

THE EXPERIENCES OF HOME ECONOMICS TEACHERS IN SAUDI ARABIAN CLASSROOMS

by

Mashael Saud Alharbi

B.Ed., Umm Al-Qura University, 2006

M.Ed., The University of British Columbia, 2015

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The following individuals certify that they have read, and recommend to the Faculty of Graduate and Postdoctoral Studies for acceptance, the dissertation entitled:

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the degree of Doctor of Philosophy

in Curriculum Studies

Examining Committee:

Dr. Kerry Renwick, Professor, Curriculum and Pedagogy, UBC
Supervisor

Dr. Anthony Clark, Professor, Curriculum and Pedagogy, UBC
Supervisory Committee Member

Dr. Sandra Scott, Professor, Curriculum and Pedagogy, UBC
Supervisory Committee Member

Dr. Samson Nashon, Professor, Curriculum and Pedagogy, UBC
University Examiner

Dr. Phyllis Johnson, Professor, Sociology, UBC
University Examiner

Abstract

The national curriculum of Saudi Arabia aims to provide young people with the capabilities to participate in society that are framed around the values expressed in the Qur'an and through Islamic rules. The provision of public education for Saudi girls and young women has been developing since the 1960's and includes home economics as one of the subjects. Offered at the elementary, intermediate, and high school levels the home economics curriculum has a specific focus on improving family life, hygiene, and nutrition. There is limited research about home economics teachers and their work. Guided by a centralised curriculum, teachers enact curriculum through teaching strategies and the learning activities. The focus of this study is to explore teachers' experiences within the classroom and drawing upon a funds of knowledge approach, to understand the curricula decisions teachers make.

Following a phenomenological case study design, eight teachers from Mecca city, a major urban city in the western region of Saudi Arabia were interviewed and observed in their classrooms. Of particular interest was how these teachers perceived the impact on their student's food practices, healthy diet and eating habits. By using funds of knowledge as a lens it was possible to see how teachers made decisions about enacting the curriculum based on their personal and professional knowledges; and to see how students responded based on their funds of knowledge. The findings have implications for future research about the interplay between a teacher's funds of knowledge with that of their students within the home economics classroom. The findings point to the need for closer alignment between the food and nutrition education offered within the classroom and the food choices available at the school canteen. This study is

significant in that it is the first time that a qualitative phenomenological case study exploring teachers' funds of knowledge has been employed as a research approach in Saudi Arabia context.

Lay Summary

This study investigated how eight teachers perceived the impact of a home economics curriculum on their student's food practices, healthy diet and eating habits. Two research questions were investigated: What is the experience of teachers in Saudi Arabian home economics classrooms? and How do the teachers' funds of knowledge inform and shape their experiences? The findings in this study illustrate what teachers focused on when delivering home economics content and how these decisions were guided by their personal and professional knowledges. This knowledge shaped how teachers perceived their students' diet and subsequently how they tried to educate the students about healthier everyday food practices. Teachers were aware of the gap between what they were teaching and the food choices at the school canteen. The findings have implications for future research on how the alignment between a teacher's and student's funds of knowledge impact on the students' learning.

Preface

This dissertation is original, unpublished and independent work by the author, M.S. Alharbi. The study obtained the approval of the UBC Research Ethics Board (Behavioral Research Ethics Board; UBC BREB Number: H17-02999), and that the Ministry of Education in Saudi Arabia reference number: (029277412).

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Dedication

This thesis is dedicated to my parents Nasirah Alkhatabi and Saud Alharbi,
My husband Mohammad, my beloved children Lara, Hussam, Ibrahim and Haya

Chapter 1 – Introduction and Background to the Study

Research has shown there is a widespread problem with dietary choices in a range of countries including the United States, Australia, England, and Saudi Arabia (Aldaqa, Saleh & Sehlo, 2013; Ells, et.al, 2015; Garnett, Baur, Jones, & Hardy, 2016; Moreno, 2018; Skinner, Perrin, & Skelton, 2016; Taylor, 2011). These dietary problems are linked to increasing obesity and other chronic diseases such as diabetes and result from industrial approaches to food production, preparation, changing consumption habits, and a lack of food literacy (Snedeker & Hay, 2012; Sylvetsky et al., 2013). Severson (2010) asserts that people with minimal cooking skills tend to use high technology kitchen appliances and gadgets, such as microwaves which provide “smart” options for quick and easy food choices such as cookies, frozen food such as chicken nuggets, and pizza; all ready to eat at the push of a button. In Saudi Arabia, there is increasing evidence that the population is shifting towards fast food consumption (Aljaadi & Alharbi, 2020; Al-Othaimeen, Al-Nozha, & Osman, 2007).

Despite the capacity of home economics school curriculum to produce graduates who can care for themselves and their families, Saudi women are being called upon to feed their children a balanced diet and restrict their children’s consumption of energy dense foods (Al-Kutbe, Payne, de Looy & Rees, 2017). Moreover, as Bilaver (2010) observed, food preparation skills are often not transferred to real-life situations, and there is evidence of poor eating habits both in school and home environments of Saudi children (Al-Dossary, Sarkis, Hassan, Ezz El Regal, & Fouda, 2010). Thus, there appears to be a disconnect between food preparation skills and nutritional knowledge offered in home economics education in Saudi Arabia’s schools and how this knowledge and these skills are practiced within families and the wider community.

1.2 Background to the Research Problem

The overall aim of this research was to explore how healthy diet and eating habits are represented within the elementary and middle school home economics curriculum in Saudi Arabia and the impact on the food practices of school-aged children. Specifically, the experiences and related perspectives of home economics teachers were explored regarding food and the attendant attitudes and responses of young people.

This research examined teachers' funds of knowledge where "they have knowledge, and their life experiences have gained them that knowledge" (González, Moll & Amanti, 2005, p. ix-x) and how their funds of knowledge influenced their practices in the home economics classroom. In this research, teachers' funds of knowledge were examined in relation to both teachers utilizing students' funds of knowledge and school knowledge (e.g., teaching and learning activities, materials and textbook) and the influence on students' food choices. This study aimed to contribute to the research by creating a space where the four categories: (1) teachers' funds of knowledge; (2) students' funds of knowledge; (3) school knowledge; and (4) curriculum knowledge inform teaching and learning in a home economics classroom. This new space facilitated student learning by allowing both students and teachers to construct new knowledge. It is important to examine teachers' funds of knowledge to understand the ways teachers' formal and informal knowledge influence student classroom learning.

Students' funds of knowledge have been studied by researchers in different contexts, and the research findings reveal the positive impact of utilizing students' funds of knowledge on their learning (González et al., 2005; Llopart, & Esteban-Guitart, 2017; Moje et al., 2004). The addition of teachers' funds of knowledge along with curriculum and school knowledge is much

needed because teachers have different sources of knowledge which can influence their daily decisions and strategies related to teaching and learning (Hedges, 2012).

1.3 Research Questions

The following questions guided this research:

1. What is the experience of teachers in Saudi Arabian home economics classrooms?
2. How do the teachers' funds of knowledge inform and shape their experiences?

