with them based on their skills (Rogoff, 2003). For example, she said, "A child has great abilities . . . that increase in something and decrease in other things. He may be skilled in language but not skilled in dealing with practical life skills . . .[or] skilled in practical life, not skilled in sensory" (I).

Ms. Ola's belief in understanding children's differences was based on the Montessori philosophy: "[It] is for Montessori, it is not a general thing to apply to everyone" (I). In the classroom, the teacher deals differently with beginner children to learn a new letter. For example, when a child could not write the letter *Ba* in the sandbox, she cleared the box by shaking it and then said, "Come on, not from here, from the top" as she demonstrated writing the letter. She did not prolong the lesson with the child because he was a beginner (O). In a similar situation, working with numbers in a one-to-one lesson, she asked the child to trace them, but the child did not get it right. Ms. Ola said, "It is okay," and moved on while the child still did not know how to correctly trace numbers three and four. She did not insist that the child master tracing the first time; instead, she brought her a different activity for a lower math skill. The activity was wooden sticks and boxes divided into sections to sort the sticks based on the number that appeared in each section. Ms. Ola asked her to take her time working with the material and said, "When you're done, tell me" (O).

The teachers measured the children's abilities continually during school, such as asking them questions about random word and letter sounds (I). Ms. Ola explained that caring about the

children's abilities was part of the school's practices and the teachers and school administrators discussed it in their meetings, which influenced her perspective and practices (Rogoff, 2003). For example, she mentioned that in the meeting, they developed classroom units and activities based "on the understanding of the children and the amount of information that you want to add for them. What is the amount of information that a child reaches" (I). Ms. Ola worked with children based on social abilities as well: for example, Lolo refused to interact or participate with other children, and Ms. Ola provided her with physical support by holding her hand as they entered the classroom after the morning meeting (O).

Assessing Children's Mastery of Academic and Practical Life Skills

One of Ms. Ola's daily roles was working with several children to develop and assess their skills: "We present the new thing and then evaluate it" (I, O). She pointed out the importance of directing children to assess them: "Sometimes you have an evaluation, so you want to see . . . [if] he has abilities" (I).

Like the other teachers, Ms. Ola used Montessori Canvas to evaluate children by assigning one of three levels:

> When you present the work, [it] is present . . . present [when a child] needs help. And then if he worked on the same thing and made a little mistake but worked and performed it at the end, this is good. Then when he does it without any mistakes, that is the mastery. (I)

As an example of evaluation, in a mini-lesson, she was seated with a child and taught him the names of the square, circle, and triangle for the first time. Then she said, "Give me a circle" (O). He gave her a square, and she said, "This is a square, give me a triangle." He gave her a triangle. Then she said, "A square, a square," and he gave her a square. After he finished, I asked what

she was going to give him in the evaluation. She said, “Presentation only, because so far, he hasn’t mastered the names of the shapes” (O). In addition to assessing academic skills, she also assessed mastery of the Montessori practical life materials, such as how the child poured water, wiped up spilled water, and replaced a new towel in the water-pouring activity (I).

The school’s requirements and school culture influenced Ms. Ola’s practice of evaluating the children on their gained skills and sending evaluation reports to the parents (Rogoff, 2003), unlike Montessori education, which focuses more on children’s learning than on assessment (Cossentino, 2009, p. 526).

Cooperation Is a Goal and Role in a Flexible School Culture

Ms. Ola used “we” to indicate that the goals of the school came from all teachers and school administrators. For example, she said, “We always aspire, if we had a school and we had children become like what we targeted, the child will become a wise man” (I). The teachers’ belief in the importance of serving their community influenced their practice of cooperating with each other to reach their goal, which became the culture of the school (I, O). Ms. Ola described:

> Why are we here? . . . Because we want to provide service to the community. As long as you want to provide a service, you should have from the beginning these feelings [of cooperation] that you want to present . . . you will not offer them if they are incomplete in you. (I)

Ms. Ola said that the cooperation in school meetings also included decision making about school rules and classroom strategies, which influenced the teachers’ practices with children in the classroom (I; Rogoff, 2003).

Not only did the teachers’ beliefs and perspectives on the importance of cooperation affect their cooperation with each other, but the school rules encouraged this (Rogoff, 2003;

Rogoff et al., 1995). Ms. Ola said, “Your commitment to attendance, your cooperation with your colleague . . . has flexibility in dealing with the colleague in the class according to circumstances.” When I asked her if it was one of the rules, she said yes (I). An example of cooperation based on the school rules was that in the morning meeting, Ms. Ola not only helped with Quran on her days but also covered “in the absence of the basic Quran teacher” (I).

In addition to the school rules and culture that encouraged cooperation, the flexibility of the Montessori method encouraged Ms. Ola to cooperate in the school meetings to share ideas that she planned to implement with the children. She said they did “not always” follow the Montessori principles when they wanted to apply something that they agreed would benefit the children (I). She provided an example of an activity they implemented because the teachers agreed on its benefits: “In language . . . we can do things for them that I don’t know [what] the Montessori stage is . . . for example, we add worksheets, for Arabic and mathematics, for the two languages to be more specific” (I, O).

Theme 2: Integrating Saudi and Islamic Education in Daily Classroom Activities

This section discusses Ms. Ola’s integration of Saudi socio-cultural and Islamic practices in her classroom. It is divided into the following subthemes: promoting children’s identity; implementing Islamic, Saudi, and global knowledge; and enhancing Islamic and Saudi social and behavioral practices.

Promoting Children’s Cultural and Islamic Identity as One

Ms. Ola defined the children’s identity as both Saudi and Muslim. She described that the school aims to reach for “the child who should become with an Arab Islamic identity and capable of taking responsibility” (I). She also considered them to be one:

> Culture and religion are one thing . . . there are customs in it, which include traditions and customs, customs of society . . . Our customs and traditions, as a Saudi, Arab, Muslim, you take your customs and traditions from your religion from your Sharia [Islamic law] . . . I mean yes, they are in the customs, all, thanks, please and pardon, but they are originally from your religion. (I)

Ms. Ola believed in the importance of teaching children about their identity from a young age: "You want that to be shown in early age [to] growing up on them [because] they have imagination, so it is possible with practice and the advancement of their age and maturity" (I). She said that integrating Saudi socio-cultural lessons into curricula and classrooms was for "promoting identity, promoting belonging to the homeland" because "the feeling of patriotism is beautiful, I mean, my sense of patriotism is my identity" (I). Ms. Ola also believed that the children should grow up in an Islamic environment that fostered supplication and hearing and repeating the Quran and *Hadith* (I).

Ms. Ola's previous experience teaching in a children's club shaped her belief in the importance of focusing on children's identity and first language from an early age (Rogoff et al., 1995). For example, she was disappointed that some 10-year-olds in her club did not understand the basics of the Arabic language (I). She was also interested in integrating Islamic practices in the classroom, which was influenced by her reading "biographies [of the Prophet PBUH and his companions] and interpretation [of the holy Quran]" (I, Rogoff, 1998).

Implementing Islamic, Saudi, and Global Knowledge in Classroom Activities

Culture Circle Time to Enhance Cultural and Islamic Knowledge

Ms. Ola was tasked with using Arabic language and materials when teaching the children during circle time. For example, she started the classroom circle time by explaining the Arabic

calendar and reviewing the day, date, weather, month, and year (O). She shared that the aim of the culture circle time was to have "basic information about the unit that we are talking about" (I). Also, the cultural lessons were aimed to develop the children's knowledge about Saudi Arabia, and were "just culture for children, enriching information for the child, no more" (I). Therefore, her belief in the importance of teaching culture was influenced by the school scheduling circle time to develop the children's cultural knowledge (Rogoff, 2003). For example, she described some circle time topics related to Saudi Arabia:

> The world of the desert, we spent four weeks on it, for example, what are the basic things in the desert? Animals. A type of animals . . . there is a plant? . . . There is a desert here in Saudi Arabia . . . When we talked about palms and dates in the desert unit, we talked about Al-Asha, we talked about Medina [cities famous for dates], how can we connect it to a province in the Kingdom? (I)

Not only did she talk to the children about palm trees, but she brought in related real materials: "We brought them palm fronds that we talked about, we brought them types of dates" (I).

In addition to this role in the culture circle time, Ms. Ola also taught Quran and *Hadith* during the morning meetings in the inner yard, and helped Ms. Asma with her Quran circle time by observing the children as they engaged with the reading (O).

Ms. Ola also integrated Islamic beliefs into meditation circle time when she explained God's names. For example, she was reading *Surat Al-Fatiha* [a Quran chapter] and stopped when she read "The Gracious and the Merciful," and then asked, "When do we say 'in the name of Allah the Merciful'?" The children answered, "When we read," "When we get in the car," "When we sleep," etc. (O). Ms. Ola involved Saudi culture at the same time, by presenting a picture of a camel on the screen and pointing to the camel's hump to explain its importance (O).

She connected the features of the camel with God's name (the Merciful) by saying, "God had mercy on it by creating eyelashes to protect its eyes from dust" (O).

Teaching Cultural Diversity

Montessori education includes the concept of cosmic education to advocate for and support spirituality, which can refer to education on democracy and cultural diversity (Gross & Rutland, 2019). Thus, Ms. Ola did not only involve Saudi culture in her class, but also other different cultures. She mentioned different nationalities because not all children in the classroom were Saudis; talking about their nationalities gave the other children the opportunity to express themselves and encouraged all children to accept each other. For example, Ms. Ola had an Iraqi child with an Egyptian mother in her class, and she shared, "We had a unit called 'The World Around Me,' we talked about the continent of Africa, we talked about the Republic of Egypt" (I). The child "brought with him pictures and talked about it and brought clothes with him" (I). Also, each child in the classroom presented a different country: "There are children who talked about Egypt, talked about Syria, talked about Palestine, talked about Spain, I mean different cultures" (I). For example, the children who chose Spain wore Spanish clothes and talked about what they ate there. Ms. Ola invoked the Montessori principles of freedom and independence (Lillard, 2016) to allow the children to choose the countries they wanted to present, as she clarified: "He chose what he wanted, [it was] not us who chose them" (I).

Ms. Ola also mentioned different countries during culture circle time by showing animals from different parts of the world. For example, she showed a picture of a mountain goat. "This is a mountain goat; where are the mountains? Canada has mountains . . . mountain goats in the mountains of North America . . . Where does the elephant live? Elephants live in the forests of Africa; camels live in the desert in Asia" (O).

"The Quran and Culture [Circle Times] Have the Same Rules"

When Ms. Ola led the inner yard circle time, after she recited the *Hadith* out loud, some children raised their hands to read by themselves and made some mistakes. She immediately repeated the *Hadith* to them, allowing them to correct themselves (O).

According to Ms. Ola, "the Quran and culture [circle times] have the same rules . . . so as not to distract the children." She added that because the "Quran is the saying of Allah Almighty, I must sit right and listen well" (I). Ms. Ola modeled the right way of sitting by putting her arms around her chest and crossing her legs while seated alongside the children in the Quran circle. She also ensured that the children stayed and behaved well in the circle. For example, when a child was creeping into the middle of the circle, Ms. Ola stared at the child firmly and, using a low tone, said, "Zuhair, your place, your place" (O).

When Ms. Ola led the culture circle time, she controlled the children's freedom of sitting, talking, and leaving the classroom. For example, she asked in the circle, "Give me a word that begins with *Ha* . . . Who wants to answer?" A child raised his hand and answered after the teacher chose him (O). The children also were directed to be quiet when they raised their hands: "Who raises his hand quietly . . . I choose him, please" (O). Ms. Ola explained that the reason for controlling children in circle time was based on Saudi school culture (Rogoff, 2003):

> We have a culture that I will not talk until my turn comes . . . or until I raise my hand. This child must learn it with us, that I do not interrupt what I am talking about even if I have a question or participation, so I raise my hand. [And] the way that children should sit in the circle, for example, [they] should not recline or raise feet . . . But children must learn for each time a different position. (I)

Encouraging Speaking Arabic

Ms. Ola used the Montessori classroom materials to develop the children's Arabic language skills. For example, she used the 3D wooden shapes and Metal Insets to present the names of the shapes in Arabic, and the sandpaper to present Arabic letters and numbers (O). She displayed a shape, pronounced its name, and put it on the mat as she worked individually with a child (O).

Ms. Ola's belief in the importance of the Arabic language led her to encourage speaking in formal Arabic when children interacted with her (O). For example, in a one-to-one lesson on the letter *Da*, Salem said, "Bear, bicycle," in Arabic, but "chicken" in English. The teacher said, "What is its name in Arabic? *Dejajah.*" The child repeated, "A chicken." Ms. Ola responded, "Honey, [this is] in English, and *Dejajah* is in Arabic" (O). Another example was when Ms. Ola asked a child, "What is this color?" and he said, "Blue," in English. Then she asked him to say it in Arabic, and he correctly said, "*Azraq"* (O). This practice came from Ms. Ola's previous experience as a teacher, which shaped her support for children speaking Arabic from an early age (Rogoff et al., 1995).

Enhancing Islamic and Saudi Social and Behavioral Practices Based on Islamic and Saudi Culture and Montessori School Culture

Modeling Islamic Verbal Practices in the Daily School Routine

Ms. Ola considered teaching Islamic practices to children at a young age crucial because she "learned that the child is a sponge" (I, Montessori, 1949). She also believed people should be "a role model and the model for the child" (I). Thus, she modeled Islamic practices at their prescribed times, such as saying *duas* (supplications) in the children's daily school routine: "The

supplications that we say . . . in the morning session and other times during the day, [we say] 'in the name of God' [when we] start the mealtime . . . [when we] go out" (I, O).

At mealtime, the children were seated at the table to start eating and Ms. Ola said loudly, "May God bless our livelihood and protect us from the torment of fire, in the name of God" (O). When mealtime was over, she said, "Thank God," but did not ask the children to repeat it (O). While in the circle area, Ms. Ola also said special prayers to God. For example, when she presented an elephant picture, she said, "سبحان الله" ("Glory be to God") in a loud voice so the children could hear her. She explained that modeling the prayers to the children loudly was better than asking them to say them "until they get used to it" (I). Ms. Ola explained that her family influenced her modeling practice (Rogoff et al., 1995): "I took it from my mother possibly . . . they call it . . . education by role model . . . my mother was a living silent example" (I).

Assessing Islamic Verbal Practices to Follow School Rules and Encourage Them

Like the other teachers, Ms. Ola assessed the children's Islamic practices as one of the evaluations required by the school. She revealed that one "part of the evaluation is greetings and response to the [Islamic] greetings, regards and responding to them with regards" (I). As such, the evaluation could be done "mostly in general time" (I). For instance, when "a girl child enters from outside, you know if she says regards or not . . . when you are in the yard, you say [the Islamic] greeting . . . there is who responds and who does not" (I). She evaluated children not only as a school requirement, but also to ensure they would follow cultural and religious practices as they grew up (Rogoff et al., 1995). Her goal was that when a child "gets older, in their dealings with people, my tongue does not hurt, my correct sitting . . . and when he grows up, he knows how to deal and how to look, appearance and style of his words" (I). Ms. Ola did not use Montessori Canvas to assess the children's religious and cultural practices; instead, she

used a private report. She explained that "it goes to the parents. To show them" their children's mastery of the social practices (I).

Both Montessori and Islamic Principles Support Respectful Behavior

Ms. Ola said, "One of the things that are taught in Montessori, and we need in society, is respect for the others' turn." According to her perspective, in society some people did not respect each other, and some individuals were impatient and took each other's turns rather than waiting for their own. This practice contradicts Montessori's principle of teaching children to wait for their turns (I; Lillard, 2016). Thus, Ms. Ola opined that Montessori education helped develop respectful children. Ms. Ola provided direction for the children to respect each other and modeled respect. For instance, when she was sitting on a chair to work with one child, another child came and said that was his place. She immediately said, "Oh, I'm sorry," and moved to the other side of the child on the floor (O).

Ms. Ola also taught children to respect each other as an Islamic moral value. She demonstrated respectful practices to encourage the children to behave respectfully with each other. For example, in the circle time, she recited the *Hadith* "Whoever believes in Allah and the Last Day should say what is good or keep quiet" and the *Hadith* "The Muslim is one who avoids harming other Muslims with his tongue and hand" (I). She also mentioned respectful practices in the meditation circle time when she said, "We were learning about the name of Allah, *As-Salaam* (The Peace), so we chose the story of peace and calm among children. There is no fight, I mean, you choose the story that suits the name of God Almighty" (I). She initiated conversations with the children during circle time if she noticed disrespectful behavior (O). Moreover, Ms. Ola taught that the Islamic faith encouraged respect for food, so people should not throw out food because it was Allah's (SWT) blessing (for more examples, see Appendix G).

Islam and Montessori School Culture Encourage Patience and Calmness

Ms. Ola said it was important to teach children to be patient. According to her, children should deal with others' mistakes patiently and calmly, as stipulated within the Islamic religion (I). For example, while talking to the children, she highlighted the *Hadith* "Do not get angry.*"* In the teachers' meetings, they selected *Hadith* to influence children's Islamic practices "in the working life" and routine (I). The school culture shaped teachers' practices related to patience (Rogoff, 2003). For example, Ms. Ola shared,

> From the teachers here [whom] I dealt with . . . each one influenced me in a certain way, how she deals with children, how she is patient, how calm she is, how her teaching style is. I mean, from each one, I learned something. (I)

At one point, some children in the classroom were making noises in violation of the classroom rules (O). I observed that Ms. Ola did not scream or punish the children at any time. Instead, she used eye contact to direct them calmly (O; see more examples of directing children at mealtime in Appendix G). Ms. Ola explained that she was calm because she viewed the Montessori environment as calm (Isaacs, 2018). As she presented, "one of the main things in Montessori . . . is that if you talk to the child, you talk to him in privacy, and it is supposed to be in a low voice." When Ms. Ola talked about calm, she shared that the principal had imparted this discipline to her: "Teacher Sahar, during the training period, has mostly affected our dealings with children" (I). Thus, the principal influenced her through training and guidance (Rogoff, 2003).

Flexibility in Enhancing Gender Segregation

Ms. Ola sat on the ground with the children around her in the morning circle in the inner yard; the boys sat on the right and the girls on the left without the teacher's direction (O). Ms.

Ola explained that gender segregation was a collective agreement and the "teachers applied the rule . . . [with] no particular principle" (I). She believed that gender separation was important for "distinguishing girls and boys, I mean they distinguish sex . . . Because everyone has a specificity, he must distinguish his qualities" (I). However, Ms. Ola was flexible when applying this rule because she did "not want to differentiate in treatment . . . [or] anyone to feel better than the other," meaning that children might feel that they were better or less than each other if she forced them to sit separately (I). For instance, girls and boys sat at the tables during mealtime without separation (O).

Dedicating Time to Encouraging Public Conversation

Saudi society values social communication skills, an aspect that encourages teachers to focus on developing children's social skills. Khalifa (2001) presented that "socialization in traditional societies is often seen as the procedures and methods that are adopted by the community to transform the child, who is relatively peripheral, into the adult who is the child's central link to community social life" (p. 125). In this regard, the school culture influenced Ms. Ola's practice of promoting social conversation activities: she led a circle time twice weekly for the children to communicate and express their feelings (Rogoff, 2003). For example, 3-year-old Amani presented her toy for the "Show and Tell" and talked about it in front of the other children while responding to their questions with the teacher's help. Also, the children shared events that had happened to them the previous weekend (O).

Praising Children and Not Implementing Consequences

The Montessori philosophy discourages rewarding or punishing children because this shifts their interest in learning to an interest in getting the reward or avoiding punishment (Montessori, 1949). Islamic educational philosophy discourages punishment, but encourages

rewarding children for their good manners (Abdullah et al., 2018; Gumiandari et al., 2019). Ms. Ola praised children during circle or work time. For example, in the morning circle time, she asked about the *Hadith*, and after a child raised her hand and answered, Ms. Ola said, "*Mashallah*, God bless you" (O). She also praised children in the mini-lessons after they got the right answer. For example, when a child sorted numbers from one to 10 correctly, Ms. Ola said to her, "Well done" (O). Throughout the observation, I did not notice that she punished the children or provided any consequences, even when she warned them to stop their behavior. For example, she told two children who were talking loudly at mealtime that she would change their places if they kept talking. But even though they continued talking, she did not change their places (O).

Theme 3: Organizing and Managing the Classroom Environment

This third theme focuses on the classroom environment and school culture and how it affects children's and teachers' practices in the classroom (Rogoff, 2003). The first subtheme details the children's cooperation to organize their classroom; the second subtheme presents the school and Montessori classroom rules that shaped the teacher's practices and her approach to directing children in certain practices.

Children's Cooperation and Help to Organize Their Classroom Environment

The Montessori method supports children's independence and responsibility and encourages them to be organized and care for their environment (Isaacs, 2018). According to Montessori (1949), "the environment must be rendered pleasing, beautiful [and] made as attractive as possible" (p. 136). During the observation, the children in Ms. Ola's classroom organized their environment. For example, when work time ended, all the children put their

activities away in their places and sat in the circle, while a 3-year-old girl returned the chairs to their places across the tables before she sat in the circle (O).

Also, there was a task poster where almost all the children had a task assigned to them for the benefit of all in the classroom, such as arranging the mealtime tables, arranging the story shelf, and so on. For example, during mealtime, the children assigned to that task arranged the trays before going to wash their hands (O).

The children showed they cared about a supportive classroom environment, as they offered their help without the teacher's asking. For example, Huda found it difficult to carry the trays as she passed the tables during mealtime. One of the children seated at the table noticed her and said, "Help you?" (O). The Montessori mixed-age classroom also allows older children to support younger ones (Lillard, 2016). For example, when a 3-year-old was struggling to put on a plastic suit before she painted with wet colors, Jude, who looked almost 6 years old, helped her to put it on (O). The child's action aligned with the Montessori approach, which encourages children to practice positive social skills (Lillard, 2016).

Teacher's Practices Based on School and Montessori Classroom Rules

"Moral Trait" as a School Rule

Ms. Ola mentioned that the Montessori school shaped her classroom practices with the children (Rogoff, 2003). She said that the "moral trait" was valuable as it helped her teach the children "how I can speak with [their] friends in any tone . . . and what words [to] use," which was assigned as a school rule (I). She also shared that the way she talked to children and guided them toward positive behavior was based on the Montessori approach and the school principal's advice:

> One of the main things in Montessori . . . is that if you talk to the child, you talk to him in privacy, and it is supposed to be in a low voice . . . Teacher Sahar [the principal] during the training period has mostly affected our dealings with children. (I)

Montessori education is based on the child-centered approach, which considers children independent when making their learning choices. However, Saudi society views children as dependent on their parents and teachers in most of the decision making.

The following sections present how Ms. Ola directed children to keep the environment organized, stay safe, and work according to the classroom schedule, based on the school rules.

Safety as a School Rule

"The kindergarten/preschool experience in Saudi educational philosophy is also considered an extension of the family atmosphere and should protect children from dangers, watch for signs of abnormal behavior, and be responsive to the requirements of Islam" (Aljabreen, 2017, p. 72). Based on the school rules, the children should be in a safe classroom environment. Ms. Ola implemented these rules because she cared about students' safety. She explained, "From the school rules . . . we don't leave children without a teacher with them" (I). As such, Ms. Ola asked a school adviser to stay with the children at a time when she needed to make an important call (O). She also shared that based on the school rules or procedures, she needed to "check the tools after students leave [to see] if there is something missing or something that needs cleaning" (I).

Time Factors Limited Children's Independence

The need for effective time management influenced Ms. Ola's practice of directing the children to stick to the school schedule. As such, she sometimes limited the children's independence in making decisions (Rogoff, 2003). For example, when a 3-year-old girl finished

her food but was still seated at the table, Ms. Ola said that mealtime was over and she should go with the other children who were preparing to move out (O). The child moved slowly and noticed that her tray contained food, and when food started falling on the table and the floor, she wanted to wipe it up. Ms. Ola took the tray from her, returned it to the designated place on her behalf, and said to her, "Move," to go wash her hands.

During mealtime, another young child wanted to take more food and used tongs too big for a 3-year-old hand. Thus, she acted slowly, as she wanted to open and close them correctly. A few children lined up behind her, waiting for their turns. Ms. Ola was observing, then put her hand on the child's hand and opened it to drop the food on the plate and said, "Come on, Sara, your friend is waiting" (O). Ms. Ola confirmed that teachers arranged the tables for children during the second meal because of the "time factor" (I).

Time was critical for teachers during work time as well. In the Montessori method, "children need to be at liberty to choose work over 3-hour periods in the classroom to develop concentration and engage in what she called the Great Work: deep, sustained, focused interaction with Montessori materials or other work" (Lillard, 2016, p. 30). However, the total work time in this classroom was around 65 minutes. Thus, Ms. Ola directed some children to ensure they learned different skills and did not spend too long on one activity (I). She explained, "I sometimes finish their work. . . we should put the timer and say come on, do it. If he did not do it, the time is over" (I).

Teacher Directives to Organize the Classroom

While Montessori school culture allows children to be independent and move freely (Montessori, 1949), Ms. Ola was influenced more by Saudi school culture, where the "teacher directs the students in seated activities . . . [and] manages students' independent practice" to keep

the classroom organized and managed (Aljabreen, 2017, p. 88). For example, she directed a child to put back his mat when he left it in the middle of the classroom (O). Ms. Ola explained that she guided the children who needed direction to keep the environment organized because "some children need to be disciplined . . . and some children are young, so they didn't learn . . . and we have children from last year, and some of them from the year before, [so] the experience factor exists" (I).

During work time, Ms. Ola notified the children to lower their voices to keep the classroom calm. For example, when she noticed that many children were talking loudly, she hit the bell and said loudly, "A signal of attention" (O). All the children in the classroom raised their hands and fell silent. Ms. Nouf noticed a child who did not raise his hand and said, "Attention signal," and he raised his hand. Ms. Ola said, "My beloved, your voice is loud. I lower my voice while I work" (O). The children went back to work with lower voices.

Ms. Ola also controlled the children's behavior to keep the environment organized, which limited the children's independence at mealtime. For example, Ms. Ola served a child who had dirty hands instead of asking her to clean her hands and serve herself. When a seated child eating her food said, "We want to get the pancakes ourselves," Ms. Ola said, "So this all becomes honey." She pointed to the tongs. "You want to get the sandwich on your own? See if your hand is clean." The child opened her hand. Ms. Ola said, "Look, it's all *labna,*" meaning that creamy yogurt covered the child`s hand. The child rubbed her hands, smiling, and the teacher left (O).

Moreover, Ms. Ola directed children when they displayed unusual behaviors or spoke loudly in the classroom. For example, all the children ate quietly except for two, who ate while talking loudly. Ms. Ola sat next to them. She saw two children at an adjacent table challenging each other by holding hands, and said, "No, this is not a time for a challenge. [It is] breakfast

time" (O). She repeated, "We are eating," several times during the meal period to encourage the children to focus more on eating than on lateral talk or play (O). Moreover, she told the children speaking loudly, "Tomorrow you won't sit [together] in the circle or at the meal. I'm sorry" (I), and then the children calmed down (O).

Table 4 summarizes the major themes and subthemes found in Ms. Ola's final results.

Table 4

Summary of Results for Teacher 3 (Ms. Ola)

Theme	Subthemes
Adapting Montessori principles and strategies in a flexible school culture	Montessori education enhanced children's responsibility Children are independent until they do not know how to work by themselves Children freely working and chatting in work time Adult intervention in children's learning Flexibility in teaching mini-lessons and assessing children's developmental skills Cooperation is a goal and role in a flexible school culture
Integrating Saudi and Islamic education in daily classroom activities	Promoting children's cultural and Islamic identity as one Implementing Islamic, Saudi, and global knowledge in classroom activities Enhancing Islamic and Saudi social and behavioral practices based on Islamic and Saudi culture and Montessori school culture
Organizing and managing the classroom environment	Children's cooperation and help to organize their classroom environment Teacher's practices based on school and Montessori classroom rules

Chapter Summary

Ms. Ola believed that the Montessori method was unique because it encouraged children to take responsibility and teachers to work with children based on their abilities. She was

influenced by Montessori principles to allow the children more freedom in the classroom and provide help for only the children who needed it (Rogoff, 2003). The children in Ms. Ola's classroom were free to choose an activity to work on, how they worked on it, with whom to work, and where to sit without the teacher's direction. However, she controlled their freedom in the circle time and mini-lessons. Ms. Ola used Montessori teaching strategies to work with children in the mini-lessons, considering the children's abilities before she assigned an activity, and used Montessori Canvas as an assessment tool. Her strong cooperation and communication with the other teachers influenced her perspective and practices in the classroom.

Ms. Ola believed in the importance of teaching Saudi socio-cultural and Islamic practices to children from a young age to enhance their identity. Thus, she integrated cultural and Islamic lessons into the circle time and the curriculum using materials and activities supporting the Arabic language, Saudi knowledge, and Islamic principles. She also encouraged Saudi and Islamic social and behavioral practices in circle times and classroom routines.

Finally, the children helped organize and care for their classroom environment, and the Montessori school rules affected classroom practices. Ms. Ola directed children in certain behaviors to keep the classroom organized and safe based on the Montessori system and the school rules.

CHAPTER 7: FINDINGS FOR TEACHER 4

Introduction

This chapter presents the findings from the fourth case—the second classroom Montessori English teacher—in thematic sections similar to the previous chapters. Data sources are presented as interview (I) and observation (O). Before the presentation of the results is an overview of Ms. Nouf, the English teacher in Classroom B.

Overview of Teacher 4

Ms. Nouf was a 33-year-old English-language teacher from central Saudi Arabia. She had a bachelor's degree in financial management, 1 year of experience in her field, and 2 years of teaching teenagers scientific subjects. She had participated in volunteer work to support children of different ages. After she heard from her neighbors and relatives about the Montessori school, she joined the institution. She had worked at the school for approximately 2 years after receiving full Montessori training from the principal.

Ms. Nouf taught the children English while she presented different subjects to them during circle time, individual lessons, and small group sessions. She taught math, literacy, practical life skills, and cultural lessons, all in the English language. She was also responsible for teaching Quran during Quran circle time. She worked with Ms. Ola in the same classroom and they taught and observed children simultaneously.

Theme 1: Adapting Montessori Principles and Strategies in a Flexible School Culture

The data analysis for Ms. Nouf's case presented multiple teachers' adaptations of the Montessori method. The details of the adaptations were based on the Islamic religion, Saudi

culture, the Saudi educational system, and Montessori principles. This section presents five subthemes: the teacher's perspective of the Montessori method, children's independence and freedom of choice, children's dependence in mini-lessons and their home environment, flexibility in teaching children, and the caring and flexible Montessori school culture.

The Montessori Method Solves Many Schools' Problems

Ms. Nouf believed that Montessori was "the future of education . . . it may be Montessori is the solution to the boredom that children live in school" (I). She explained that during her experience in the school, she saw the Montessori method as a "vacation from many problems faced by schools" (I). Ms. Nouf also believed the education outcomes that "comes out of the Montessori will be above usual" (I). She reflected that the school supported the idea of giving: "Everything is an opportunity to learn for the child. There is a feeling that gives the child a feeling that learning is a journey, and not that I sit down and learn and memorize" (I). Moreover, Ms. Nouf admired Montessori's ideas of working with children based on their abilities (I; Isaacs, 2018) and designing the classroom to include children of multiple ages, as she explained:

> We saw very beautiful things, seeing the older learn from the young, how to make him know, how to defend him sometimes. We see how the young [children] start talking to the adults and sit with them sometimes and learn from them. This was very beautiful. (I)

Teacher Providing Training, Time, and Flexibility to Encourage Children's Independence and Freedom of Choice

Ms. Nouf's experience at the Montessori school affected her belief in the children's ability to be independent. She said,

> When I entered school, I was one of the people who thought that the child should not get dirty and things should go quickly. Then I understood that once in a while, the child learns, and once about the time the child grows up. (I)

Her experience in the Montessori system also influenced her decision not to support the idea of independent children. She said, "This is a little bit contrary to the idea of the children's self-reliance" (I).

The children were independent when they came from home, put their shoes in the cabinet, and went to the bathroom to wash their hands without the teacher's direction (O). This section presents examples of the teacher's perspectives and practices in the classroom to encourage children's independence in dressing, eating, and learning.

Training Children Step by Step to Become Independent

Ms. Nouf encouraged the children's independence by not doing things on their behalf. Instead, she taught them about it when they needed to learn. For example, when a child tried to wear her jacket, but she could not because the sleeves were inside the jacket, Ms. Nouf said, "Fix the sleeves; the sleeve is not fixed." When the child was still struggling, Ms. Nouf provided verbal direction for the child to pull the sleeves first so she could wear it, and the child did (O). Ms. Nouf explained that they trained the children step by step on how to dress themselves as part of the Montessori school culture (Rogoff, 2003): "At the beginning of the year, we start with them step by step, we train them little by little until they learn to put on their coats; this is my intention that the child is the center of education in school" (I).

Ms. Nouf considered that "independence is part of the child's formation" (I), which encouraged her to be patient in waiting for children to do the tasks themselves (Rogoff, 2008), as she shared:

> If we simply want to rest, I put the child's shoes on and let him go. The easiest thing is we make their food and give it to them, which makes it faster, but the essential thing is that the child learns, the child matures intellectually, and even his personality matures, he begins to resign himself. (I)

At mealtime, a few children organized the tables for the first meal based on their tasks, and all children chose to eat or not. They also chose where to sit at the tables, and they all ate by themselves (O). Ms. Nouf asked the children to serve themselves with only two extra pieces at a time (O). When the children lined up to collect oranges, Ms. Nouf was at the front of the line and observed them without directing them unless they forget to bring their plates (O).