1.4 Significance of the Study

There is a lack of research in the Arab world, compared with Western countries, and especially in Saudi Arabia, in the field of social sciences and humanities (Badran & Zoubi, 2010). While the findings of this study have implications on the future of home economics for children in Saudi Arabia, this research will also contribute to the home economics education literature in the Middle Eastern context. My review of the research revealed that in Saudi Arabia, most phenomenological studies focused on medicine, teacher education, and education policy (see for example Al Kai et al., 2011; Alhazmi & Nylan, 2013; Alosaimi, Dyson, & Anthony, 2013; Jackson & Manderscheid, 2015; Hamdan, 2015), with no specific reference to home economics education in Saudi Arabia in the literature. In other words, little or no attention has been given to teachers' perspectives of home economics education. Moreover, most existing literature on Saudi teachers' experiences focused on early childhood education, (kindergarten) (e.g., Alameen, Male & Palaiologou, 2015; Khoja, 2013) and the experiences of teachers in Islamic studies and science education (e.g., Alnefaie, 2016; Jamjoom, 2010; Saif, 2016). Hence, this study within this unique context of home economics education in the Saudi classroom contributes to the literature on teachers' experiences, specifically regarding their perspectives on

teaching and learning. Another contribution of this study's findings is addressing the gap in the research on Saudi teachers' perspectives on home economics education, particularly in the elementary and middle schools. In addition, this phenomenological case study provides insight into the ways a teacher's personal and professional knowledge shape their understanding of the curriculum as well as their choice and teaching of learning opportunities in the classroom.

1.5 Research Positionality

This research study on Saudi Arabian elementary and middle school teachers' experiences with the home economics curriculum posed a dilemma for me. I am a home economics educator, and share a similar nationality and culture as the teachers in this study, which may have affected my collection, interpretation and analysis of the data due to potential researcher bias. However, I believe that my cultural background, work, and educational experiences provided insights into school culture and practices and how these might influence the participants' worldviews. My passion for home economics education developed during my experiences as a student and educator in Saudi Arabia led me to conduct this research. As I conducted this study, I reflected upon my own experiences as a home economics student, educator, and now graduate student within my researcher roles as both an insider and outsider.

1.5.1 My Experience in Home Economics Classes

Having been a student in home economics classes from elementary school through to higher education, I have always been intrigued about the extent to which home economics education enabled Saudi Arabian children, to think in ways that would build their capacity to cope, adapt, and participate as explained by (McGregor, 2011) in their everyday lives. As a student, I was interested in home economics because I aspired to become a home economics teacher who could contribute to the lives of young women in Saudi Arabia. I wanted to be a

model home economics teacher, a role model to my students. However, the enthusiasm with which I entered intermediate school as well as the passion I had for home economics was short lived. When I graduated from primary school, I took on more responsibilities at home, and I was being given more latitude to make decisions about what I wanted to do with my own life. I soon realized that the home economics class was not offering the type of meaningful and relevant experiences and critical thinking I desired. My education was not providing opportunities for me to connect school learning and societal needs. In Grade 6, it was clear to me that the main objective of home economics was to prepare and equip Saudi Arabian girls with knowledge and skills to be good and productive wives and mothers. On this basis, I was disappointed and wanted to develop a home economics program that placed greater emphasis on developing an environment where students could ask questions about life in the home and beyond. I was keen to create a program that would substantially acknowledge and recognize the students' cultural backgrounds that are central to their questions.

As I reflect on my schooling background, I recognize my concern for the lack of relevance of the curriculum to the students' daily lives. In Saudi Arabia, classrooms are monocultural with a borrowed curriculum from countries like Kuwait, Qatar, Emirates and Jordan (Alharbi & Renwick 2017; Ministry of Education in Saudi Arabia, 2017). The disparity between my experiences in home economics courses and my expectations particularly in relation to food preparation led me to become dissatisfied with the entire curriculum. I felt quite frustrated as I was not shown how to transfer my school cooking knowledge, for example, to my home environment. The required cookbook had recipes for different kinds of dough but ignored the traditional method for making bread that my family and most of the families I knew used in their homes. My mother and grandmother often prepared this traditional dough to prepare tasty and

delicious bread. As another example, the curriculum contained a section on jam making; however, this did not resonate with our real-life experiences. While the main ingredients for making jam in my family were local fruits, most of the recipes in the textbook used imported fruits. Since these imported fruits were not homegrown, Saudi students were neither familiar with the way they looked nor the way they tasted and therefore did not see these ingredients as something that would be a part of a meal or even worth eating. A third example is that of food preservation, specifically canning. The curriculum did not take into consideration that as a country with large expanses of desert, students required an understanding of Indigenous/traditional knowledge and they needed to learn specific techniques for food preservation particular to the country with unique locally available foods and local geography and climate. The home economics curriculum emphasized topics such as cooking and sewing as well as textile techniques across the Middle East.

The home economics class I experienced did not reflect the original home economics mission statement as described by Brown and Paolucci (1979) which was:

... to enable families, both as individual units and generally as a social institution, to build and maintain systems of action which lead (1) to maturing in individual self-formation and (2) to enlightened, cooperative participation in the critique and formulation of social goals and means for accomplishing them (p. 23).

In this way, the Saudi home economics curriculum falls short of Majorie Brown's three systems of action for home economics, (1) technical, (2) interpretive, and (3) critical, which posit that the intent of home economics curriculum is to bring about change and educate students about practical problems and ways to address these problems. In other words, the intent of the home

economics curriculum should be concerned with students' "perceptions, their conceptualizations, and their modes of thinking ... their thinking-acting capacity" (Brown, 1979, p. 59).

As a student I was not allowed to ask questions. Rather, I had to listen and be able to reproduce the information given by the teacher. As an adolescent, I had so many unanswered questions. Although I was afraid to ask for fear of being called a "bad" girl, my frustration was compounded further when I noticed the teacher reprimanding my classmates who dared to ask questions. The more I was not allowed to question the more I asked myself the extent to which home economics taught me to think critically. I felt a disconnect between what I learned in the home economics classes and my role in real-life situations in my home and community. I was drawn to the work of Thomas (1998) who asserts that Brown's work (1979, 1980) reflects a postmodern worldview in which "(1) human relationships are cooperative and equal rather than coercive, individualistic, and patriarchal, (2) the wisdom of all cultures is respected, and (3) natural science is not the sole route to valid knowledge and inquiry" (p. 21). This worldview reflects a critical-science approach that can be described as practical problem-focused and process-oriented which aligns with my understanding of the goal of home economics education.

The learning scenario in my home economics classes was what Freire (2000) would describe as "banking education", where the teacher expected students to listen, memorize, and recall the knowledge taught; but not to ask any questions about what was being taught. The banking concept of education refers to a "depositing" of information by teachers into the minds of their students (Freire, 2000). As a result, there is little or no connection to the students' lives. This silencing of students' voices and the absence of teachers' perspectives of teaching and learning in their classroom motivated me to conduct this research. My aim in conducting this research was to support teachers, especially at the elementary school level by highlighting and

foregrounding their voices and representing their perspectives of the home economics curriculum.