Choosing Work Activities After Taking Time to Think

Montessori (1949) wrote, "We must understand clearly that when we give freedom and independence to the child, we give freedom to a worker who is compelled to act and who cannot live except by his work and his activity" (p. 135). During work time, the children chose the activity they wanted to work on, either individually or in groups, and sat in a place where they were comfortable in the classroom (O). For example, after the children came in from the playground, the children and Ms. Nouf sat in the circle time area. After 1 minute of having the children think about the activity of their choice, Ms. Nouf asked each child to go and work on that activity (O). Thus, Ms. Nouf's practice of allowing the children to be free during the work time to construct their learning was based on Montessori principles and the school culture (Rogoff, 2003). She used the first 5 minutes to walk around the classroom observing the children (O). She said, "If everyone is busy, it is my turn to observe" (I).

I also observed that the classroom furniture promoted the children's independence. For example, classroom space and materials were on levels where the children could move and reach without the teacher's help (O).

"It's Okay to Get [It] Wrong"

Montessori classroom materials need to meet two requirements: being sensory and having the possibility to control errors (Montessori, 1949). The Montessori approach influenced Ms. Nouf's beliefs and practices around the importance of self-correction (Rogoff, 2003). She described this as "teaching children [to understand] it's okay to get [it] wrong" (I). During work time, two boys were building the Pink Tower and Brown Stairs. The bridge fell by the time Ms. Nouf passed, and she said, "*Bism Allah"* ("by the name of God"). The children looked at her and said, "It fell down," and she replied, "It's okay" (O). In the interview, she said, "They can learn that if it falls, there's no problem, we'll build it again" (I).

Because Ms. Nouf described that "90% of the tools can have self-correction," I asked her to provide examples of the other 10% of materials. She explained that some materials needed the teacher's direction:

> [For] example is the box of the triangle, the teacher sits with a child and tells him this name is semi-deviant; otherwise, he does not know. There are things that the teacher needs to be with a child and correct him, to some extent (I).

Teacher Flexibility in Safety to Promote Children's Independence

Most Saudi kindergartens avoid breakable materials in the classrooms. However, like the other teachers in this study, Ms. Nouf provided the children with glass cups and butter knives during mealtime following Montessori's recommendation (Rogoff, 2003; Montessori & Carter, 1936). She cared about the children's safety first, but it was the children's responsibility to foster

a safe environment, encouraging them to be independent and responsible in their choices. For example, when three boys were seated at a table at mealtime, two of them took knives and started to play by crisscrossing them in front of each other's faces. Ms. Nouf came to their table and told them this was dangerous. She took the knives away and returned them to the food cart. After a few minutes, she found that one of the children had brought the knives back, but they were not playing this time. Ms. Nouf told them the purpose of the knives and asked them not to play with them again. Then she put the knives in the right place in their tray and left (O). Thus, she gave them a second chance to be responsible for their safety.

Although Ms. Nouf paid close attention to providing a safe environment, she was flexible as long as activities were not high risk and the children concentrated on learning. For example, when two children built a tower using the Pink Tower and Brown Stairs, it fell down. Ms. Nouf said, "By the name of God." One child said, "It fell." Ms. Nouf replied, "It's okay." She explained this situation and said, "They know," meaning the children knew how things worked. "If it were the beginning of the year, I would be very afraid they'd get hurt" (I). She pointed out that "they were working at the end [of the classroom] and they weren't working in half the classroom," thus they were far away from other children (O; see Figure 7).

Figure 7. Two children build a tower at the end of the classroom.

Children's Dependence in Mini-Lessons and the Home Environment

"Forcing Gently" in Mini-Lessons

In the mini-lessons, Ms. Nouf worked with the children individually and in small groups to teach them certain skills based on their abilities. The Montessori child-centered approach influenced her practice in that she gave the children some control of their time to work with her (Rogoff, 2003). For example, when a child was sitting at the table working on an activity, the teacher said, "Leen, when you are done, we will work." The child nodded her head (O).

However, since there were over 16 children in the classroom and she lacked time to wait for each child to choose (I), she had to "force the children gently" and encourage them to work with her in mini-lessons. For example, Ms. Nouf shared examples of how to start a lesson:

> I don't tell him to stand up and come on, but I put a timer for him, for example, three minutes. When the three minutes are over, we'll work on English. [Or] a child who came up with a repulse of the language, I told him, "Let's write your name." So, I present for him something to bring him back, something new that he didn't do before. (I)

Ms. Nouf also controlled the lessons because she was a center to present and guide the process. For example, she taught Adel about the letter N while he played with the plastic nail. Ms. Nouf said, “This is the time to work with the letter, there is a time to play with it,” and put the nail back on the table (O).

Assessing Primary Children’s Mastery of Arabic and English Letters

The Montessori method encourages teaching and learning rather than assessment (Cossentino, 2009). However, as previously noted, the school in this study required teachers to assess children’s progress in certain skills. Ms. Nouf shared, “We have standards from the administration that the primary child is expected to know all the Arabic and English letters” (I). Thus, the school culture influenced the teacher’s belief that it was important to teach the children academic skills from a young age (Rogoff, 2003). Ms. Nouf used Montessori Canvas to evaluate the children’s academic performance and sent the reports to the parents (O).

Different Home Systems Discourage Children’s Independence

Two primary principles of the Montessori method are independence and self-learning (Montessori & Carter, 1936). However, Ms. Nouf believed the biggest challenge in using the Montessori system with children in Saudi Arabia was “having a different school system than they [are] used to at home” (I). She had some students who were not independent and needed the teacher to dress them. At the beginning of the year, “I remember many kids who put their shoes [down] and looked at me, it means he asked me to put his shoes on . . . So we start giving him a little help, sometimes we help him” (I). She said that children who were dependent in their home environment found it challenging to work in the Montessori environment (Rogoff, 2008). “This is a challenge because at home, for example, 50% of children rely heavily on parents [or] there are nannies” (I).

Ms. Nouf described it as "an obstacle for us in school" (I). She said, "When we talk to the children about this idea, they said, 'My nanny does it.' It's so sad that the child has grown to believe that the nanny is there to serve, and not to help at home" (I). The more dependent children were guided more to complete their classroom tasks. Ms. Nouf said, "We have a task poster, every child has a task" (I). However, I observed that not all children were independent and some needed the teacher's reminders and help to do the task (I; O). On the other hand, Ms. Nouf explained that "some homes that children come from are Montessori . . . [so] parents . . . give them responsibility" (I).

Flexibility in Including Different Strategies and Teaching Children Based on Their Abilities

Including Hiding Game Activity in a Mini-Lesson

Ms. Nouf followed Montessori's three-period lesson plan to teach children mini-lessons (Lillard, 2016). For example, when she worked with Huda on the letter Q, she presented each object and said, "This is a quilt, this is a question, and this is a queen." Then she asked, "Show me a question," and so on. After the child pointed to the right objects, Ms. Nouf moved to the next level, where she pointed at the objects and the child named them. Ms. Nouf commented on the three-period format:

> It is very important in the language lesson, and in most presentations, we have the three-period lesson. The first step is to present; the next step is to ask, "Can you show me where is the apple," [and] the child points to the apple. And the third, the highest step is when the child masters, I move to the next letter, which is to ask him, "What is this letter?" and the child says, and then I tell him "What is this?" . . . Then, I ask him what

the beginning sound is. And when he [answers], here the child has mastered the letter and is ready to go to the next letter. (I)

However, Ms. Nouf was flexible in adding different strategies in her mini-lessons, based on the school culture that encouraged teachers to share different materials and strategies (Rogoff, 2003). For example, she included a hiding game activity with the three-period lesson (see Appendix J).

Working on Children's Individual Abilities Based on the Sensitive Period

Ms. Nouf believed the Montessori classroom was unique because teaching was based on the child's ability (I; Abdullah et al., 2018). This was part of the child-centered approach that she admired: "One of the things that attracted me in school is that the child determines, I mean the child is the center of education" (I). She saw working with children based on their abilities as unique because she had a different previous experience when she was a student that shaped her perspectives and influenced her contemporary practice (Rogoff et al., 1995). She shared, "I am a smart one, and I got [the idea] the first time . . . suddenly one student didn't understand . . . then we get back to the [same thing] . . . I was always kicked out of class, although I [was one of] the top students in the school" (I).

The Montessori system of understanding the child's ability and her working experience (Rogoff, 2003; Rogoff et al., 1995) encouraged Ms. Nouf to work with children based on their abilities. For example, she shared, "There is a child who needs to learn three letters per week, and I have a child who needs four weeks to master one letter" (I). She referred to the children's ability to learn as the sensitive period: "The sensitive period is a period during which a child has the ability to learn something specific, his ability to learn something particular is very, very high,

and he has a high desire to learn this thing" (I). Ms. Nouf said that children had different age levels when they reached the sensitive period: "I don't think it's related to a certain age" (I).

When Ms. Nouf worked with children on letters using the three-period lesson plan, she presented the objects and then asked them to trace the letter. She understood the children's abilities and provided more support for those needing extra help: "For the younger children, I trace the letter first, and then they trace it" (I). She explained that "not all children are good at tracing . . . tracing is hard for young children." As a part of understanding the children's abilities, she did not insist on mastery of the tracing: "If he did not do it well, it is okay. The most important thing is that he tries" (I).

On another occasion, Ms. Nouf asked, "Saad, can you roll the mat?" Saad rolled the mat incorrectly. She observed it and said with a smile, "What happened? Try again." The child opened the mat again and rerolled it. The mat was still not perfect, but Ms. Nouf said, "Thank you, Saad," and he returned the mat to the basket (O). Saad was 3 years old and she wanted to give him more time to practice the mat rolling skill. Thus, she understood the children's abilities and did not push them to master the skills at a particular time, which was influenced by Montessori's (1949) philosophy: "Education must no longer be based upon a syllabus but upon the knowledge of human life" (p. 15).

Caring and Flexible Montessori School Culture Encourages Cooperation

The flexibility of the Montessori method influenced Ms. Nouf's cooperation, as she met periodically with other teachers to develop the curriculum and design activities and classroom materials (I). In addition, the school culture was flexible in encouraging the teachers to bring up ideas at the weekly meetings (I). Ms. Nouf said that the school administrator cared about the

children's learning and encouraged the teachers to bring tools into the classroom when they found they benefited the children (I).

Theme 2: Integrating Saudi Knowledge and Socio-Cultural Practices in Daily Classroom Activities

The second theme presents Ms. Nouf's integrating of Saudi socio-cultural knowledge and practice in her classroom. The subthemes here discuss the teacher's perceptions and background around integrating Saudi culture, teaching Saudi knowledge based on Montessori principles, and encouraging Saudi social practices.

Integrating Saudi Culture Supports Children's Identity

Ms. Nouf said it was "beautiful, beautiful" to integrate Saudi socio-culture lessons into the curriculum and classroom for the child to "know who he is . . . to know his belonging" (I). As much as she supported teaching the children to be proud of their identity, she also taught them to be respectful and humble toward other people. Ms. Nouf shared:

> It's beautiful to teach the children that you are Saudi, but at the same time, we do not raise him that you are better than others. It is nice to be proud that the Saudi is polite, the Saudi has high morals, the Saudi loves others, and so on (I).

Her belief in the importance of integrating Saudi culture into the school was affected by her experience as a student (Rogoff et al., 1995). She said, "At home [is] less, but in the school is more cultural topics" (I).

Keeping Montessori Principles in Mind When Designing Cultural Activities

Ms. Nouf believed in the importance of building the children's knowledge about their Saudi identity. In addition, the school culture supported involving cultural topics in the curriculum. Thus, her beliefs and the school culture influenced her practices of integrating Saudi

culture during circle time and classroom activities (Rogoff, 2003). For example, Ms. Nouf shared that during circle time, "we mentioned that the woman wears the *abaya* and the man wears the *thoub*" (a *thoub* is an ankle-length robe, usually with long sleeves) (I). Also, she used circle time to explain and present pictures of different parts of Saudi Arabia on the classroom screen. For example, in the mountain unit, she discussed "the Mountain of Mecca . . . and the mountains in the Taif" (I). She presented the most famous thing in each city: "We showed them a video about the tunnels of Mecca, and a monkey because it is located in Taif" (I).

Montessori (1949) wrote, "The environment must be made as attractive as possible to overcome diffidence and disgust. We must give pleasant activity to the child because we know that it is through an activity that development takes place" (p. 137). Thus, in the classroom, Ms. Nouf integrated cultural materials in the practical life center: "A coffee pitcher and a cup . . . [is] the simplest thing to serve the [Montessori] idea, so it serves one of the objectives of practical life skill, [and] it suits our culture" (I; see Figure 6). She shared that when the teachers met to design the materials, "the Montessori [principle] and its basic rules are always in mind" (I). Ms. Nouf also mentioned other activities that supported Saudi culture, such as singing the "Saudi national song" as a daily routine in the morning circle (O; I). In the classroom, Ms. Nouf also celebrated special events in Saudi Arabia (see Appendix I).

Figure 6. A coffee pitcher and cups.

Encouraging Saudi Social Practices in Circle Time

Verbal and Physical Directives for Children's Sitting in Culture Circle Time

Montessori (1949) presented that "our task is to teach the teacher where he or she intervened needlessly. We call this part of our work 'the method of non-intervention'. The teacher must measure what is needed and limit her work to that" (p. 255). However, the school culture and Ms. Nouf's prior experience influenced her to direct children in culture circle time (Rogoff, 2003). When Ms. Nouf was a child, she went to a traditional kindergarten, which might have influenced her views on the role of the teacher in the classroom (I; Rogoff, 1998).

Ms. Nouf used both verbal and physical directives. For example, when Ms. Ola presented a forest lesson and Ms. Nouf sat with children in the circle, a child lay down on the floor. Ms. Nouf said, "Sit," and the child did (O). Another child beside her copied his friend and lay down. Ms. Nouf said no and then put her hand on the child's back and pulled him softly to sit. The child changed his position and sat up properly (O).

Encouraging Gender Segregation Without Enforcing It

One part of Saudi school culture is gender segregation in first grade and above. The larger socio-cultural practices affected Ms. Nouf's practice of teaching children about gender differences from a young age (Rogoff, 2003). When all children from both classrooms gathered in the inner yard to have the morning circle time, she said loudly, "Boys sit on the right and girls sit on the left" (O). She explained, "We always say girls alone and boys alone only in the [morning] circle time . . . so that they start to grow to understand that girls are separated from boys" (I). From my observations, I noticed that children sat separately as a habit, and it was not based on the teacher's guidance. Every child who entered the school sat on the designated side without being directed (O). Ms. Nouf believed that each gender shared similar characteristics, and thus, they should sit together: "The girls are the same, they sit the same . . . The boys are the same, they move [a lot]" (I).

Even though Ms. Nouf supported gender segregation, she did not enforce separating children in the classroom at circle time or during the day (O). Ms. Nouf explained, "It may be very tiring to take this rule. Because the girls are sitting and silent and the boys are not . . . If we separate them in the classroom, it would be very difficult" (I). She clarified that she was careful when presenting gender segregation to children: "Do not discriminate . . . I mean there is a difference between you as a boy and you as a girl, but there is no one better than the other" (I). She noted that the school culture also supported gender differences by having a bathroom for boys and one for girls (I, O).

Theme 3: Integrating Islamic Knowledge and Practices in Daily Classroom Activities

The third theme presents Ms. Nouf's integration of Islamic practices in her classroom. It has three subthemes that discuss the teacher's background and perceptions that formed her belief

in teaching children Islamic practices, how she involved Islam in circle time and the classroom curriculum, and how Islamic social and behavioral practices were encouraged in the classroom daily routine.

Teaching Islamic Practices Is Important for Young Children

Ms. Nouf's practices reflected her background, culture, and perceptions (Rogoff, 2003). She explained that her family formed her religious experience: "I consider myself from a conservative family" (I). When she grew up, she worked by herself to learn more about Islam, and practiced a routine of memorizing Quran and studying (I). She shared the books she was interested in reading: "Islamic cultural books, biographical books, or books related to Quran translation, Quran, and interpretation. Sometimes I read educational books, somewhat Islamic pedagogical. I read the books of the *Sahaba* [the Prophet's PBUH friends]" (I). Her religious belief was reflected in her practices with children: "My choice to work here has some connection to religion because the teaching is one of the noblest jobs that I do" (I). Ms. Nouf thought that Islam was critical to raising children from a young age, "because the first seven years of man's life are the years in which faith is built for man . . . [and] the faith is important because it is the basis for the child's values, ideas, way of thinking, and social life" (I).