As an insider, I am aware of the complexity of conducting a qualitative study in the context of Saudi Arabia were based on my experiences as educational researcher, most research practices in school settings focus on quantitative research. Merriam et al. (2001) explained that “being an insider means easy access, the ability to ask more meaningful questions and read non-verbal cues, be able to project a more truthful, authentic understanding of the culture under study” (p. 411). However, being an insider often means that the researcher is close to the culture and the context under investigation, and becomes biased (Merriam et al., 2001). The strengths of being an insider become the weakness of the outsider and “vice-versa”, and “what an insider sees and understands will be different from, but as valid as what an outsider understands” (Merriam et al., 2001, p.415).

I am located within and yet also outside the group who is being studied because of my lived experience as a member of that group as it is explained by Gair (2012). My positionality was also as a PhD student at the University of British Columbia in Canada, providing me with rich experiences and a range of research skills. In line with Patton’s (2002) assertion that it is important to balance a researcher’s emotions and decision making throughout the research process, I was aware that my past experiences as a student inevitably influenced my research work. I felt kinship and empathy for the participants in my study. In the context of this research, I positioned myself as both an outsider, and an insider, as a researcher who pursued the balance between insider and outsider, knowing the outsider as researcher and the insider as a qualified home economics teacher.

1.5.2 Ontological and Epistemological Considerations

The quality and relevance of any research largely depends on the appropriateness of the methodological approach (Myers, 2009). Given that the underlying assumptions of different research perspectives shape the research from the methodology employed to the type of questions asked (Hathaway, 1995), a clear understanding of the research questions is essential to determining appropriate methodological approaches that fit the nature of the phenomenon under investigation. Patton (2002) advises that justification of the methodological choice should relate to the research perspective, since the underlying assumptions of the research perspective guides the researcher. Justification of a methodological choice also involves understanding what constitutes human knowledge, the kind of knowledge to be gained or sought, and the characteristics of the knowledge obtained. It is therefore essential that the underlying assumption should be consistent with the research problem and the methodological approach.

Based on the above understanding, in designing this study, I considered the ontology, epistemology, and axiology of a given methodology (Denzin & Lincoln, 2018). While ontology refers to the nature of being and aims to answer the question pertaining to what is reality, epistemology seeks to understand how knowledge is constructed (Bryman, Teevan & Bell, 2012; Denzin & Lincoln, 2018). The ontological position of qualitative research is that reality is not fixed but interpretive (Bryman et al., 2012).

The epistemology or theory of knowledge of qualitative research including phenomenology is that knowledge construction is mediated by people's experiences and by the context and meanings people bring to them (Denzin & Lincoln, 2018). However, phenomenology "does not see theory as something that stands before practice. Practice (or life) always comes first, and theory comes later as result of reflection" (van Manen, 1990, p. 15).

Bergere (2011) noted that the phenomenological approach does not avoid theory, but rather the intent is “to follow the qualitative research’s tendency to work outward from the data towards developing theoretical propositions” (p. 83). The theoretical framework I used to frame this research was ‘funds of knowledge’ as proposed by González et al. (2005), following the methodological consideration that theory arrives later as a result of the reflection and description of participants’ experiences. Merriam (2009) observed that general perspectives of qualitative research aim at answering the ‘how’ ‘what’ and ‘why’ questions with the aim of making sense or interpreting the phenomena in terms of the meanings people bring to them. Phenomenology emphasizes ‘what’ questions to gain a deeper understanding of the nature or meaning of everyday experiences.

For the purpose of this research, my ontological and epistemological approach led me to select a qualitative methodology as my aim was to illuminate understanding and make meaning by examining and describing teachers’ experiences in the elementary and middle home economics classroom in Saudi Arabia.

1.6 The Saudi Arabian Context

Saudi Arabia is located in South-West Asia and covers approximately 2,000,000 square kilometers (General Authority for Statistics, n.d). The country is bordered to the east by the Arabian Gulf, Bahrain, Qatar and the United Arab Emirates, to the south by Yemen and Oman, to the west by the Red Sea and to the north by Jordan, Iraq and Kuwait. Most of Saudi Arabian land surface is covered by sand, consisting of deserts of Al-nufud in the north, Al-dahna in the east, and Ar-rubalkhali in the south of the country (General Authority for Statistics, n.d.; Niblock, 2004).

Generally known as the Kingdom of Saudi Arabia, the country and people whose culture I refer to here belong to an absolute Monarchy where the King is the head of state and all institutions (Burton, 2010). Saudi Arabia is home to approximately 35 million people (General Authority for Statistics, n.d.). Islam is the official religion. Despite a significant number of foreign workers, Saudi Arabia can also be defined as a country where Arabic is the dominant language. The cities of Mecca and Madina constitute the birthplace of Islam. They are considered holy and are of great importance to the Muslim world globally. Conservatism or traditionalism of the Saudi Arabian society is rooted in Islamic laws, which strongly emphasize gendered roles in terms of men and women (AlMunajjed, 1997). It is the principal duty of the women to care for family and children in a male-dominated society (AlMunajjed, 1997). In Saudi social life, religious morals take precedence (Oyaid, 2009). These morals range from personal relations to tribal and extended family values, all of which form a complex interlocking web of commitments assigned to individuals and described within the Qur'an (Oyaid, 2009).

Generally, the Saudi people have high regard for their traditions and consider privacy and family honour to be of extreme importance (Press, 2010). It is on this basis that Saudi people still eat the same foods as their nomadic ancestors including dates, breads, yogurt, cheese, wheat, rice and meat, all with mixed spices (Saudi Arabian Cultural Mission, n.d.). Saudi society is a culture that does not easily assimilate outsiders on a casual basis (Feghali, 1997). However, the Saudi people are known to be highly hospitable and this is demonstrated when visiting one another and through the offering of Arabic coffee to every visitor (Press, 2010). Saudi greetings are effusive, eloquent, and elaborate. Saudis lavish praise and compliments upon greeting each other and take pride in the way they use both Arabic and English languages (Press, 2010).

Economically Saudi Arabian possesses one of the world's largest oil reserves, which, since discovery in 1930s, have had a huge impact on the country's economy (Feghali, 1997). Oil accounts for 92% of the country's budget and explains Saudi's fast-growing infrastructure (Feghali, 1997). Many of the country's projects such as agricultural, industrial, health care, education, commercial business, transportation and the use of a wide variety of new technologies have, over the years been facilitated by oil revenues (Hamdan, 2005). Also, reflected in the country's rapid growth after the discovery of oil are Saudi people's values, in terms of new patterns of commodity consumption and adoption of new technologies in the agricultural and domestic realms (AlMunajjed, 1997; Hamdan, 2005; Press, 2010). Saudi is a constantly changing and developing country in terms of social, economic, and political aspects of its people in relation to the rest of the world (Hemish, 2015). Like many other countries around the world today, Saudi Arabia finds at a crossroads. While the country strongly favours conservatism in order to preserve its culture, at the same time it is forced to be open not only to the forces of media, technology, and travel, that fuel global consumerism for new commodities, but also to the forces of education, which in turn fuel new ideas.