Caring About Children's Quran Reading and Islamic Faith in Circle Time

One way Ms. Nouf integrated Islamic practices was by providing Quran lessons twice a day in circle time (*Halaka*). The first time was after the children entered the classroom in the morning, and the second time was in the middle of the day. Ms. Nouf sat in the front of the circle and the children sat around her in a U shape (O). She reviewed the last chapter *(Surah)* by reciting it aloud once with the children and presented new chapters or verses where she read first and the children read after her (O). The children also raised their hands to ask for permission

before they read (O). Ms. Nouf used the cuing strategy (*Talgin*) to introduce new chapters to the children, which is the most common strategy for memorizing Quran in Saudi schools. She also paid close attention to reading with *Tajweed* (O). *Tajweed* means Quran recitation, where the reader can "pronounce the letters and words in Quranic verses correctly, giving every letter its right in reciting the Quran" (Madrasat El-Quran, n.d.). Ms. Nouf's belief in the importance of teaching Quran to children at a young age influenced her practice of teaching the Quran by involving higher skills in reading (Rogoff et al., 1995). For example, she explained, "We care that the child reads the Quran correctly . . . these things are habits that the child learns from now and become easier for him later. There are old people who read incorrectly; thus, we are careful about it" (I).

Ms. Nouf also mentioned Islamic beliefs in circle time. For example, after reading the Quran, she pointed at each child and asked a religious question: "Who is your God, who is your prophet, what is your religion, what is your [holy] book?" Each child said one answer: "Allah, Mohammed (PBUH), Islam, Quran" (O). She explained that she involved the Islamic faith because the Montessori method focused on nature and the universe, "but does not focus on Allah the only creator" (I). On the other hand, she said Muslim children "learn about the world by knowing God (SWT), so this is the main point on which we disagree [with the Montessori method]" (I). Ms. Nouf thought the Montessori principle of cosmic education focused on teaching in an atheist way, but she believed it was easy to involve Islam in teaching about the universe. "We always say, 'Glory to God' when we talk about animals" (I). Ms. Nouf also thought the Montessori curriculum was flexible enough to integrate Islam: "We have a meditation class in the school, so they know that God is the Creator, God is the one, God is the Giver. When you talk to them, you say, 'Glory be to God, the Creator who created this'" (I).

During Quran circle time, Ms. Nouf made sure the children sat properly by modeling the right way of sitting and directing them. For example, she put her hands on her lap to model the correct position and directed the children to follow her (O). When she saw children who were not sitting properly, she "asks them to sit properly in *Halaka* (the circle)" (I; O). Unlike the story time at the end of the day, when the children might lie down on the floor and put their hands under their heads (O), she explained that it was important to sit properly in Quran class: "We must teach them that the Quran has its respect" (I).

Correcting Children's Mistakes in Quran Circle Time

In the Montessori approach, the child is the center and corrects his mistakes (Montessori, 1949). However, in the Quran circle time, the teacher was the center, following the traditional strategy for teaching Quran. Muslims stress not making mistakes when reading Quran because it is Allah's (SWT) words. Ms. Nouf explained why she corrected the children's mistakes: "The Quran must be, especially the chapters that we have memorized, the child must know his mistake in it" (I, O). Even though she believed in respecting Quran, she understood the children's reading abilities. She said, "When we correct them, we don't scream or blame them . . . But the child hears it and returns it in the right way" (I). Ms. Nouf shared a case of a father who insisted on having his young daughter pronounce the *Ta* sound when she could only pronounce *Ga* instead. Ms. Nouf said, "The idea is not a challenge . . . she's going to grow up and the *Ta* will come out [of her mouth]" (I). Thus, she only corrected the children twice in reading Quran: "I corrected once, I corrected twice, then I let it go" (I, O). She also cared about having the children memorize the Quran sufficiently; she read with the children, then stopped reading and let them continue the rest of the verse to make sure that they knew what word came next (O).

Modifying the Montessori Curriculum to Align with Islam

Ms. Nouf came up with an example when I asked how they integrated Islam in teaching mathematics: "The children sing in Arabic, 'One is my God, two are my parents . . ." She also avoided using some words in the language center that were not related to Islam and Saudi culture:

> The subject coming from the NAMC's curriculum has some words that we have taken off. For example, *ham* is something that is not suited for our culture, so we take it off. Another example is the word *nun* too. It is important that children learn the language, but they don't have to learn these words at this young age. Because the child wants to know the meaning of the word, so it is difficult to explain *nun* to them (I).

A third example is that Montessori arranged the activities on the classroom shelves from easiest to hardest, left to right. However, Ms. Nouf explained it was *Sunnah* (the Prophet's practices that constitute a model for Muslims) that "everything . . . starts from right to left. I mean, the Montessori is from left to right, but we [have arranged the materials] from right to left" (I).

Encouraging Islamic Practices by Modeling, Notifying, Teaching, Praising, Evaluating, and Answering Questions

Notifying and Modeling Verbal Practices Without Being Strict

Ms. Nouf thought one aspect of school culture that affected her practices was teaching children to say "Assalamu alaikum" (the Islamic greeting) when they entered (I; O; Rogoff, 2003). She modified the Montessori philosophy of self-correction based on her belief in the importance of directing children for religious purposes, because it is not acceptable to let children make mistakes in Islamic principles without directing them (I). Thus, she guided them in following the Islamic practices such as saying *dua* (supplications) before eating food. She

explained, “When a child came to eat before saying the prayer, we notified him gently . . . I mean, there is nothing strong unless there is an assault on the other.”

In the classroom, when Ms. Nouf forgot to remind the children to say the eating *dua* and they had already started eating, she said out loud, “Did we say the *dua*? We forgot!” Then she said, “When we forget, we say ‘In the name of Allah’ at the beginning and the end of it.” Ms. Nouf said this *dua* in Arabic (O).

Montessori (1949) wrote, “If he sees the people around him talking, eating, etc., he receives a sub-conscious impression that he takes in and this will help growth” (p. 150). Her belief aligns with Ms. Nouf’s practice of modeling the *dua* in the classroom. For example, Ms. Nouf said “الحمد لله”, which means “thank God,” out loud while placing an empty plate in the cart when the oranges were finished (O). She said “باسم الله”, which means “by the name of God,” when a bridge fell while two children were building it (O). She also said “*in Sha Allah*,” which means “God willing,” when she talked about something in the future, such as “Tomorrow we will be in the new month, *in Sha Allah*” (O). When Ms. Nouf modeled the supplication, she was not strict in ensuring that all children said it, but she said it before each meal loudly for children to hear and learn (O).

Answering Children’s Religious Questions

“In the Islamic framework of Saudi education, Prophet Mohammed’s teachings direct Middle Eastern countries regarding children’s rights for care and education . . . that children should be listened to, and their questions should be answered” (Aljabreen, 2017, p. 74). In addition, Rogoff (2003) presented that the larger school culture affects teachers’ practices with children. Thus, since all Saudi schools integrate Islam as an important principle in their curriculum, Ms. Nouf confidently answered children’s questions about Islam using simple and

logical language for them to understand the concepts. For example, when the children were preparing for outdoor time, a child asked, “Can only Muslims touch Quran?” Ms. Nouf said, “If a non-Muslim wants to read Quran, they can touch Quran.” The child said his nanny was taking a shower, but she did not touch Quran (his nanny might have been non-Muslim). Ms. Nouf asked, “Does your nanny speak Arabic?” The child said no. Ms. Nouf said, “This is why she doesn’t touch Quran, because she can’t read Quran” (O).

Teaching Children to Respect Each Other and Food

Ms. Nouf shared, “We don’t have that idea of differences (based on nationality)” (I), and part of the school rules was “to deal with children gently . . . we use nice words, my hand to me, not to beat, my leg not to kick” (I). In addition, as part of the school rules, Ms. Nouf allowed the children to defend themselves verbally when others annoyed them (I). For example, when Saad was working at the table, Adam came and hit him on the head with a pencil. Saad loudly said, “Please, I don’t allow you.” Both teachers turned their eyes to the children. Adam returned to his place, and Ms. Nouf did not comment (O).

Moreover, Muslims believe that food should be respected because it is a gift from God. Allah (SWT) said in the holy Quran, “O Children of Adam! Wear your beautiful apparel at every time and place of prayer: eat and drink: But waste not by excess, for Allah loveth not the wasters” (Al-Araf, verse 31). The Islamic tradition of respecting food influenced Ms. Nouf’s practices in the classroom (Rogoff et al., 1995). For example, at mealtime, Ms. Nouf noticed Saad was satisfied, although he had not finished his cupcake. She told him, “Next time, think if you want to eat or not.” She took his plate and brought it back to him at the second meal (O). Ms. Nouf commented about this situation during the interview: “Children know this rule here . . . we do not throw away anything. And if it stays [the piece of food] and he doesn’t eat it, he takes it

home with him, so it isn't thrown away" (I). Thus, the children had less freedom to throw their food away, but were responsible for their decisions regarding eating food on their plates.

Providing Care for Nature

The Montessori method teaches children to care about nature, but Ms. Nouf had a different perception of caring, influencing her practice in the classroom (Rogoff et al., 1995). For example, when she and I stood in front of the task poster in the classroom, I asked if there was a task for plant watering. She then removed a picture of the story shelf task and showed me the image of the plant task behind it. She laughed and said that they worried children would not take care of the plants well, and they might hurt and tear the plant (O). Ms. Nouf shared that she thought about introducing a plastic plant instead to teach children the skill with less risk of hurting a plant. Her perception might be based on her Muslim point of view that people must take care of nature (plants, animals, etc.) when they take it from its home environment.

Praising Children in Different Situations in the Classroom

Montessori (1937) believed that rewarding children might affect their desire for learning, as they would work to get the reward rather than the knowledge. However, Islamic psychology encourages educators to reward children. For example, Ibn Masoud, the Prophet's (PBUH) friend, said: "I recited *Surah Yusuf* (chapter Joseph) to the Messenger of God (PBUH), and he said, 'Well done.'" Al-Ghazali, an Islamic scholar, also recommended rewarding children and praising them for good manners to make them happy (Abdullah et al., 2018).

During my observation of Ms. Nouf, it was clear that she praised the children in many situations in the classroom, such as when they demonstrated effort regardless of their level of mastery, when they mastered skills, and when the children showed her their mastery and needed a teacher's confirmation (O). One child showed her his work in the notebook tracing the letter *P*

and Ms. Nouf said, “Good job!” in an excited voice (O). Then she showed him how to write the letter in a better shape (for more examples of Ms. Nouf’s praise, see Appendix K).

Evaluating and Encouraging Children’s Mastery of Islamic Practices

Ms. Nouf thought that teaching children to use the greeting *Assalam Alaikum* (peace on you) was important; thus, she evaluated the children in this skill. Ms. Nouf explained how she presented and assessed the *Assalam* skill:

> When a child enters silently, I tell him, ‘When we enter, we say *Assalam.’* This is presenting to him, I told him what the idea is. Next time I say [to remind the child] *Assalam, Assalam*. When the child says *Assalamu Alaikum* by himself, he has mastered the skill. (I)

Theme 4: Organizing and Managing the Classroom Environment

The child in the Montessori classroom “*must be liberated,”* thus the classroom rules and management support independence and freedom of choice (Montessori & Carter, 1936, p. 129). However, the school and classroom rules influenced the teachers practices in the classroom. This section presents the results of the fourth theme regarding the children and the teacher's practices in keeping the classroom organized based on the school rules and the Montessori classroom system.

Children Help Each Other and Respect Each Other’s Time to Organize Their Classroom

Montessori classroom culture encourages children to work independently and help organize their environment, which influenced Ms. Nouf’s practices (Montessori, 1949). For example, when work time ended, the children returned the activities to the shelves and sat down in the circle time area (O). Ms. Nouf noticed a child still holding his activity and confused about where to put it back. She encouraged Lubna to help: “Lubna, can you help Saad?” Lubna left the

circle, went to the shelves, and searched for the right place. Another child wanted to help and said, “I will search,” and without the teacher asking, she searched for the right place. A third child stood and went to search too. Ms. Nouf stood in the middle of the circle waiting for the children to find the right place. Then, Lubna found the place and said, “There! But someone took the picture” (she meant the picture of the activity on the shelf). Ms. Nouf said, “Okay. Saad, can you put it there? Thank you for helping.” The children went back to the circle, except for Saad and Sara. Sara took the activity from Saad and put it in its place, and then they both sat in the circle (O).

The children also did not interrupt their friends in the classroom. For example, when children were still in the Quran circle time area, the other class wanted to enter, since it was their snack time. However, when they noticed that the other children were still seated in the circle, they stepped back, closed the classroom door, and waited for them to finish (O). Also, during work time, the children respected each other’s time and waited until activities were returned to the shelves so that they could use them (O). When they finished, they returned the activities and the mats to the designated places (O).

In addition, Ms. Nouf admired the way Montessori designed the classroom to include children of diverse ages (Montessori, 1949). She explained,

> We saw very beautiful things, seeing the older learn from the young, how to make him know, how to defend him sometimes. We see how the young start talking to the adults and sit with them sometimes and learn from them. This was very beautiful. (I)

Teacher Directing Children Based on School Rules, Montessori Classroom Rules, and Time Factors

Direction to Follow School and Montessori Classroom Rules

Ms. Nouf participated in the meetings where teachers and school administrators discussed rules and strategies to be implemented in the school and classrooms (I). However, Ms. Nouf pointed out that the school principal suggested the rules governing children's behavioral problems, which influenced her classroom practice (I; Rogoff, 2003).

Ms. Nouf provided directions to the children to ensure they followed all the classroom and school rules. For example, the Montessori teachers set a rule that the children should spend the first 5 minutes of their working time only working. Ms. Nouf observed and directed children to follow this rule. Thus, when Manal talked during the first 5 minutes, Ms. Nouf went to her, looked at her, and pointed at the sand timer. The child understood that and stopped talking (O). Ms. Nouf explained that this rule was established during a school meeting (I; Rogoff, 2003).

The Montessori environment also encourages children to be organized and calm, which affected Ms. Nouf's practices in that she directed the children to follow the Montessori environmental rules. For example, when Muthanna rang the teacher's bell, she went to him, looked directly into his eyes, and asked softly, "Who rings the bell?" The child said, "Because I want to." Ms. Nouf explained in a low voice, "The children will say, 'What's happened?" She meant the bell sound would distract the children from work. She continued, "Do not do it again. Say sorry." Muthanna said, "Sorry," and Ms. Nouf left (O).

Also, during mealtime, Ms. Nouf noticed a mat that had not been rolled well. She held it up and said loudly, "Hmm, this is not rolled well." Then she brought it to the circle and asked a

child who had finished her meal, “Huda, can you fix it?” Huda put the mat back in the right place after she rolled it well (O).

Time Challenged the Children’s Freedom and Teacher’s Role

It was important for Ms. Nouf to ensure that children followed the school schedule and spent their time doing different activities. Therefore, she provided direction for children who delayed moving to the next activity. For example, after mealtime, all the children went outdoors with Ms. Ola, except Saad and Sara, who were still seated at the table eating their meals. Ms. Nouf was in the classroom, moving around and organizing some activities, and asked the children to finish faster, saying, “Let’s go, hurry up, your friends are playing outside” (O). After a few seconds, she repeated, “Hurry up, so you can go out.” Then she said, “Put your trays and plates here, and let’s go . . . come on, Saad, wash your hands and brush your teeth. Let’s go, dear, faster” (O). The children ate the rest of their food, went to the bathroom, and then moved outside to play (O). This practice was affected by the school culture and not by the Montessori method, which says “physical education or recess time is a choice children can make, rather than something imposed by the clock and adults’ schedules” (Lillard, 2016, p. 38).

Ms. Nouf believed the timers were important because “if we don’t put a timer, a child can work on it for half an hour, especially with the new activities . . . [so] we must put a timer so that the activity passes to all the children” (I). She also provided timers so the children would benefit from different activities. For example, when two children spent a long time working on the Pink Tower and Brown Stairs, she went to them with a 5-minute timer and said, “You’ve worked with this for a while. You have five minutes left.” She placed it in the corner of their mat. The children looked at the timer and continued working. When their time finished, they returned the blocks to their places (O). Ms. Nouf commented on this situation: “You learned the sensory

[skill], you benefited from a working imagination and everything, so you must move on to something else . . . the classroom is full of other materials" (I).

Time also affected her role in the classroom, as she was supposed to spend more time observing children than assessing them. However, Ms. Nouf spent more time assessing and working in small groups than observing, because she had 17 children to work with on mini-lessons (I, O). She described, "I am often busy running between the children. As soon as I get done working with a child, I give him a timer and move to the child after him" (I). She was required to teach and assess skills; thus, her limited time affected her practices with the children (Rogoff, 2003).

Table 5 summarizes the major themes and subthemes found in Ms. Nouf's final results.