1.6.1 Saudi Arabian Culture

Culture may be defined as a way of life by which I characterize a group of people based on their language, symbols, beliefs, sociocultural practices, and values. Various researchers define culture differently. According to Tylor (1871), culture refers to "that complex whole which includes knowledge, belief, art, morals, laws, customs and any other capabilities and habits acquired by man (*sic*) as a member of society" (p.1). Spradley and McCurdy (1980) define culture as the acquired knowledge people use to interpret experience and generate behaviour.

In this research, I draw on the work of González, Moll and Amanti (2005) and refer to culture as “representing the concept of how people view and act in the world based on the norm group expectations” (p.10). Amanti (2005) explained that the typical approach to culture embodied in most multicultural curricula taught in public schools is static, normative, and exclusive. She portrayed culture as homogenous and frozen in time, such as when teachers engage with students in learning about holidays, food, typical costumes, history, and art or culture of their own or that of other people. In this way, Amanti demonstrated how students’ everyday experiences can be devalued through pedagogical approaches. In the following section, I explore the general literature on Saudi Arabia with more emphasis on Saudi’s culture.

1.6.2 Home Economics Education in Saudi Arabia

In Saudi Arabia, schools are segregated by gender, and home economics is referred to as “Family Education” within a curriculum which began at the inception of girls’ education in the 1960s (Alharbi, 2018; Alharbi & Renwick, 2017). In the Saudi Arabian context, disciplines related to home economics have the same meaning and the term home economics, with its broader international recognition will be used to refer to the Saudi curriculum in this study. Home economics is an umbrella term divided into three categories: (1) nutrition and cooking; (2) sewing; and (3) health education (Ministry of Education in Saudi Arabia, 2017a). Overall, home economics includes subjects such as food and eating practices, childcare, family relations, housing and home management. Sewing involves both flat pattern work and tailoring (Ministry of Education in Saudi Arabia, 2017a).

In the Saudi Arabian school system, home economics is a required course for girls in Grades 1 to 6 at elementary school level; Grades 7, 8 and 9 at intermediate school level; and Grades 10 and 11 at the secondary school level (Ministry of Education in Saudi Arabia, 2017a).

All girls' public schools are managed directly under the General Presidency for Girls' Education, and the Saudi Government prescribes the standard curricula for all schools (Ministry of education in Saudi Arabia, 2017b). As Stone and Boldt (1994) stated, home economics education was automatically situated in the feminine Hestian realm representing the life world of women, as it existed historically and within various cultures. In fact, within the Saudi Arabian society, understanding home economics requires a shift from a male-defined mind-set to a female-defined Hestian mind-set. Stone and Boldt (1994) stated that "this perceptual shift ... can bring a holistic reality into focus and take us beyond gender to more complex levels of social and intellectual organization" (p.187). This is consistent with Thompson's (1988, 1992) view that the Hestian system represents the private and domestic life with emphasis on everyday life, reflecting a home economics focus. In Saudi Arabia, women are positioned in the domestic domain "inside the house" (Al Lily, 2016). Al Lily (2016) argued that the aim of home economics is to teach girls how to be effective participants in the domestic domain.

The underlying concept of home economics education in Saudi Arabia was introduced as a way to entice more families to have their daughters engage with formal education and overcome the cultural and social resistance towards the newly introduced formal education (Bahrani, 1981) while reinforcing the importance of the role that women have in the family. With the inception of formal education for girls, home economics became a required subject at all levels of public schooling, elementary, intermediate and high school levels.

With a focus on improving family life, hygiene, and nutrition, the home economics curriculum was designed to include educational experiences, skills, and knowledge that matched the responsibilities of female students in their family life. Given the rapid changes within the Saudi society at the time, home economics would assist female students to integrate school

knowledge and skills with real-life situation activities in home environments, leading to the establishment of the General Directorate of Girls Education by the Saudi government (Bahrani, 1981). The directorate was mandated not only to oversee the moral standards of girls, but also to emphasise the need for home economics as a way to support Saudi society. By focusing on home economics, female students were expected to acquire the type of education suitable for the changing modern times. Home economics is perceived as offering life-long skills that can be employed both in the domestic and private sphere as well as in the public sphere (Farrelly, 2012). Two skills that transcend the private/public divide include decision-making and managing interpersonal relationships.

Since the 1960s there has been a substantial shift in education in Saudi Arabia, as previously there was no formal education for women (Al-Rawaf & Simmons, 1991). Reforming the educational system included girls and young women becoming a priority, which was a great challenge for the Saudi government. The latest educational reform is presented in the Saudi Arabian's Vision of 2030 statement, which articulates Saudi's values and beliefs that underpin the achievement of the future goals and expectations. Today, "curricula represent the essence of the educational process, as it contributes to forming and shaping future generations and the morals and values they should possess" (Education & Training Evaluation Commission, 2018). Curricula define the skills and competencies that students require to enable participation in societal development (Education & Training Evaluation Commission, 2018). The Vision of 2030 explicitly calls for reform for the education system and national curriculum and aims to improve the teacher education programs to meet the future marketplace needs for innovation and creativity (Vision 2030, n.d.). The Vision of 2030 includes three main themes: (1) a vibrant

society; (2) a thriving economy; (3) and an ambitious nation. The first theme highlights the importance of balancing lifestyle and living a healthy life (Vision 2030, n.d.).

Given the world's rapid changes politically, economically, and socially, today's educators cannot choose to ignore the need for education reform and development. However, the different theories that home economics researchers build upon in their teaching present challenges to the choice of theoretical orientations and the types of problems to be examined, particularly in relation to families' everyday life (McGregor, 1997). Nevertheless, assumptions and philosophies related to home economics tend to indicate that if important changes are to occur, the adoption of new perceptions and insights (Brown & Paolucci, 1979) is inevitable.

1.7 Organization of the Thesis

This thesis is organized into five chapters. Chapter 1 introduced the thesis by providing a rationale for the study, purpose, the study's two guiding research questions, significance of the study, and the researcher background and positionality. Chapter 2 offers a comprehensive literature review, which includes an overview of the history of curriculum reform in home economics education especially in the Saudi Arabian context. This is followed by a discussion of the theoretical frameworks guiding the study, which is based on teachers' funds of knowledge. This framework is based on the belief that teaching and learning in the classroom involve personal and professional knowledge. Chapter 3 discusses the methodological perspectives and procedures employed in the research design, the context of the study, and the research participants. The chapter outlines the study's trustworthiness, as well as ethical considerations. In Chapter 4, qualitative analysis results in developing key themes that emerged by synthesizing and triangulating the data in relation to the study's research questions. The final chapter, Chapter 5, provides a discussion of the findings by grounding these within the funds of knowledge

literature. It also provides a summary of the study and outlines the implications for theory, curriculum and pedagogy, further research, and offers recommendations.

Chapter 2 – Literature Review

In this chapter, I present my review of the literature that considers the theoretical frameworks used in this study, which are sociocultural theory and funds of knowledge. Funds of knowledge are considered with particular reference to understanding and explaining the work of teachers. Sociocultural theory helps to explain knowledge that is enacted through interactions between students and their teachers. The literature draws upon global research to consider the ways curriculum is utilised as a vehicle for social policy. The subsequent sections consider the history of home economics education and how it is enacted within Saudi Arabia. This chapter concludes with an exploration of the importance of nutrition education within Saudi home economics classes.