Table 5

Summary of Results for Teacher 4 (Ms. Nouf)

Theme	Subthemes
Adapting Montessori principles and strategies in a flexible school culture	The Montessori method solves many schools' problems Teacher providing training, time, and flexibility to encourage children's independence and freedom of choice Children's dependence in mini-lessons and the home environment Flexibility in including different strategies and teaching children based on their abilities Caring and flexible Montessori school culture encourages cooperation
Integrating Saudi knowledge and socio-cultural practices in daily classroom activities	Integrating Saudi culture supports children's identity Keeping Montessori principles in mind when designing cultural activities Encouraging Saudi social practices in circle time

Table 5 (continued)

Theme	Subthemes
Integrating Islamic knowledge and practices in daily classroom activities	Teaching Islamic practices is important for young children Caring about children's Quran reading and Islamic faith in circle time Modifying the Montessori curriculum to align with Islam Encouraging Islamic practices by modeling, notifying, teaching, praising, evaluating, and answering questions
Organizing and managing the classroom environment	Children help each other and respect each other's time to organize their classroom Teacher directing children based on school rules, Montessori classroom rules, and time factors

Chapter Summary

Ms. Nouf supported implementation of the Montessori method in Saudi Arabia, as she admired the way it focused on children's abilities and encouraged them to be independent. However, she saw a need to consider Saudi culture and Islamic principles when adapting the Montessori method, and demonstrated different ways to integrate them into the daily routine in the circle time area and during the classroom activities. All the teachers and school administrators met to design the curriculum and set appropriate rules to apply in the Saudi context while considering Islamic practices and Saudi culture. Ms. Nouf pointed out how some of the children's homes were different from the Montessori system because their parents and nannies encouraged dependence. In the classroom, she allowed the children to choose activities for work time and control their place and time to work with the activity, but sometimes directed the children to work on mini-lessons (O). Ms. Nouf encouraged children to sit silently and appropriately during circle times and to raise their hands to participate or share something. She

included Islamic practices in circle time by reading Quran and integrating the Islamic faith with classroom lessons. She corrected the children's mistakes immediately when they read Quran and encouraged them to behave based on Islamic morality. Ms. Nouf also directed children to promote an organized, safe learning environment based on the school rules and classroom schedule.

CHAPTER 8: FINDINGS ACROSS CASE ANALYSIS WITH DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

The research question guiding this case study was "How have teachers in early childhood Montessori classrooms in Saudi Arabia adapted the Montessori method to align with Saudi socio-cultural and Islamic practices?" I used the term *Montessori method* and not *Montessori education* because I focused on the teachers' adaptations of the Montessori method in their classrooms based on Saudi and Islamic practices. Qualitative semi-structured interviews and observations were used to gather data from the participants, who were four Saudi early childhood teachers working in two Montessori classrooms in a school in Saudi Arabia. Thematic analysis of the data was conducted manually for one teacher and using NVivo software for the other three teachers.

The multi-case researcher "starts with a quintain, arranges to study cases in terms of their situational issues, interprets patterns within each case, and then analyzes cross-case findings to make assertions about the binding" (Stake, 2006, p. 10). Thus, after I used the six steps to analyze the data, I applied the cross-case analysis. Cruzes et al. (2015) presented that "the term cross-case analysis is sometimes used as a general umbrella term for the analysis of two or more case studies to produce a synthesized outcome" (p. 1639). In this study, comparative analysis across cases was used to summarize themes and note the commonalities and differences across the four cases of the four teachers (Cruzes et al., 2015). Stake (2006) presented that "when the time comes for reporting the analysis and interpretations of a multi-case study, a different report

assembly form is needed" (p. 14). In addition to the use of NVivo software to code the cases, the "Framework Matrix" button was used to compare the themes and codes for the cases. This function allowed me to identify the similarities and differences and compare the outcomes of the cases. Cruzes et al. (2015) presented the importance of the framework matrix as a tool for "the comparison of the cases and areas of agreement or disagreement across cases" (p. 1665).

I reviewed the cases by reading each code for each case one at a time to capture more details. Then, I allowed "more generalized explanations" by describing the results in detail (McGrath & Hughes, 2018, p. 136). In the final step, I used the saved "memos" file in NVivo to check and edit the results.

The following discussion, based on the case results, covers Montessori adaptation and the school culture, Saudi socio-cultural implementations, Islamic implementations, children's roles, and the rules in the school and classrooms. The findings present the four teachers' implementations and practices of the Montessori method within their Saudi kindergarten classrooms. The findings demonstrate how the Montessori approach aligns with Saudi culture and Islamic practices.

Montessori Adaptation in a Flexible School Culture

All four teachers were Saudis and received Montessori training from the school principal, who was certified by NAMC. However, they had different teaching experiences in the school. Ms. Ola and Ms. Asma had 3 years of work experience. Ms. Nouf had almost 2 years, and Ms. Leena had a half year. Additionally, only one teacher, Ms. Asma, had a background in education. The other three teachers had different major backgrounds, as illustrated by their undergraduate degrees.

The four teachers admired the Montessori educational approach because it provided children with the opportunity to be independent and responsible in their learning, decision-making, and serving themselves. Ms. Leena, Ms. Asma, and Ms. Ola agreed that implementing the Montessori method was challenging, especially in a society that misunderstood it and had different goals. However, the teachers varied in their answers: Ms. Ola believed that the challenge came from some educators who believed the children could not be independent at a young age. Ms. Asma complained that parents had a broad desire to know the results of their children's academic performance, an aspect that contradicted the Montessori objectives. Ms. Leena thought some educators did not support multi-age classrooms, and others believed kindergarten was too early for children to learn.

Three teachers, Ms. Ola, Ms. Leena, and Ms. Nouf, agreed that part of the challenge arose from home parenting styles. They supported children's independence, but Saudi culture influenced the parents' practices, with most Saudi middle-class families having housemaids and nannies to help keep the house and serve their children (Rogoff, 2003).

All four teachers encouraged children to be independent in putting on their shoes and coats. The teachers served the children only when they needed help. However, the school culture prioritized the children's safety, which influenced the teachers' practices during mealtime (Rogoff, 2003). Thus, the teachers sometimes served the children at meals; this was done to avoid spreading COVID-19 and due to the short time available to serve food during the second meal. Also, the results showed that Ms. Ola directed children's behaviors more often at mealtime because she wanted a calmer and more organized classroom environment.

Concerning self-correction, all the teachers agreed that allowing the children to self-correct their mistakes was essential. In addition, the teachers were less involved in the children's

learning, allowing them to correct themselves. They only attempted to point out the children's mistakes or give them hints when they explained a new skill or presented a verbal explanation in mini-lessons. Ms. Ola was the only teacher who corrected a child's mistakes when the child worked by herself on a self-correcting activity. However, she regretted her involvement with the child because she felt it was important to let her work by herself.

All four participants supported the Montessori teaching approach designed according to the children's abilities. All the teachers showed competence in dealing with children based on their academic and social skills. In addition, the Montessori school culture influenced teachers' belief in the importance of working with children based on their abilities. However, Ms. Asma. Ms. Ola, and Ms. Nouf worked on the children's abilities as an individualized practice, while Ms. Leena saw the abilities as grouping skills, which affected her practice of working with children on the mini-lessons in groups. Ms. Asma and Ms. Nouf's previous experience in traditional schools also shaped their belief and practices in working with children based on their individual skill (Rogoff, 2003; Rogoff et al., 1995).

During work time, all the teachers observed the children in the classroom, but provided them with the freedom to move, choose the activities that they were interested in, and choose to work individually or in a small group; these practices aligned with the Montessori classroom principles (Montessori, 1949). The school culture and teachers' educational beliefs on the importance of teaching children academic skills drove their classroom practices, whereby they spent most of their work time with the children in individual or small-group lessons rather than observing them (Rogoff, 2003).

All the teachers asked the children to work with them based on the Montessori Canvas assessment assigned by the school administration. The four teachers did not push the children to

work with them during the lessons but allowed the children to seek guidance if the need arose. All four teachers encouraged the children to complete the mini-lessons, although with some level of teacher control to take care of the lesson time. However, they encouraged the children differently during the lessons. For example, Ms. Leena asked a child if she wanted to stay or leave. At one point, Ms. Ola was working with two girls in a mini-lesson and one of them looked uninterested in work, so she brought a different material to encourage the child to stay in the lesson. Ms. Nouf forced the children gently and Ms. Asma guided the children to stay in the mini-lesson to teach and assess their performance. So, Ms. Leena allowed more freedom in the mini-lessons than the other three teachers.

All teachers used the three periods, sandpaper tracing, letter numbers, and tangible materials that Montessori recommended (Lillard, 2016). When they presented the Montessori teaching steps, Ms. Leena, Ms. Ola, and Ms. Nouf were flexible to include some strategies to engage the children in learning. For example, Ms. Leena and Ms. Nouf engaged children with hiding games where they hid the object that they presented to the child, and then the child guessed the missing object. Ms. Ola was flexible since she included some stories, a blackboard, and singing a song when teaching mini-lessons. The four teachers all provided the children with 5 minutes of free time to play with the objects after they finished a lesson with the teachers.

Thus, the teachers' flexibility in using different classroom lesson strategies was supported by the school culture, where the school administrators organized weekly meetings for teachers to brainstorm their ideas and discuss the children's needs. This aspect allowed the teachers to be more open to using new strategies during the mini-lessons (Rogoff, 2003).

Concerning assessment, all the teachers used Montessori Canvas, assigned by the school principal, to assess children's academic skills. The teachers then forwarded the evaluation reports

to the children's parents. This assessment system was not supported by the Montessori educational approach, but by the Saudi school culture (Rogoff, 2003).

All the teachers supported and admired the Montessori collaborative school culture. While in the classroom, the teachers cooperated and encouraged each other. They shared the same strategies in the classroom and implemented the same classroom rules. The teachers felt comfortable engaging with the school administrators and other teachers. Ms. Leena shared that she got more support and encouragement from other teachers since she was the newest teacher in the school. Ms. Ola found that teacher cooperation was a school rule; however, Ms. Asma did not think that the school provided rules, but directions that the teachers agreed on in the meeting.

The positive school culture influenced the teachers' practices in the school and classroom, where they were more cooperative and comfortable. In addition, the flexibility of the Montessori educational approach supported the teachers' cooperation, allowing them to involve different strategies and materials to support the children's Islamic and Arabic identity. The teachers' common experience of being volunteers might have supported their ability to cooperate with others in the school (Rogoff et al., 1995).

Teachers' Integrations of the Saudi Socio-Culture and Islamic Practices

All four teachers came from an Islamic religious background. They educated themselves on religion by using different sources. Thus, all of them agreed it was important to teach the children about Islamic beliefs starting from a young age. Ms. Asma remarked that the Montessori approach and Islam were related, especially in enhancing responsibility.

In addition, all the teachers agreed that integrating Saudi culture into the classroom was essential to developing the children's Saudi identity. Moreover, the school culture supported the integration of Saudi culture in the classroom time, activities, and daily routine, which influenced

the teachers' practices (Rogoff, 2003). Ms. Ola in Classroom B and Ms. Asma in Classroom A had similar roles. Both were responsible for teaching and communicating in Arabic with children. They believed in the importance of developing the children's Arabic language skills, realized by talking with them in formal Arabic or asking them to use Arabic words instead of English when they communicated in the classroom.

Even though Ms. Ola and Ms. Asma taught and spoke formal Arabic all day in the classroom, all of the teachers involved Saudi culture during circle time by talking about Saudi Arabia and displaying pictures and videos related to Saudi culture. Also, Saudi coffee pots and cups were used for the water-pouring activity in the practical life centers. As a daily routine, all the teachers sang the Saudi national song at the morning meeting before the classes started. Also, the teachers participated in and supported the Saudi cultural activities that the school assigned. Ms. Asma added that the aim of celebrating Saudi events is to teach children Saudi moral values.

While Saudi Arabia was the focus during most of the classroom time, the teachers introduced other countries following the Montessori cosmic education principle, which aims to advocate for and support spirituality, democracy, and cultural diversity (Gross & Rutland, 2019). All the teachers taught about and presented pictures of forests in different parts of the world, as part of a forest unit that they agreed to implement in the classrooms. Ms. Asma and Ms. Ola added activities where they encouraged children to model, present, and share about different continents and countries. Thus, Montessori principles influenced the teachers to present material about different cultures and countries around the world (Rogoff, 2003). However, the findings from Ms. Asma and Ms. Nouf showed that the teachers removed mentions of some non-Islamic religious words (e.g., *nun*) and festivals (e.g., Easter) from some materials to align with the Islamic religion.

All the teachers had a consensus on the idea of promoting gender segregation to allow the children to distinguish their differences from the opposite sex while communicating and interacting with each other. However, specifically, Ms. Asma advocated for the change of the definition of the term "gender segregation" to describe more about dealing with each gender differently. For example, she said: "To me, personally, I do not mean gender segregation, but . . . the way to deal with the opposite sex" (I). All four teachers promoted and reinforced gender segregation with the children in the inner yard, based on Saudi social practices. Ms. Nouf, Ms. Asma, and Ms. Leena added that it aligned with the Islamic practice that encouraged gender separation as well. While in the school, the children in both classrooms sat separately in the inner yard. However, the teachers did not insist, force, or ask the children to change their places or to play or not play with each other based on their gender. The teachers' belief in the importance of gender segregation was also influenced by the school culture. They allowed it right from the morning circle time. In addition, the school culture encouraged gender separation by providing different bathrooms for boys and girls (O).

Another social concept that the teachers encouraged the children to practice as part of the classroom culture was respect for others. The teachers agreed that teaching respect was encouraged by the school rules and the Montessori classroom system, where the children should respect each other. It was an element of self-discipline, inspired by the Islamic principles of respect and peace among all people. However, all the teachers, except Ms. Asma, added the importance of teaching respect according to Saudi culture. Ms. Ola found that respect was a moral value that was missed by some people in Saudi society, while Ms. Leena considered it a value that was implemented in Saudi society. When teaching respect, Ms. Leena focused more on modeling it in the daily classroom routine. Ms. Nouf agreed with Ms. Leena in teaching

respect for others as part of classroom culture. Ms. Asma and Ms. Ola invoked respect lessons during classroom circle time, as part of their rules when teaching Arabic and Islamic practices. Ms. Asma added examples to align the Islamic behavioral practices with the Montessori principles that encouraged children's self-discipline, helping, and respecting each other.

Ms. Nouf showed a tense respect for nature, where she did not assign children to care for the classroom's real plant because she was afraid of the children harming it. However, Ms. Asma saw this as an opportunity to teach the children how to care for plants, and she modeled the cleaning in front of a child before he did his plant task. Respecting food was also part of both classrooms, where the teachers managed the amount of food the children had on their plates to ensure no food was thrown away. The teachers' practices were guided by the Islamic belief that food is a blessing from God that needs to be respected.

Some Saudi social practices were applied by some of the teachers and not others for many reasons. Some teachers practiced Saudi culture by default in the classroom or when the children created the opportunity for the teacher to react. For example, I noticed that during mealtime, Ms. Nouf, Ms. Leena, and Ms. Asma provided more freedom for children to talk, unlike Ms. Ola, who focused more on the children's calmness. This example shows that the teachers had different classroom practices based on their beliefs about classroom management.

Ms. Ola, Ms. Asma, and Ms. Leena encouraged the children to engage in social conversations as part of the classroom norm. The school system mandated the teachers to guide circle times for children to talk and express their feelings and interests. The teachers also shared their interests and communicated with children excitedly to teach them social communication skills, which are important in Saudi society.

The teachers agreed that during the Quran circle time, as well as the culture circle time, the children should sit appropriately and listen to the teacher. Their perspective was shaped by their Islamic religious beliefs, since all Muslims should respect the Quran when it is read (Rogoff et al., 1995). Also, Arabic educational practices encourage students to show respect to the teacher, including sitting appropriately and listening. Thus, while one of the teachers led the circle time, the other observed the children to ensure that they sat appropriately.

The teachers provided directions for children who failed to sit properly in both circle times, which meant children had less freedom in choosing their sitting position or talking, leaving the circle for the bathroom, or drinking water without asking for the teachers' permission.

Ms. Asma and Ms. Nouf were responsible for Quran reading in the classroom. Both teachers used *Talgin*, a traditional Quran teaching strategy, and *Tajweed*, a Quran recitation, in the Quran circle time. Ms. Ola guided the morning circle time in the inner yard, and included Quran and *Hadith* in her rotation. The teachers read Quran verses aloud to the children. When a child made a mistake, the teachers said the word correctly, reminding the child to say the right word. However, the teachers allowed few chances for children to self-correct their errors. Sometimes they ignored it if the child did not get the word correct, and said the right word out loud instead of the child. Ms. Asma and Ms. Nouf agreed that young children should not be forced to pronounce words because some of them were still learning pronunciations.

All the teachers presented Islamic religious teachings during other circle times and classroom as a daily routine. All the teachers modeled saying *duas* in the classroom, allowing the children to learn without their guidance. Ms. Nouf, Leena, and Asma notified and reminded the children when they did not say the *dua*s or eat with their left hand.

Ms. Leena, Ms. Asma, and Ms. Nouf shared the importance of integrating the Montessori curriculum and classroom presentation to align with Islamic practices by avoiding words and pictures that violated Islamic principles. In both classrooms, all teachers presented pictures acceptable to Islamic practices. Ms. Asma and Ms. Ola, since they were the Arabic teachers, were responsible for presenting during the meditation class. They linked their presentations with Islamic moral values to encourage good behavior in the classroom. Ms. Asma teaches Islam as universal practice without limiting it to the Saudi culture.

Ms. Nouf felt free to answer the children's religious questions and carry-on logical conversations with them to help them understand the Islamic faith. Her practice was encouraged by the Saudi education system, which encourages teachers to answer the children's questions (Aljabreen, 2017), in addition to the Islamic religion, which is a large part of Saudi education. All of the teachers evaluated the children's religious practices in separate reports apart from the Montessori Canvas and sent the evaluation reports to the parents as part of the school requirements. In addition, Ms. Ola shared the importance of the evaluation as it helped encourage the children to exercise positive behaviors in the classroom.

When Ms. Ola noticed two children in the classroom playing roughly without following her directions severally. She directed and reminded the children many times during my observation, teaching them respect and how to deal with others' issues. She provided directions softly and privately about positive behavior. However, sometimes, she ignored their negative behaviors. Even though Ms. Nouf taught with Ms. Ola in the classroom, she rarely calmed the children.

As much as the teachers made different decisions while dealing with the children, their patience was profound. However, Ms. Ola teach her children that they should deal with others'

mistakes patiently and calmly, as required by the Islamic religion (I). Ms. Ola also added that the school principal influenced her practice in dealing with the children calmly (Rogoff, 2003).

All the teachers praised the children in different situations in the classroom. They praised them to encourage them to put in more effort during work time or to confirm their skill mastery, in line with the Islamic educational methods that encourage educators to praise children for good manners (Abdullah et al., 2018). Ms. Asma talked about consequences against children that defied rules as she clarified: "[When] a child breaks a rule several times, so the child can see the consequences. And then the punishment is done." However, they did not need to apply such consequences during her experience with children in the classroom.

Classroom Organization and Management

The teachers encouraged children to follow the daily tasks and routine as part of the Montessori classroom and school culture. Furthermore, the culture encouraged the children to keep their environment organized by returning activity materials to the shelves once they finished working on their daily tasks. Some children in both classrooms helped the teachers by displaying supportive and positive behavior toward each other while in the classroom. The Montessori principle of the mixed-age classroom allowed the children to help each other as needed.

All the teachers followed school rules to manage their classrooms and the children's behaviors. The teachers had a weekly meeting to discuss different academic and social topics, including new rules to implement in their classrooms. Thus, both classrooms had similar rules and routines based on the teachers' discussions, as well as the Montessori school system. However, three teachers (Ms. Nouf, Ms. Leena, and Ms. Ola) found that the school principal played a major role in creating and enforcing school rules. On the other hand, Ms. Asma felt that

the school rules were flexible and how to enforce them was the teacher's decision, and her long experience in the school influenced the new school rules highly.

The Montessori philosophy encourages children to be self-directed and self-disciplined with less teacher guidance (Montessori & Carter, 1936). However, the teachers' concern for following the classroom rules and school schedule shaped how they dealt with the children (Rogoff, 2003).

Ms. Ola spent more time guiding and directing children to stick to the school schedule. Since the work time was only 1 hour long, all the teachers agreed to use timers for the children to control their time during class activities. However, the teachers varied in directing the children's use of classroom time. For example, Ms. Nouf found that time was important because she was too busy working and assessing them in mini-lessons to observe. Also, the time factor limited the children's freedom to control their eating. However, Ms. Ola showed stronger practice when it came to the time, where she did the practice on behalf of children to manage the classroom time. Ms. Leena and Ms. Asma, on the other hand, directed children for learning.

Safety for the children was highly valued in the classrooms. The teachers had to intervene several times to ensure the children were safe. For instance, in Ms. Asma's classroom, two children were building a bridge from the Pink Tower and Brown Stairs. The teacher asked them to stop because she feared it might fall and hurt somebody. In a similar situation, Ms. Nouf said, "It's okay" to children when their tower fell. She allowed the children to build the tower because they were at the end of the classroom, so no one could have been hurt. Ms. Leena agreed with Ms. Nouf in seeing safety as the children's responsibility; they both were flexible in letting the children work with the materials after they directed them on how to use them safely.

Classrooms Across Cases

Both classrooms shared the same materials and applied the same strategies and rules. The similarities in the classrooms were due to the teachers sharing the same Montessori training, weekly meetings, and open discussions. This means that the school culture shaped the teachers' practices and activities. I saw the same materials in both classrooms as well as similar classroom rules and activities. Based on the interviews, the teachers supported such cooperation and sharing of knowledge among themselves.

In addition, all four teachers shared the same identity as Saudis and Muslims. However, I found slight differences between the classrooms. For example, Ms. Asma allowed a real plant in her classroom, and showed a child step by step how to clean the plant. However, in the other classroom, Ms. Nouf discussed that she planned to bring a plastic plant because she was afraid the children might not care for it appropriately. Also, Ms. Asma had the senior role among the teachers and they all referred to her in developing classroom materials. She shared that when the English teachers Ms. Nouf and Ms. Leena made PowerPoint presentations for their lessons, "my meeting is the base." Also, when Ms. Ola made a presentation, she asked for Ms. Asma's opinion. Ms. Asma also played a large part in the school where she reinforced some school rules and directed the teachers to develop their practices.

Because my research focus was Islamic and cultural alignment in the classroom, I expected to get more data from Ms. Asma and Ms. Ola, since they taught the Arabic language and Islamic meditation class. However, the results showed that even the English teachers played roles in the classroom to integrate Islam and Saudi culture. For example, Ms. Nouf was responsible for the Quran circle time in Classroom B. Also, Ms. Leena, the Classroom A English teacher, integrated Saudi Arabia in her presentations and encouraged verbal and behavioral

Islamic practices in her daily routine. The results also showed that the two classrooms had similar levels of Islamic and cultural alignment.

I observed that both classrooms included children with challenging social skills. However, the children in Classroom B behaved more aggressively and talked loudly with each other, which made the classroom more active and louder than Classroom A. Nevertheless, Ms. Ola and Ms. Nouf focused on nurturing a calm environment, using the classroom bell to draw the children's attention. Their practice contradicted the Montessori approach, which discouraged teachers from disrupting children's concentration but equally supported by the same methods that called for a calm classroom environment (Lillard, 2016).

In addition to the across-case findings, this chapter discusses the core themes and findings from the semi-structured interviews and classroom observations as they relate to the literature review, my experience in the ECE field, and the Montessori method. The discussions are organized based on the study's key findings. In addition, I present the implications and recommendations of this study.

Discussion of the Study's Key Findings

The findings of this study are categorized into four major themes. The first theme concerns the teachers' adaptations of Montessori principles in the classrooms, when and how they encouraged such practices, and the school culture that encouraged the adaptations. The second and third themes discuss the teachers' integrations and implementations of Saudi socio-culture and Islamic practices to align with the Montessori method and classroom routine. The fourth theme describes the classroom organization and management.

Montessori Adaptations in a Flexible School Culture

This theme addresses the teachers' perceptions about the Montessori method and its implementation in the Saudi context. It also addresses the main principles of Montessori (independence, freedom of choice, teaching and assessment strategies) as well as the school culture that supports such implementations. The findings generally indicated that all the teachers supported implementations of Montessori in Saudi Arabia and appreciated the flexibility of the adaptations as well as the flexibility of the school culture, where both encouraged them to be creative in involving different subjects based on the children's interest and the Saudi context. For example, the teachers shared that they had meetings before school and weekly where they brainstormed topics, activities, materials, etc. to use in the classroom. The school administrators were involved in the meetings, valued the teachers' discussions, and encouraged these implementations. Thus, the results showed that the school administrators encouraged cooperation and there was a teacher-administrator relationship of trust that allowed teachers to work in the school comfortably and with flexibility to implement what they found best for the children.

Furthermore, the school was licensed by the HRSD, which allowed for more flexibility to adapt different curriculum and classroom practices (S. Aljude, personal communication, June 15, 2021). This finding is different from those of other studies in traditional Saudi public classrooms where the MOE assigned a specific curriculum and gave the teachers certain roles, which affected their classroom practices (Aljabreen, 2017; Rogoff, 2003).

The results also showed that all teachers in this study supported the children taking independent responsibility for what they were wearing, eating, and learning. However, one teacher had a conflict between her belief in the importance of having the children correct their own mistakes and her practices, as she guided a child on where to place puzzle pieces without

the child asking her for help. The teacher's actions were based on the traditional approach where the teacher is the center of the classroom and guides the children's learning. Based on my experience as a student in Saudi schools and as a teacher and academic adviser in the early childhood setting, Saudi traditional schools influenced by the MOE encourage the teacher-centered approach; thus, the Saudi school culture influenced this teacher's practices with children in the classroom. However, the Montessori environment had shaped the teacher's belief, as shown when she reflected on her practice, saying, "I'm supposed not to correct her. She should correct herself." Thus, Montessori principles affected the teacher's belief, but when it came to practices, sometimes she acted spontaneously in ways that brought the large Saudi school system experience into the classroom. In addition, the teachers all agreed that the Saudi social culture did not encourage children's independence. For example, some parents lacked knowledge about the principle of having the children be independent in their work, and thus, hired nannies to serve their children. Thus, the children's independence was affected by the larger Saudi educational system as well as the Saudi parenting style.

All the teachers in this study used Montessori materials such as the sandpaper letters and other tangible materials in their mini-lessons. Also, all of them started presenting lessons by using the Montessori strategy of three periods when teaching the lessons (Montessori, 1912). However, they varied in how they kept the lessons going. For example, Ms. Ola encouraged the children to complete the lesson with her by providing different strategies and changing the activity to encourage the children's lesson time. On the other hand, I observed Ms. Leena giving children the option not to complete a lesson, suggesting that she was affected by Montessori philosophy more than the other teachers. This is further evidence that Ms. Ola was more influenced by the larger school culture's teacher-centered approach than the other teachers. The

flexibility of the school culture also affected the teachers' implementations of the mini-lessons: for example, all the teachers involved games in the lessons as well as allowing the children to play with the objects freely at the end of the lessons.

The core result of this theme was that the teachers encouraged children's independence and freedom of choice during work time and most of the daily classroom routine. However, the teachers controlled the children's freedom by directing them at certain times, such as encouraging them to follow the circle time and classroom rules. Also, when freedom of choice conflicted with the children's learning in mini-lessons, most of the teachers guided and directed children toward learning. This reflected the teachers' belief in the importance of teaching children academic subjects and working with them on certain skills required by the school administrators (Rogoff, 2003). Not only did the socio-cultural practices of the school community affect the teachers, but the teachers' roles developed the school culture; as Rogoff (2003) presented, "humans develop through their changing participation in the sociocultural activities of their communities" (p. 36). For example, the teachers played major roles in choosing the subjects that they presented in the classroom and school activities, developing classroom rules, and suggesting lesson times and activities. Figure 8 illustrates how the teachers and school culture affected each other and how they both influenced classroom practices.

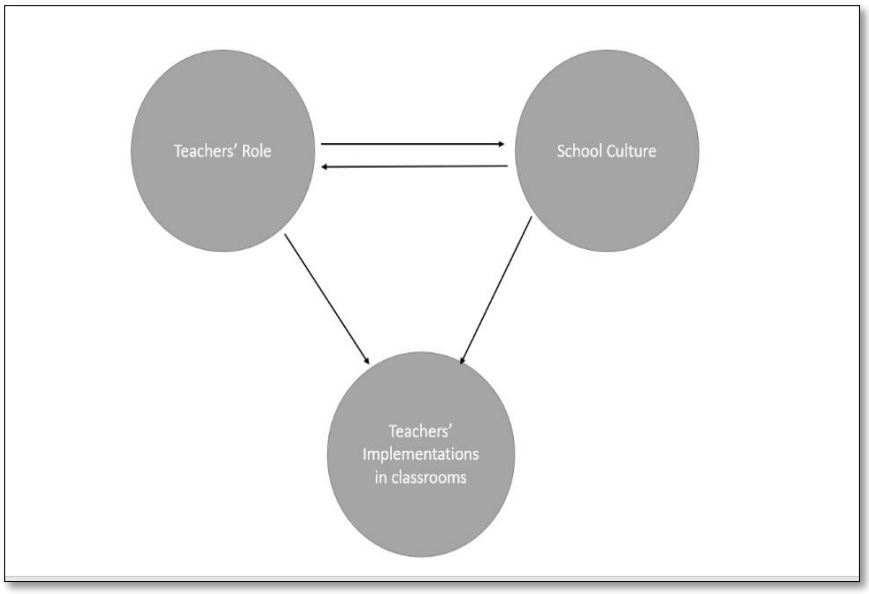

Figure 8. How school culture and teacher roles affected the classroom implementations.

The teachers' action of directing children toward learning was also affected by the public school culture, which encourages children to learn basic academic skills before they enter school, leading parents and the school to expect teachers to work with children on mastering certain skills. This thus encouraged the teachers to direct children to work with them in small groups or work with the activities if they saw them playing around and doing nothing (Rogoff, 2003).

Implementations of the Saudi Socio-Culture

The results from this theme indicated that all the teachers in this study supported cultural implementations in the classroom and teaching practices to support the children's Saudi identity. The teachers most often used circle time to introduce Saudi social norms, traditions, and learning about the country. Saudi materials and special events or field trips to teach children about Saudi Arabia were less common, because they required more work for the teachers to present, whereas the circle time allowed them to mention Saudi Arabia as part of the children's daily routine.

In addition, the teachers asked children to respect the culture of circle time and sit appropriately. This rule seemed to be based on not only school culture, but also the larger Saudi school culture where all students from kindergarten through college level are expected to sit appropriately, listen to the teacher, ask for permission before they leave the classroom, etc. All such classroom rules enforce respect for the teacher as a leader of the classroom. In contrast, in my experience at a Montessori school in the United States, I observed a teacher asking children to sit down for circle time, but allowing one student to finish his work, because he had not had enough time to finish when she made the announcement. The teacher started her lesson and the child was sitting at the table finishing his work. Thus, the implementation of Montessori principles varies based on cultural context and teachers' personal views about the importance of teaching children to follow the rules of the public school culture (Rogoff, 2003).

In the classroom, Ms. Asma and Ms. Ola both spoke to children in formal Arabic and avoided slang and other languages. These teachers' beliefs had not been affected by the growth of some private schools in Saudi Arabia that teach in English with less focus on the Arabic language. Instead, they both agreed on the importance of Arabic and enhancing children's vocabulary to support their Arabic identity.

As the teachers were all Saudi and teaching in a Saudi school, they brought Saudi social practices into the classroom, such as gender segregation. I have been exposed to different Arabic cultures and found that people in Saudi Arabia segregate the genders more than in other Arab countries. For example, in schools (fourth grade and up) and at family meetings, weddings, etc., usually men and boys stay in different rooms than women and girls. The teachers in this study followed this practice when they (without insisting) encouraged children to sit on different sides based on their gender. They did this based on the Saudi culture, but they also had a deeper vision

of raising students with the idea that gender differences mean they are different in the ways that they build relationships with each other, talk, sit, etc. In addition to the cultural influence, the teachers' perceptions about gender segregation came from their religious point of view: for example, Islamic practices ask women to talk to men behind a cover (*hijab*) and with a normal voice (not soft).

Another social practice that the teachers encouraged was respect. Three of the teachers, Ms. Nouf, Ms. Leena, and Ms. Ola, related respect to Saudi culture, and they wanted to teach children to respect others as part of their Saudi identity. However, Ms. Asma associated respect more with the Montessori method and found that Montessori encouraged children's self-discipline and guided children to be respectful. In addition, all four teachers focused on respect as encouraged by Islam. In addition to the teachers' belief in the importance of teaching respect to young children, the school culture has influenced their beliefs and practices toward modeling respect in the classroom. For example, Ms. Nouf shared her classroom rules about teaching children to respect each other, such as avoiding being physical, a school rule that the school principal encouraged.

In my experience as a researcher in the Montessori educational field, I have found that some educators do not support the Montessori method because they believe the method doesn't not encourage children's communication in the classroom (Lillard, 2016; M. Alhamd, personal communication, March 20, 2022). The Montessori classroom system encourages children to work by themselves or in small groups (Lillard, 2016), unlike different educational approaches, such as Reggio Emilia, based on in-depth projects involving cooperative work (Aljabreen, 2020). In Saudi Arabia there is "a very strong community focus embedded in Saudi culture which is a collectivistic nature of the culture, as well as people's sense of duty (*al-wajib*)" (Evason, 2019).

Thus, the teachers in this study used different activities to teach communication skills and allow children to talk and express their feelings, such as the Show and Tell lesson and the midday circle time. In my classroom observations, I found that most of the children at the classroom tables talked and communicated with each other while they were working, and all the teachers allowed talking in quiet voices.