2.1 Sociocultural Theory

As we think and engage with the world around us, we draw upon signs and tools to inform, mediate, and enable both our individual and social actions (Rogoff, 1990). The particular signs and tools available are the result of people creating and using them over a period of time; hence, the cultural artefact (Rogoff, 1990). According to Lantolf (2000) we use artefacts to “establish an indirect, or mediated, relationship between ourselves and the world” (p. 2). Bubolz and Sontage (1988) wrote about the interrelationship between family/home, the individual and society. They argue that the reciprocal relationship between family and society is a central concern of the home economics profession. Family members make use of signs and tools in their everyday practices and manage their human ecology in cooperation with each other, across the extended family and their social and environmental systems. Sociocultural theory therefore provides useful framing in

this thesis about home economics teachers' experiences in schools as it is about the relationship between family and society that they are a part of.

Sociocultural theory was developed by Vygotsky (1896-1934), a Russian psychologist whose ideas have impacted and changed both psychology and education (Turuk, 2008). The development of Vygotsky's theory in the field of education has been extended by other researchers (see Bruner, 1996; Rogoff, 1990). The main idea behind Vygotsky's theory is "children participate in cultural activities with the guidance of more skilled partners, which allows children to internalize the tools for thinking and for taking more mature approaches to problem-solving that children have practiced in the social context" (Rogoff, 1990, p.14).

According to Rogoff (1990), culture creates a pathway to carry on skills for each generation with the interactions with those who are mediated and more experienced in the use of cultural tools in a particular context (Rogoff, 1990), beginning with the family (Bubolz & Sontage, 1988). In her understanding of the sociocultural theory, Rogoff stressed that "children's active role in making use of social guidance, the importance of tacit and routine arrangements of children's activities, and sharing through discussion and explanation with adults, children achieve shared understandings of the cultural context" (1990, p. 8). Thus, familial, social activities develop and enhance the learning of its members.

The unifying concept in Vygotsky's work is the zone of proximal development (ZPD). ZPD provides a way to understand Vygotsky's theory of human development (1980) (See Figure 1). There are three aspects to consider about ZPD. Firstly, there is a distance between what we cannot do without assistance to when we can do it independently. Secondly, there is distance between what we are taught to do and what we learn by being in the world. And thirdly, there is a distance between activity that is done as an individual to what is a social activity. From a social

perspective learning emphasizes the importance of culture and provides context in understanding what occurs in society and in regard to knowledge construction (Derry, 2004; McMahon, 1997).

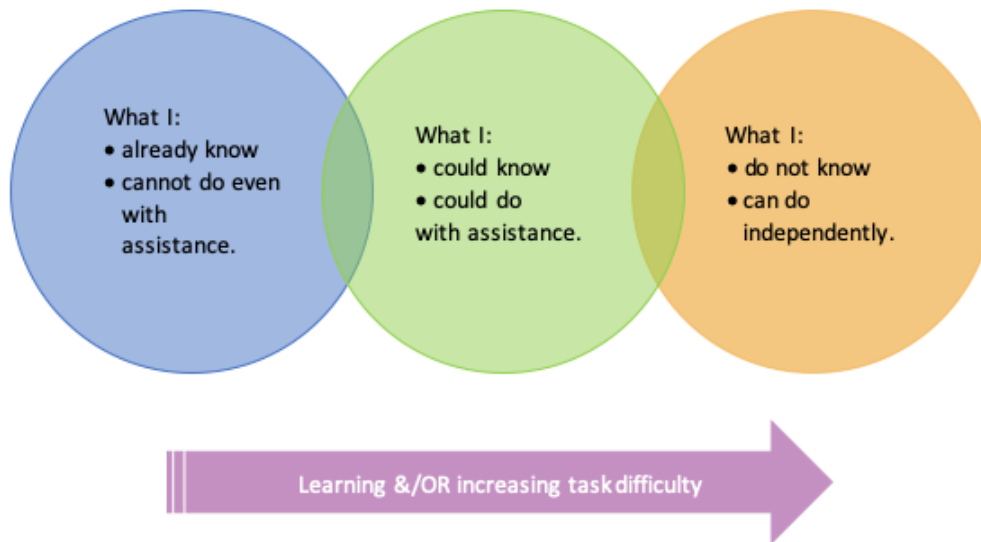


Figure 1: Zone of Proximal Development (based on Nomura et al., 2019).

The concept of ZPD provides a lens where personal development such as in children, can be understood because of their participation in activities slightly beyond their capability, with help from adults including parents and teachers, or more experienced peers such as older siblings. Harry et al. (1999) noted that families also have a zone of proximal development where the ecology of the family and cultural engagements combine to create a family specific ‘ecocultural niche’.

For many sociocultural theorists, learning is most effective when the learner has a role model to learn from as they interact with others and the culture they live in, which in turn shapes their mental abilities. According to Vygotsky (1980), parents, relatives, peers, and society all play an important role in forming a child’s higher levels of functioning. Thus, within the sociocultural theoretical framework, “the cognitive development that includes finding,

understanding, handling particular problems, building on the intellectual tools inherited from past generation and social resources provided by other people” (Rogoff, 1990, p.190) play a major role in learning. In this way practical learning in subjects such as home economics, does not constitute an end in itself; instead, learning continues even after students have graduated from school.

The sociocultural theory posits that learning is a cognitive process that takes place in a social context and is guided by socially and culturally accepted norms (Eun, 2019; Rogoff, 1990). Since sociocultural theory focuses on any development where the individual participating in sociocultural activity is “embedded in specific social and cultural settings which comprise one's ecocultural niche” (Harry et al., 1999, p. 126). Thus, learning occurs by observing others (Rogoff, 2012; Shabani, 2016) in social spaces beginning with the family. According to Cole (1996) there are interconnections between individuals and the created and natural objects within their environment. Objects are used to signify knowledge, beliefs, morals, and customs acquired because of societal membership and can best be investigated through a sociocultural theoretical framework. Esmonde (2017, pp. 7-8) discusses various sociocultural theories and posits that there are common elements:

1. Cultural artifacts (both tools and signs) mediate human activity. This means that artifacts form an inextricable part of human cognition (rather than bearing some sort of causal relationship with cognition).
2. Learning should be studied as it occurs in everyday life, not just in the laboratory.
3. As people cross boundaries between different contexts, their learning both endures and shifts. Therefore, the units of analysis for the study of learning goes beyond the individual and must include aspects of context.

4. Multiple historical timescales are relevant for the study of learning. Learning both endures and develops across time.
5. Learning should be studied using a generic (developmental) method that allows insight into the process of learning, not just the outcomes.
6. As they participate in joint activity, people simultaneously exercise agency and are constrained.

Sociocultural theories have been used to demonstrate how students learn and form opinions through participation in cultural, linguistic, and historically formed settings such as peer group interactions and institutional contexts, such as schooling (Lantolf & Beckett, 2009) and that knowledge of reality is obtained through social constructions (Eun, 2019; Walsham, 1995).

Sociocultural theories therefore offer a way to explore home economics as a profession focused on families and households as a place to transform societies with attention to sustainable futures (IFHE, n.d.). Social constructions such as tools and labour provide the means for us to engage with the physical world (Lantolf, 2000). Within classrooms, sociocultural framework knowledge is enacted through physical interactions between students and their teachers using artefacts in ways that draw on their social and environmental experiences (Eun, 2019; Lantolf, 2000; Namazzi, 2015; Nashon & Anderson, 2013).

Home economics is rife with sociocultural artefacts associated with the learning and practice about food, family, and textiles as it involves the body as well as the mind and subconscious as it draws on cultural histories and the associated valued modes of thinking (Lantolf, 2000). Namazzi (2015) observed that learning and practice intrinsically link actions and attitudes of individuals, communities, and societies and lead to decision making and acting. Nashon and Anderson (2013) further assert that cultural values facilitate an understanding of the

relationship between content learning and its practice in society. This is in consonance with Wertsch's (1991) view that learning occurs within a social context and that new information is obtained by individuals as they construct knowledge through interactions with their social environment. Esmonde (2017) argued that context is inseparable from cognition. Through this intersection, the researcher can gain a deeper understanding of how home economics can contribute to learning about everyday practices from sustainable decisions about clothing to food and nutrition choices that support development and wellbeing. Our most immediate and prevailing social context is the family and thus is significant in how we process knowledge and our understanding of the world. Schools offer another space for sociocultural activity and potential to develop an individual's ZPD. The teacher is more experienced and has an explicit role to provide formal instruction and scaffold learning opportunities so that individual students are supported as they develop independent capabilities (Eun, 2019).

The classroom setting poses a field of communication and interaction between teachers and students, although students in the same class may perceive curriculum content differently (Renwick, 2015). The culture of the school represents an interplay between the students' attitudes and beliefs as they are expressed both inside the school and in the external environment, as well as engaging with the cultural norms of the school and the relationships between persons in the school. The interrelatedness of these factors also affects the way students perceive and practice home economics. Thus, it is possible to see how the culture of a school reflects the local culture in many ways (González et.al, 2005; Moll, 2005).

Within home economics as a field of study sociocultural theory becomes a particularly pertinent means to understand families as core units of society. It is possible to see evidence of this in each of the common aspect of sociocultural theory identified by Esmonde (2017).

1. *Cultural artifacts (both tools and signs) mediate human activity.*

Families are spaces of human action and are both users of and creators of cultural artifacts. They use signs to communicate between members and use art and crafts to represent meanings that are valued and tools that are both physical (cooking, sewing equipment) and ideational (concepts, strategies) facilitate action (Eun, 2019). The available tools and signs are mediated according to culture. Thus, decisions about what to eat or mediated by cultural understandings about what food is and when certain foods are permitted or limited.

2. *Learning should be studied as it occurs in everyday life.*

Within sociocultural theory Esmonde (2017) noted that the everyday provides a social backdrop to understand development as growth, progress or as change. Family is a significant space where development can be perceived. Vaines (2004) argued for the need to take time to notice everyday life acts not because they were mundane rather that they were meaningful. Most closely related to our everyday experiences families influence not only what cultural artifacts are used and how but also have the capacity to influence sociocultural and ecological systems.

3. *As people cross boundaries between different contexts, their learning both endures and shifts. Therefore, the units of analysis for the study of learning goes beyond the individual and must include aspects of context.*

Families engage in a range of human actions that are aimed at meeting fundamental needs and daily practical concerns; what McGregor (2010) calls practical, perennial problems such as a lack of housing supply. Families create an ecology of the family and make cultural engagements to create a family specific ‘ecocultural niche’ (Harry et al., 1999).

What is learnt within the family, home context has application in other sociocultural contexts.

4. *Multiple historical timescales are relevant for the study of learning. Learning both endures and develops across time.*

Families are by definition defined over long time frames as people grow and develop through their lifespan and the family cycles through various stages and generational membership.

5. *Learning should be studied using a generic (developmental) method that allows insight into the process of learning, not just the outcomes.*

In thinking about learning within family there is intergenerational learning that describes the transmission of beliefs and behaviours from older to younger family members. A second version of learning is transgenerational learning that is described as being more fluid and reciprocal sharing that is in perpetual motion (Kabuto, 2015). Life in a family is perceived as a long-term experience as one stage of development morphs into the next thus trying to focus on any one outcome doesn't have credibility given the continual change both of and between family members.

6. *As they participate in joint activity, people simultaneously exercise agency and are constrained.*

Families share resources and engage with decision making about how those resources will be used (Kabuto, 2015). The level of engagement and how the decisions are made are the result of complex relationships within family, and the interactions of identities, that occur over time and are influenced by emotion and perceptions of empowerment.

This section has considered social theory as a way to understand the interplay between social relations and development. Specific attention was given to Vygotsky's development of sociocultural theory as a way to understand learning especially in children using his zone of proximal development. Family is the basis of the home economics profession and is a base unit of society. Families are therefore significant spaces for the enactment of sociocultural practices such as those evidenced in Esmonde's (2017) list of common elements of sociocultural theories. It has been noted that the sociocultural theory and the funds of knowledge theory are linked (Moll et al., 2005). In this study's context, the construction of knowledge and the significance of the elements for both teachers and students in home economics classes makes the combination of the sociocultural theoretical framework and funds of knowledge theory appropriate for guiding this research. With this in mind the next section will elaborate on the funds of knowledge theory.

2.2 Funds of Knowledge Theory

Funds of knowledge is positioned within Vygotsky's (1978) sociocultural work, specifically his concept of cultural mediation (González et al., 2005). The concept of funds of knowledge was generated by González et al. (2005) as a result of their work with Latino youth in Southern California. The authors draw on three ideas from Vygotsky's work that played a role in their formulation of the funds of knowledge concept.

Funds of knowledge are generated through the social and labor history of families and communicated to others through the activities that constitute household life ...Then funds of knowledge represent one of the household's most useful cultural resources, an essential tool kit that households need to mediate their well-being. A second way is that funds of knowledge become cultural resources for teachers as they document their existence and bring them

to bear on their work... To understand families and their cultural resources also including raising possibilities for changes in classroom practices (González et al., 2005, pp.18–19).

Funds of knowledge draws from an anthropological perspective described by Vélez-Ibáñez and Greenberg (1992) who studied working class Mexican-American families in the United States. As a part of their household analysis using a funds of knowledge approach, the families were able to describe various sets of knowledge and skills that were economically and socially important to working class Mexican households (Vélez-Ibáñez, 2018; Vélez-Ibáñez & Greenberg, 1992). Typical research approaches included teachers, researchers, students and parents to understand how knowledge grows out of the activities in which students and parents were engaged, and how this knowledge is shared within the community (Huerta-Kelley, 2017; Richardson, 1997).