Implementations of Islamic Practices

All four teachers in this study involved Islamic practices in the classroom. Their backgrounds, their perceptions, and the school culture influenced their adaptations of Islamic practices to the classroom routine (Rogoff, 2003). The results showed that circle time was where the teachers introduced Islam most often, such as Quran chapters, sayings of the prophet Mohammed (PBUH), Islamic stories, and the names of God (SWT), to build on the children's Islamic faith and practices. Teaching during circle time was more influenced by the school culture, which assigned the teachers to teach at certain times based on the classroom schedule. Also, the teachers' meetings influenced the topics/chapters they agreed to use, which were additionally supervised by the school administrators.

The teachers also used the daily classroom routine to model Islamic practices with children, reminding them to say the Islamic supplementations, eat with their right hands, respect others, etc. Such practices are less likely to be systematic; instead, it is more the teacher's belief in the importance of teaching them that influences their implementation in the classroom's daily routine. In terms of correcting the children's mistakes, during circle time Ms. Asma and Ms. Nouf corrected children immediately when they mispronounced a word in the Quran. However, when I asked the teachers about whether they corrected the children's mistakes or had them correct themselves, they both included a different point of view in their answers: they focused

more on the children's ability to pronounce the right words, rather than on saying them right because they are God's (SWT) words. Thus, the teachers considered the children's stage of development and modified the Islamic practices based on the children's abilities. I did not find that they roughly inserted Islamic practices in the classroom or pushed children to practice Islam; instead, they reminded, modeled, and involved it in circle time and the classroom routine.

However, all the teachers tried their best to teach children to respect Quran circle time and sit appropriately in the circle. I did not observe any teacher letting it go when children would lie down or make noise during circle time. Instead, they guided the children to behave appropriately using verbal or physical directions. In kindergarten classrooms in the United States, I noticed that teachers used verbal direction more than physical direction, but in Saudi Arabia, physical direction is common. The Saudi teachers' actions reflect the Saudi parenting style, where children are more dependent on their parents and parents feel the responsibility to guide the children's actions, verbally as a first option and physically as a second or third option. This contrasts with Western culture, where they provide guidance verbally and provide the choice for the children to be responsible for their decision making.

In terms of respect, all the teachers agreed to connect respectful behaviors with Islamic behavior. The teachers encouraged respect at different times in the classroom and aligned it with the Islamic religion, such as during circle time and the children's daily routine. According to Gumiandari et al. (2019) and Abdullah et al. (2018), Islamic practices encourage educators to praise children for good manners. For example, the Prophet's (PBUH) friend Ibn Masude read *Surat Yusif* (the Joseph chapter in the Quran), and when he finished, the Prophet said "*Ahsant"* (good job). In a similar example, the Prophet (PBUH) praised a child who told the truth by gently holding his ear and saying (translated), "You have fulfilled your ear, O boy, what you

have heard and believed your Lord." Because the Prophet Mohammed (PBUH) used verbal praise, it became part of Islamic culture.

Classroom Organization and Management

The findings on this theme showed that the children in these teachers' classrooms played a role in organizing the classroom environment. The Montessori classroom system affected the teachers' practices, as they encouraged children and provided them with tasks as part of the classroom routine that taught them to be independent in themselves and in their environment (Rogoff, 2003). On the other hand, rules created by the school and the teachers also affected the children's roles, as the teachers guided them toward certain behaviors, such as sitting calmly, to provide an appropriate classroom environment for children to develop their skills.

One of the major issues that influenced the teachers' direction of children was time management. All the teachers reminded children when it was time to go outside, finish their work, or transition from one activity to another, and time also influenced their teaching practices. For example, because work time lasted only 1 hour, the teachers used a sand timer to time it for the children. This idea was based on discussion in a teachers' meeting, and the time period was based on the school schedule, as they had around 5 hours per day and wanted to include different activities such as circle time, mealtime, and outdoor time. Thus, in addition to the school culture influencing teachers' practices in the classroom, the teachers influenced the classroom culture by agreeing on rules to implement (Rogoff, 2003).

Another issue that affected the teachers' classroom practices was the importance of a safe environment for the children. For example, on one occasion Ms. Asma directed the children to stop building a high tower and build a lower one instead because she was afraid the tower would fall down and hurt other children. On the other hand, Ms. Nouf allowed children to keep building

because they were at the end of the classroom where no children were working. Even though the teachers made rules and directed them, the children in both classrooms appeared comfortable.

Overall Connected Findings

Figure 9 shows how the four themes connected with each other as major findings, based on the research question "How have the teachers in early childhood Montessori classrooms in Saudi Arabia adapted the Montessori method to align with Saudi socio-cultural and Islamic practices?" and Rogoff's (2003) socio-cultural theory that presents the personal, interpersonal, and cultural–institutional planes of analysis. For example, the Montessori method and the school culture are placed at the top of the figure because they influenced the teachers' implementations of Islamic practices and Saudi culture. The flexibility of the Montessori method and school culture allowed the teachers to involve Islamic practices and Saudi culture in circle time, classroom materials, and school activities.

When implementing Islamic practices and Saudi culture, the teachers considered how teaching such practices could fit into the Montessori classroom and the school culture. They could not involve Islamic practices in the Montessori classroom materials, but they could incorporate Saudi culture. They found that circle time, the classroom daily routine, and school special events were a better fit for Islamic practices in the Montessori classroom. They also included Saudi culture in circle time and school events.

The school culture encouraged the teachers to apply Saudi socio-cultural and Islamic practices by providing them with time in the classroom schedule, funding, and approval to implement special events. In addition, the Montessori method and the school culture affected the children's role as they organize the classroom environment. For example, the Montessori system encourages children to be independent, free to choose work activities, and free to move and help

each other in the mixed-age classroom. The school designed the classrooms to allow children to move and be independent in themselves. Also, the supplementary materials that the school agreed to provide in the classroom were required to be self-correcting to align with the children's role of self-learning in Montessori education. In addition, the school culture influenced the children's role in that they followed the school schedule to organize their environment. The school rules and the Montessori classroom environment influenced the children's social behavior to respect each other in the classroom. Montessori and the school culture influenced classroom rules and management, in that the teachers encouraged children to be more independent in the classroom but also to follow the school schedule, and managed the classroom to meet school expectations around teaching and evaluation.

The arrows in Figure 9 going back from the other three themes to the Montessori method and school culture show that these themes affected classroom implementations of Montessori and school culture. For example, the teachers' meetings had a major influence on their decisions about what topics, subject units, and supplementary materials to introduce in their Montessori classrooms. The teachers included Islamic stories in the meditation class time and topics about Saudi Arabia during circle time. The teachers' backgrounds and perceptions about the importance of teaching Islamic practices and Saudi culture to develop the children's identity were evident in their daily routine (Rogoff, 2003), as described in detail in the results chapters. In addition, the teachers' implementations of Islamic practices and Saudi culture affected the children's roles in the classroom. For example, during Quran and culture circle times, children's role was to read, share, and engage with the teachers quietly. The teachers managed the classroom based on their Islamic and cultural perceptions, as they believed it was important for children to respect the Quran and the culture and sit appropriately.

The children's roles in the classroom affected how the Montessori method were implemented in the school. For example, the school extended the work time period to 1 hour after finding that the children were still engaged in the materials after the time ended. Thus, as Ms. Nouf shared, the school principal made it a priority to design and implement materials based on the children's roles and interests (I). Also, the children influenced how the teachers used Montessori teaching strategies in the classroom, because they presented materials and worked with them in mini-lessons based on the children's abilities and interests.

COVID-19 affected the children's attendance and their roles in the classrooms, and some of them became less independent and forgot the daily routine. Thus, in this case classroom management affected the Montessori method, in that the teachers guided the children to work on the classroom rules and daily tasks instead of allowing them independence. Classroom management also influenced the implementation of Montessori in situations such as the teachers setting up a sand timer to ensure children followed the work time schedule.

I organized Figure 9 with the Montessori method at the top because the findings are shown based on the research question, which pointed at Montessori implementation as the method that guided the curriculum, materials, and classroom practices. School culture is also at the top because it had the largest influence, along with the Montessori method, on the teachers' implementations of Montessori, the Saudi and Islamic cultural practices, and the roles of children and classrooms. Next are two themes that I placed on the same level, which are the teachers' Islamic and cultural implementations in the classroom. The reason was because the aim of the research question focused on the alignment of Islamic practices and Saudi culture in the classroom and the teachers' implementations to present such alignment. Based on the final results of two teachers, I separated the Islamic implementation theme and the Saudi socio-

cultural theme for the reader to understand that even when culture and religion came in separate themes they had the same effect in the Montessori classroom. In addition, having the Islamic theme separate from the Saudi cultural theme might be helpful for researchers who are only interested in Montessori and Islam, or Montessori and Saudi culture, to have an idea of how such implementations can be affected in the Islamic and/or Saudi classroom context. I placed the theme of organizing and managing the classroom environment last because it showed the teachers' surrounding culture that influenced their classroom practices (Rogoff, 2003).

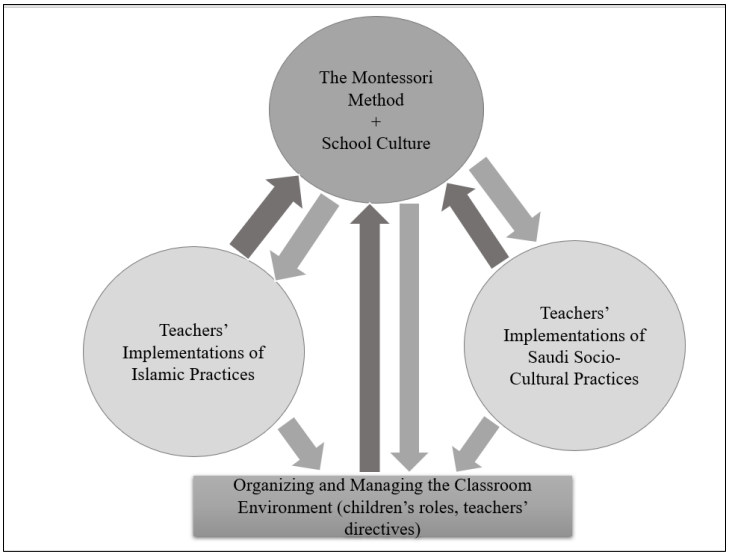

Figure 9. Connections between the themes.

Recommendations

There are three main groups who might benefit from this study; thus, I provide recommendations that can be implemented by early childhood teachers and their schools, the Saudi MOE, and higher education programs.

Recommendations for ECE Teachers

Based on my experience as a teacher, researcher, and academic advisor in the ECE field, I observed that the teachers in this study showed great care for and involvement in the children's learning. Their care, love, and support were evident from the children's comfort in the classrooms.

There are several main things I would recommend for early childhood educators. First, the classroom schedule should provide children more than 1 hour daily to work in a well prepared classroom environment, especially if the teachers guide children to switch activities because of the time factor. According to Montessori and Carter (1936), children should not be interrupted when they are concentrating on their work. More time would allow children to use the materials longer without feeling pressured to finish to give them to someone else, or to learn from a different material. The teachers would also have more time to observe the children, rather than spending most of their time working and evaluating children in small groups. Lillard (2011) presented that the working cycle lasted for 3 hours. Thus, I recommend a 3-hour working cycle if school hours permit. However, if the full day is less than 7 hours long and includes different activities, circle time, mealtimes, and outdoor play, I recommend at least 2 hours for work time.

Montessori (1949) wrote, "If we see any intelligent activity in the child, even if it seems to us absurd or not according to our wishes, as long as it is not dangerous to life and limb of course!, we must not interfere, because the child must complete his cycle activity" (p. 227). Thus, I would recommend that early childhood educators focus more on the importance of children's concentration and limit interruptions. For example, teachers might avoid using a classroom bell during the work cycle.

The second recommendation is based on the Montessori principle of children's independence and freedom of choice (Montessori, 1949). I recommend that early childhood teachers limit their guidance in the classroom and guide the children only in necessary actions. For example, it might align more with the Montessori philosophy to avoid rushing the children to finish their food; the teachers could notify the class a few minutes before mealtime ended and when it ended, and let the children be responsible to manage their eating.

My third recommendation is for educators to limit the praise they give children for educational matters. For example, if children build towers, draw pictures, or master skills, and they ask the teacher what she thinks of their work, the teacher can provide an overall response and avoid showing excitement or interest in the accomplishment. For example, she can ask what the children think of their own work, or make an overall statement such as "thank God," etc., without evaluation, such as "Beautiful" or "Good job."

There are some studies that have presented an incompatibility between Islamic culture and Montessori principles in terms of praising children (Abdullah et al., 2018; Gumiandari et al., 2019). Montessori discourages educators from providing rewards, while Islam encourages praising children for good manners. However, I do not find a conflict with the Islamic faith if the teacher provides overall support for children focusing on their inner desire to learn rather than looking for praise and evaluation. In addition, the teachers can praise children, but limit the praising to significant accomplishments, rather than small tasks.

Recommendations for the MOE

The Saudi MOE only allows Montessori schools at the kindergarten level; children in first grade and higher are required to use the MOE curriculum and textbook. Moving from a Montessori kindergarten to a traditional primary school, it is a challenge to learn about the new

classroom system, the new textbooks, and the teacher's expectations. Based on my experience as a first-grade teacher, many first graders face such challenges transitioning to elementary school. In addition, a Montessori school principal described that "anxiety is the first challenge that they [children] face" when the child transitions from learning by doing to traditional learning, which requires more mental effort (G. Gamdy, personal communication, April 21, 2021). In my experience, some parents requested including sensory materials in the first-grade classroom, as well as a reduction in the homework load and written assignments. I understood their children's needs, but it was a challenge to apply such strategies in our traditional school.

Based on my experience and the 2030 vision of expanding the early childhood classroom setting, I recommend that the MOE allow early childhood Montessori schools, so that educators can apply the Montessori method not only for children ages 0–6, but also for the early childhood period (6–9). After they test the outcomes for children in first through third grade, they can move it to the upper grade levels. If such practices are followed, first graders will only transition to a new classroom instead of a whole new school system. Also, having consistent classroom rules and routines will allow them to be more comfortable and confident in their learning. I also recommend that the MOE provide public Montessori school so that all Saudi children, regardless of socioeconomic status, have the opportunity to enroll in a Montessori classroom.

These recommendations open another door, which is the importance of teacher training programs. Based on a personal communication with a Saudi Montessori educator in Riyadh, she faced challenges getting approval from the MOE to open an internationally licensed Montessori training center (A. Albasim, personal communication, June 18, 2021). MOE rules and regulations limited her opportunity to have her training center certified by the Montessori Accreditation Council for Teacher Education. Therefore, I recommend that the MOE allow

internationally certified centers as well as opening more Montessori training centers affiliated with Association Montessori International, which was created originally by Dr. Montessori (Lillard, 2016).

Recommendations for Higher Education Programs

In my experience as a university lecturer, I found that Montessori's theory and method were mentioned less often in the early childhood program curriculum compared with other philosophers such as Piaget and Vygotsky. I recommend more focus on Montessori in the early childhood programs because Montessori connected her theory with her classroom practices, which provides a clearer vision of what she meant by her theory and helps prepare preservice teachers to know or adapt such practices in their future classrooms. I also recommend that early childhood education programs partner with Montessori schools so that pre-service teachers have more opportunity to observe and do internships in Montessori schools, as well as in traditional classrooms. The idea might provide the pre-service teachers with critical thinking as they compare the Montessori school system with the traditional system. The partnership might also enable university researchers to conduct more studies in Saudi Montessori classrooms, which would strengthen the literature in the field.

Recommendations for Further Research

Finally, I recommend that further research focus on Saudi parents' perspectives about enrolling their children in Montessori classrooms. In that study, the researcher might examine the parents' views on raising children to be independent in their choices. Many parents and teachers focus on independence in the sense of putting on shoes by themselves, eating by themselves, and learning by themselves; however, teaching children independence is more than a practical skill. It enables children to be more independent in all their decision making in life. In contrast, it is a

social norm in Saudi culture that parents or older family members guide children in making decisions. Saudis consider this a form of respect for older people. On the other hand, the 2030 vision encourages independence; just as women in Saudi Arabia take more responsibility than before (e.g., they drive, work, etc.), the new generations may now make more decisions by themselves. Thus, further research could also investigate if educators support the idea of raising children to be independent in themselves or allowing them to depend on their parents as they grow up. Such questions could help to measure the success of adapting Western approaches in Eastern conservative cultures such as Saudi Arabia.

Studies have found that parents' involvement in children's education has a positive effect on children's academic skills (Bonci et al., 2011), and the participants in this study agreed that children's home environment affected their independence in the classroom. Therefore, further study could also focus on comparing Saudi children's levels of independence in their Montessori classrooms and their homes. The study results might reveal how parenting style at home influences children's independence at school and home, which might encourage teachers to set up plans to work with parents on developing children's independent practices at home.