Initially, funds of knowledge referred to students' everyday life experiences and practices. The notion of funds of knowledge was constructed from the idea that people's everyday experiences give them knowledge and skills (González et al., 2005). A person's funds of knowledge become the foundation for their beliefs and ideas that in turn influence their decisions (González et al., 2005; Gupta, 2006; Hedges, 2012; Moje et al., 2004). The use of funds of knowledge as a way to frame research has grown to such an extent that it is now possible to engage with a critical evaluation of the literature.

In a review of different research using funds of knowledge, Hogg (2011) reviewed 50 articles and identified different ways of defining, applying and understanding funds of knowledge. The different views of funds of knowledge mostly focused on the elements that contribute to the sources or areas of knowledge and whose knowledge. Some of the research

considered household, family, peers, and popular culture as a source of funds of knowledge, where others included life experience and community. Hogg's analysis emphasized what and whose knowledge is being incorporated into a funds of knowledge approach. The use of the term 'areas of knowledge' reflected what has emerged as a traditional view of funds of knowledge (Wolf, 1966), where resources and knowledge are focused on how families manage their household economic funds for needs such as rent. The term 'source of knowledge' is emerging in more recent research and exploring different perspectives of funds of knowledge, including family, community, peer group and popular culture (Hogg, 2011). For the purpose of this research, the term funds of knowledge is being used to refer to those everyday life experiences that influence an individual's decisions as they occur because of different knowledge sources: families, communities, schools, peer groups, and culture (Moje et al., 2004).

The different kinds of knowledge identified by Moje et al. (2004) represent the sources and foundation for forming a fund of knowledge. Moje et al. (2004) asserted that family and community knowledge is learned within the home and involves personal/cultural knowledge outside school, relationships, household, work in and outside the house, cooking, cleaning, and ethnic and cultural traditions. Peer group knowledge includes inside/outside school activities, both formal and informal (Moje et al., 2004). Popular culture includes media such as music, magazines, television and movies (Moje et al., 2004). School knowledge comes from teachers' craft in their teaching and learning activities as well as the textbooks and other teaching materials that they utilize. The curriculum forms the basis of school knowledge, but it is teachers' understanding of the curricula content that formulates the teaching strategies (Moje et al., 2004). For Moje et al. (2004), family/community knowledge and peer groups and popular culture include both students' and teachers' funds of knowledge, and school knowledge refers to official

school knowledge, or curricula. According to Moje et al. (2004) funds of knowledge and official school knowledge interact to create a new space for student knowledge (see figure 2). This led Moje et al. (2004) to determine that there were two main categories of sources of knowledge in education that interact in ways that support and reshape students' knowledge.

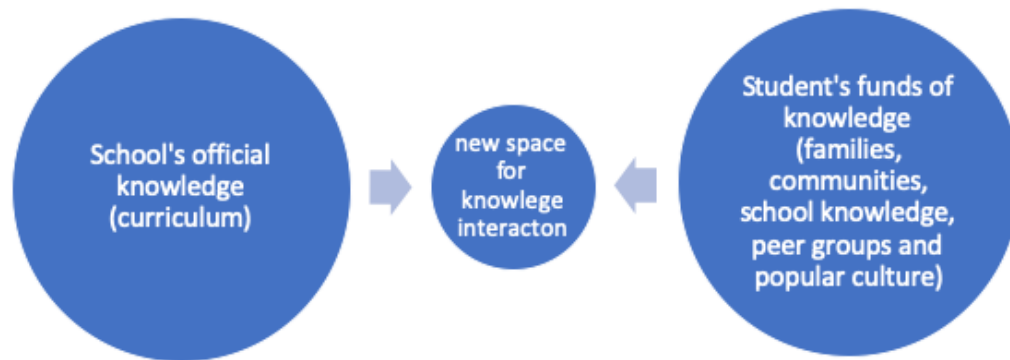


Figure 2: Source of Knowledge (Moje et al., 2004).

This research study draws on the sources of knowledge identified by Moje et al. (2004) with particular focus on the teacher's funds of knowledge derived from their personal/informal

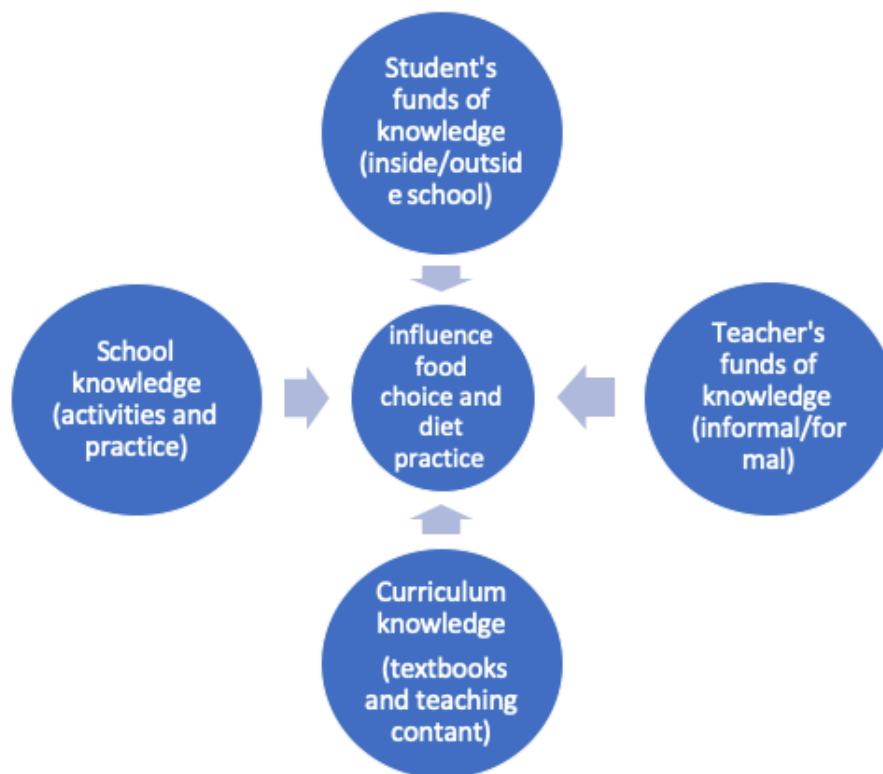


Figure 3: Four Sources of Knowledge Used in this Research.

and professional knowledge, as shown in figure 3. The extended source of knowledge, which includes the teacher's funds of knowledge added an extra lens to include the knowledge that teachers bring to their classrooms and influence their teaching practices.

As evidenced from the discussion thus far, there are different views about where our funds of knowledge specifically originate. However, many researchers agreed that funds of knowledge constructed from accumulated outside school experiences are considered informal (González et al., 2005; Hogg, 2011; Llopart, & Esteban-Guitart, 2017; Moje et al., 2004; Zipin, 2009).

However, what is accepted in this body of research, is that everyone has funds of knowledge, as it is the basis for their beliefs, values, decision making, and understanding of the world around them. Importantly for students it is their funds of knowledge that helps them make connections between what they experience in school and their experiences outside school. Equally important within the school context is the teachers' funds of knowledge (Hedges, 2012). Teachers have their own beliefs and values that inform their practice, teaching strategies, decision making, and interactions with students in their classrooms (Gupta, 2006; Hedges, 2012; Moje et al., 2004).