The children in this study had freedom and independence at some times in the classroom (work time, dressing, eating, etc.). However, the teachers guided them for learning and classroom time management. A further study focused on implementing Montessori education with the teachers' involvement and guidance might be essential to test the benefit of that approach on the children's freedom as they make their choices independently during the school day.

Aljabreen (2017) conducted a case study comparing the teacher's role in a U.S. kindergarten Montessori classroom with the teacher's role in a traditional kindergarten classroom

in Saudi Arabia. I would recommend a further comparative case study between a Montessori school in Saudi Arabia and a Montessori school in any Western country exploring teachers' classroom roles, which might include deep analysis of how cultural differences affect teachers' implementations of the same educational approach.

Abdullah et al. (2018) and Gumiandari et al. (2019) presented research comparing Montessori practices and Islamic education, and they agreed on the conflict between Montessori and Islam in term of praising children. However, further research might be important to examine the actions and reasons for which the Prophet Mohammed (PBUH) praised or did not praise children. The details can be compared with the Montessori philosophy on praising children to identify more specific points of agreement and conflict.

In conclusion, this chapter presented a discussion of the main themes from the study findings, as well as recommendations regarding implementing Montessori education in the Saudi context for teachers, the MOE, and higher education. The chapter then concluded with recommendations for further study.

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APPENDICES

Appendix A: The First Interview

Part One: General Questions

1. What is the city you live in now?
2. What city are you originally from?
3. When you were a child, were you enrolled in kindergarten? If so, what kind of program you were in?
4. What is your highest level of education? What was your major?
5. What is your working experience? How long have you been working as an ECE teacher or under the Montessori methods?
6. What does your typical daily routine look like?

Part Two: Guided Questions

7. What are the cultural and religious practices/events you engage in with your family?
8. Do you involve yourself in community participations for any events? What are they? Why?
9. How do you address the Ministry of Human Resources' rules and regulations in your classroom?
10. How do you address the school administration's rules and regulations in your classroom?
11. How do you perceive Montessori to be defined in Saudi Arabia?
12. What is your training in Montessori?

13. What is the reason(s) of choosing the Montessori school to work in?
14. What do you think is the most valuable in the school?
15. What makes Montessori unique?
16. What does Montessori mean to you?
17. What do you like most about Montessori methods?
18. What improvements do you recommend for Montessori methods?
19. What are the biggest challenges of using a Montessori program with children in the Saudi context?
20. How has school changed between your first experiences with it and your current employment? Please provide an example.

Part Three: Classroom Questions

21. How many children are in your classroom? Where are they from? What are their ages? Religious backgrounds? And Socioeconomic Status?
22. What does a typical day look like at your school? How have you scheduled classroom time in the morning in your program? For example, when do the children arrive? When do you have circle time? Etc.
23. Can you walk me through what an individual lesson looks like? What are the components of the type of lesson that a child might learn and master?
24. Do you have any details you would like to add?

Appendix B: The Second Interview

1. How does the larger school culture share their practices in the school?
2. How do children celebrate religious and cultural events in the Montessori school? What is your perspective about it?
3. Please describe how you incorporate Saudi culture and Islamic principles in the following activities/centers and for how long each day:
    A. Morning circle
    B. Lunch time
    C. Recess
    D. Practical life experience center
    E. Math center
    F. Sensory center
    G. Culture center
    H. Language art center
    I. Are there any other incorporation times or materials you would like to add?
4. What is your perspective on incorporating Saudi socio-cultural lessons in the curriculum and classroom? Why?
5. What is your perspective on incorporating Islamic principles into the curriculum and classroom? Why?
6. When do you guide the children? How?
7. What would you do if the children make mistakes when they work with cultural materials? Why? Please provide me with an example.

8. What would you do if the children make mistakes when they practice Islamic principles? Why? Please provide me with an example.
9. Who designed the activities and materials that integrate Arabic culture and the Islamic religion into the Montessori centers and circle time? What resources were used to support this work?
10. What kind of measurement do you use to assess children? How do you use it to measure each child's progress?
11. How do you assess children in Islamic principles and Saudi culture? Why?
12. What are your roles, as a teacher, in the classroom? How do you manage the Montessori classroom?
13. How do you manage behavior in your classroom in view of Islamic principles or Saudi culture? Why?
14. Please describe how your perceptions about adapting Montessori to Saudi Arabia—involving Saudi culture and Islamic practices in educating the children—are influenced by what you learn from your family, community, and culture?
15. What social traditions and norms do you consider in your teaching and interactions with children?
16. How do you respond to the Saudi 2030 Vision's plan to increase the adaptation of child-centered approaches in Saudi Arabia? Does the plan increase your awareness of the important of Montessori schools in SA? Why?
17. How does your belief in Montessori affect your practice? Can you give me an example?
18. Do you have anything you would like to add?

Appendix C: IRB Certificate of Completion

Certificate of Completion

Lila Alhashim

Completed USF IRB Student Researcher Workshop 2021

on Wednesday, September 15, 2021

USF
UNIVERSITY OF
SOUTH FLORIDA

Certificate ID#: 61396

Appendix D: Examples of Ms. Asma Providing Verbal Praise

When Ms. Asma worked with a child on an individual lesson, she mixed the objects for the letters *Th* and *Ta* and asked him to classify them based on the first letter. When he finished, she patted his shoulder and said, “Well done.” (O). She also looked at Lubna’s work on the Color Tablet where she graded the colors correctly and said, “Excellent, well done” (O).

The children sought out praise in different situations. For example, Adeel called Ms. Asma to show her his tower, and she said, “Well done” and gave him a high five (O). Another child was playing with the ball by the playdough; she said, “Teacher Asma, look!” and Ms. Asma said, “Very beautiful ball” (O).

Appendix E: Examples of Ms. Asma Leading the Quran Class

Ms. Asma cared about teaching Islamic practices to children. One of her practices was *Tajweed,* which means Quran recitation, where the reader will be able to "pronounce the letters and words in Quranic verses correctly, giving every letter its right in reciting the Quran" (Madrasat El-Quran, n.d.). Ms. Asma's reading voice was clear, audible, and beautiful (O). She also used *Talgin,* a common strategy teachers use to help children memorize the Quran in Saudi classrooms (Rogoff, 2003). For example, for a new verse, Ms. Asma repeated it three times, and the children repeated it after each time. She also divided the long verses into three parts and repeated each part with the children repeating after her. After that, she chose children to come forward and read the Quran.

When she read, she pointed to the children "to remind them of their role to read" (O). When a child seemed not to know the verse and stopped reading, Ms. Asma held his hand for support (O). When another child refused to read, Ms. Asma tried to help her feel more comfortable, saying, "Do you want to read in your place?" But the child still refused. The assistant teacher also encouraged the children to practice reading, as she said to the child, "I will help you," and grabbed her hand and sat beside Ms. Asma (I). The child Amna sat on Ms. Asma's lap and began reading with her, and when she finished, Ms. Asma praised her, saying, "Good job!" (O). When the children finished reading, she reviewed the chapter after them. For example, she said, "I will say it first, and then you repeat with me" (O).

Appendix F: Examples of Ms. Asma Guiding Children Based on the School Schedule

At the end of mealtime, Ms. Asma gave a 1-minute warning, then rang the bell and said, "We're going out now" (O). The children started to line up by their cabinets to prepare to go outside (O). At the end of working time, she said time was up and rang the bell, announcing, "We return the activities, drink water, and sit in the circle" (O).

Ms. Asma also directed the children's conversation when they strayed off the subject. For example, when a child wanted to share a story outside the topic of the culture circle time, she said, "No stories now, stories later in the day, okay?" The child nodded his head yes (O). She encouraged children several times to eat faster when mealtime ended, saying, "Let's take another bite" to encourage a child to move outside because the outdoor time had started (O). She explained the reason for rushing the children to finish their food rather than allowing them to take their time eating: "He must know that there is a specific time for food, then there is another part [of activities]" (I).

Also, Ms. Asma directed children to change activities at certain times. For example, when some children had finished eating their meals, she sat on a chair in circle time and started reading a story to them. As the story was nearing the end, a child left and brought another story for her to read. Then, Ms. Asma said, "How about we read it at the end of the day because we're going outside, okay?" She put the story on her desk, rang the bell, and said, "Let's drink water, put on our jackets, and be ready by the cabinet" (O).

Azzam displayed the same behaviors often at mealtimes during the observation. For example, he would still be eating his meal in the classroom after all the children went outside, and Ms. Asma would sit next to him and encourage him to eat faster (O). When Azzam finished, he put the glass, dishes, and spoons in the designated place and then went outside (O). Ms. Asma

followed the school schedule to guide the children to play outside, which contradicts Montessori's belief in recess as physically unnecessary because "the mental life shown by our children brings the whole of their musculature into constant use" (Lillard, 2016, p. 37).

Appendix G: Examples of Ms. Ola Controlling the Children's Eating

During mealtime, a child was seated at the table and asked Ms. Ola, "Teacher, can I get milk?" Ms. Ola saw that the child had not finished the milky cornflakes, and she said, "Finish, then I'll give you milk." After he finished the cornflakes, some milk remained in the bowl. Once he showed Ms. Ola his bowl, she said it was enough (she meant there was enough milk in the bowl for him). But the child wanted more milk. Ms. Ola told him calmly, "Drink it first; then I will give you more." The child drank (O). In addition to asking the child to drink the milk first, she told him to hold the bowl with two hands instead of one to avoid spilling and wasting the milk. When he did, Ms. Ola gave him a sandwich and asked Ms. Nouf to serve him more milk (O).

Ms. Ola described her experience when she dealt with a child who asked for more z*aatar* rolls (thyme rolls), but could not finish them within mealtime. She saved the rest and gave it to him at the second meal. She highlighted a logical, religious, and behavioral reason for children to take responsibility, saying, "My religion, it is forbidden . . . food is a blessing . . . and he should not get used to putting more than he needs on his plate" (I).

At the second meal, Ms. Ola also controlled the children. She asked whether any of them needed more food. She further told the children that they could only serve themselves two pieces of fruit or vegetable at a time, and sometimes one piece. She explained that control was necessary to prevent throwing food away. Ms. Ola added,

> Because the children . . . some have an appetite and others do not eat, so, we started at the beginning of the year telling them to put two, and they don't eat . . . and you don't want to force them to eat, I mean you don't want to force anyone [to eat] more than his stomach. So, put one for you, if you want more, take more. (I).

Appendix H: Examples of Ms. Ola Implementing Montessori Teaching Practices

On one occasion, following the three-period lesson plan, Ms. Ola brought a child the letters *Kh, Ja,* and *Hh*. She passed two fingers over each sandpaper letter and pronounced it. The second step was when she asked the child, "Where's the sound of *Ja*?" The child pointed to the correct letter. In the third step, she took the sandpaper letter card and asked the child, "What is this?" The child answered, "*Ja*." Ms. Ola said, "Good," and continued with the rest of the letters (O). She also used the three-period lesson plan to teach children the names of the shapes using the Metal Insets (O).

Another strategy Ms. Ola used related to the Montessori method was including tangible materials and pictures in the lessons (Montessori & Carter, 1936). For example, when she worked with a child on the letter *Ta*, she brought the letter bags and took out the objects, plastic toys, which included a *Temsah* (crocodile), *Toffah* (apples), and a *Telvas* (TV) (O). She also used the sandpaper letters and numbers to trace for the children and a sandbox to write the letters. For example, after she presented the objects for the letter *Ba*, she wrote the letter in the sandbox, and the child wrote it after she cleared it (O). Thus, the Montessori classroom culture affected Ms. Ola's teaching practices in that she presented lessons using strategies suggested by Montessori (Rogoff, 2003).

Appendix I: Celebrating Special Events in Saudi Arabia

"We care a lot about National Day. We celebrate it, we have a big party and the children wear [traditional clothes]." The teachers introduced Saudi Arabia, the king, the leaders, and the flag. They provided details of the country's different regions, "[how] each region has a different costume, and cities that are important in Saudi Arabia" (I). The children made decorations, and the teachers hung them up in school. A teacher explained that "the materials used in the decoration activity were cartons and paper. We didn't bring plastic . . . and they were prepared by the child himself and not the teacher . . . [which is] part of Montessori" (I). The teacher also shared, "There is the last day when we sat on the floor [and eat]. Sitting on the floor was considered a culture [practice]" (I).

Appendix J: Integrating the Hiding Activity with the Three-Period Lesson

After Ms. Nouf checked Montessori Canvas on her laptop, she went to the English language center with a child, took the sandpaper letter box from the shelf, reviewed a letter with the child, took the letter and the objects container, and sat with him at a table. She brought out the objects and the names of each object and said, "This is a nest; what is the sound of a nest?" The child said, "*Nnnn*." Then she asked the child to trace the sandpaper letter. She also presented the nail in the same way.

Ms. Nouf then integrated a different strategy into the lesson. "There is something on my face that begins with *nnn*." The child said, "Nose." She said, "Right, nose." Ms. Nouf then pointed at each object and asked, "What is this?" The child named them. She asked, "What is the beginning sound of nail?" The child said, "*Nnnnn."* Following that, Ms. Nouf said, "Close your eyes," and when the child did, she hid one object and asked the child to think of what was missing. After the child traced the letter on the sandpaper, she added, "It is my letter" (O).

Appendix K: Examples of Ms. Nouf Praising the Children

One example was when Ms. Nouf worked with Sara on learning how to put beans in a tray by using a small brush and then transferring them to a cup. After she presented how the activity worked, she observed the child do the activity alone. However, the child collected the beans with her hands, not the brush. After she finished, Ms. Nouf said, "Good job, Sara; you find it to yourself. Do you want to do that again?" The child shook her head no. Ms. Nouf said, "Okay," and then she left (O). It seemed that the child did the activity for the first time, inspiring the teacher to encourage her to try.

Ms. Nouf also praised the children when they mastered skills without her help. She showed them that she was happy and excited about their accomplishment. For example, she sat beside Assam to work on a button activity (the activity was a frame and fabric with five buttons). After Ms. Nouf modeled how to open the buttons, she asked Assam, "Do you want to try?" When Assam did it correctly, she said, "Good job!" with an excited voice (O).

Ms. Nouf also praised the children by having them show their work to others to demonstrate their skills. For example, a child was too excited to write his name without following the tracing line. He went to Ms. Nouf, putting the paper in front of his face. Although Ms. Nouf was working with a different child, she smiled and said excitedly: "Very beautiful, *mashallah tabaraka Allah*!" (which means "what Allah has willed, may Allah have blessed"). Then she told him, "Go show Ms. Ola." When he did, Ms. Ola said the same (O). The teacher also used nonverbal praise, such as when she took a picture of a child holding an erasable paper where he had traced her name. She also praised the children to confirm that they were doing an excellent job without her assistance. For example, she passed by a child working on the sponge and water activity and said, "Saad, good job, *Ma sha Allah*." Two children sat with her to learn

how to fold the towel, and after she modeled it, the children did it by themselves. While observing them, she said, “Good job” (O). Furthermore, she praised the children when they asked her to confirm their work. For example, after Mona finished working with the puzzle, she said to Ms. Nouf, “Look, I am done!” Ms. Nouf said, “Good job, *ma sha Allah*,” which means “God has the will” (O).

Appendix L: IRB Approval Letter

UNIVERSITY of SOUTH FLORIDA

APPROVAL

January 3, 2022

Lila Alhashim

Dear Lila Alhashim:

On 12/19/2021, the IRB reviewed and approved the following protocol:

Application Type:	Initial Study
IRB ID:	STUDY003632
Review Type:	Expedited 6,7
Title:	Implementing Montessori Methods in Saudi Early Childhood Classrooms
Funding:	None
IND, IDE, or HDE:	None
Approved Protocol and Consent(s)/Assent(s):	• IRB Social-Behavioral Protocol Study ^N003632 Lila.docx; • HRP-502b(8) Social Behavioral Verbal Consent Script Study #003632 (Arabic).pdf • Verbal Consent Script Study LN003632 Lila.pdf Approved study documents can be found under the 'Documents' tab in the main study workspace. Use the stamped consent found under the 'Last Finalized' column under the 'Documents' tab.

Within 30 days of the anniversary date of study approval, confirm your research is ongoing by clicking Confirm Ongoing Research in BullsIRB, or if your research is complete, submit a study closure request in BullsIRB by clicking Create Modification/CR.

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

Your study qualifies for a waiver of the requirements for the documentation of informed consent for the study interview as outlined in the federal regulations at 45 CFR 46.117(c).

UNIVERSITY of SOUTH FLORIDA

As a reminder, please contact USF IT at secops-help@usf.edu to set up your Box.com study folder before storing data on the cloud. You will need to include the name of the Principal Investigator (folder owner), study title, data to be stored, and a list of IRB-approved study team members in your email to USF IT. For additional information, please see Question 38 of HRP-103 - Investigator Manual.

Sincerely,

Katrina Johnson
IRB Research Compliance Administrator