The focus of this research is on teachers and their funds of knowledge, although it is worth noting that this has an influence on their students' funds of knowledge. The next section provides an overview of employing student's funds of knowledge in an educational setting, the original focus and intent of funds of knowledge used by (González et al., 2005). Notably, the illustration of constructed knowledge through the use of individual funds of knowledge provides a lens of forming interpretation, beliefs, interactions with others and understating community, society and the world (Moje et al., 2004).

2.2.1 Student Funds of Knowledge

Funds of knowledge is defined as “the historically accumulated and culturally developed bodies of knowledge and skills” that is meaningfully put to use as “household and other community resources” (Moll et al., 1992, pp. 132–133). Families are interconnected networks of extended family members and friends within community and social contexts. Children interact with extended family members and friends outside of their immediate family unit where they are exposed to a variety of social events, and in doing so are imbued with a culturally/ familial intuitive knowledge base and that in turn contribute to the development of their funds of knowledge (González et al., 2005).

According to research focussing on the funds of knowledge by Llopart and Esteban-Guitart (2017) and Moll et al. (2005), this knowledge base provides valuable connections to these children’s learning in school, provided teachers know what to look for. The benefits of seeking to understand what children already know as a preface to academic learning not only validates their existing knowledge and understanding, but also invites natural, intuitive knowledge into the classroom learning. This approach to learning enables students to construct knowledge as a social experience with their peers and then relate it to their personal experience and circumstance in family and community (Kukla 2000).

Renwick (2015) observed that students come to school with their “virtual school bag of experiences” acquired “from interactions with family, friends and their wider community” (p. 88). People grow and learn collaboratively within their family and community drawing on their cultural practices, historical backgrounds and the symbolic artifacts of their community. The symbolic artifacts include the community’s language, musical instruments and anything created by humans, which gives information about the community’s culture or way of life. Thus,

according to Moll et al. (1992) funds of knowledge is information that a child brings to school from home and the wider community that is essential for household and individual functioning and well-being, also influences how the child relates to the curriculum offered by the school. For some school-aged children, funds of knowledge and school knowledge readily align, providing them with a substantial academic advantage (Zipin, Sellar & Hattam, 2012). However, there are some instances where this alignment is not possible with the consequence of children being at risk of disengaging from school and education (Moll et al., 1992; Zipin, 2009; Zipin et al., 2012).

Gonzalez and Moll (2002) noted that funds of knowledge are “based on a simple premise that people are competent and have the knowledge, and their life experiences have given them that knowledge” (p. 625). The authors further stipulate that this body of knowledge includes the skills and strategies acquired throughout one’s life; for instance, the knowledge obtained when doing household tasks, shopping, or even communicating and socializing within the community (Gonzalez & Moll, 2002). It is worth noting that this knowledge is initially created within the family context and is reflective of the wider community and culture that the family is both a part of and contributes to (Moll, et al., 1992).

Zipin (2009) describes funds of knowledge as a deep fund of pedagogy, where it is possible to explore the boundaries between a student’s life world and curriculum. By analyzing systemic boundaries between life worlds and curriculum, it is possible to see constraints for decontextualizing students’ funds of knowledge within the school curriculum. It is this framing of how curriculum both includes and excludes students that can be applied to understanding and learning about home economics. Given the consideration of society’s needs, traditions, enduring values and aspirations during the development of curriculum and enactment of the curriculum (Flinders and Thornton, 2017), it is not usual practice to foreground everyday life skills

(Tileston, 2000) and the value of home economics education or student's funds of knowledge. Yet, students who are educated persons with capabilities that enhance their everyday lives benefit society as a whole. Hence, by tapping into students' funds of knowledge, it is inevitable that the teaching and learning experiences in the (home economics) classroom are inevitably enhanced.

Funds of knowledge have been used to document the knowledge within low-income Mexican-American households in the US, to help teachers to link the curriculum with student life outside the school (González et al., 2005; Vélez-Ibáñez, 2018). Rios-Aguilar Kiyama, Gravit and Moll (2011) explained that their research on funds of knowledge in an educational context has been used to better understand the schooling experience of different ethnic and cultural groups, including Mexican-Americans (Ayers et al., 2001; González et al., 2005), Haitians (Conant et al., 2001), and African Americans (Foster and Peele, 2001). The work has also been used in different countries including England (Williams, 2005), and Australia (Andrews and Yee, 2006; Zipin, 2009; Zipin & Brennan, 2018).

Home economics in curricula in Saudi Arabia developed as a result of sharing the curricula between different Arab countries such as Kuwait, Qatar, United Arab Emirates and Jordan (Alharbi & Renwick 2017; Ministry of Education in Saudi Arabia, 2017). Although there are close cultural similarities between these countries, there are also significant disparities between values and within the cultures that limit the curriculum from being the 'right' fit for Saudi Arabian society. This is consistent with Alnahdi's (2014) view that Saudi Arabian curriculum outcomes neither satisfy the lives of individuals, nor the specific needs for the larger community. Mohrman (2005) observes that with an imported curriculum learning tends to be more "imitative than creative" (p. 23) Thanasoulas (2001) claimed that such curricula can widen students'

horizons, however in reality, students are less likely to be non-reflective and non-creative in their learning process. The implementation of the curriculum in Saudi Arabia emphasises the use of textbooks as the foundation for the delivery of curriculum and as a result ignores students' funds of knowledge. But, once teachers begin to understand their students' funds of knowledge, they can utilize that knowledge to connect them to the learning intentions. This also necessitates the teachers' willingness to understand their students' specific backgrounds and the knowledge they draw from (Alnahdi, 2014).

Home economics is one curricula subject that provides young people with lifelong skills that benefit them both at work and at home. In order to be relevant, the home economics curriculum must reflect the students' culture and societal needs while building on family and community experiences. De Coninck (2008) observed that curriculum is now viewed as being at the center of daily life and the responsibility of society as a whole. Thus, reforming the educational system has become a priority as well as a great challenge for the Saudi Arabian government (De Coninck, 2008). Flinders and Thornton (2017) commented that in order to educate students to be ready to contribute positively and meaningfully to their society, schools need a curriculum that can help students understand core content and enable them to make connections to their lives outside the school context by drawing from their funds of knowledge. This resonates with Freire's (2000) suggestion that "we must never provide people (*students*) with programs (*curricula*), which have little or nothing to do with their own preoccupation, doubts, hopes and fears" (p. 129, *emphasis added*). With this in mind the capacity for a home economics curriculum to be student-centered, in the sense that it embraces students' interests and societal needs (Freire, 2000), it needs to draw from their funds of knowledge. Zuga (1992) suggested that this requires teachers who are more concerned about the community-based social

problems and the need to create a better society together with the students, rather than covering the curriculum content solely for the purpose of passing examinations. This approach supports students to become reflective as they learn and develop a sense of inquiry in order to understand what contribution they can make within and for their own community.

Students require every opportunity to interact in the classroom to limit them disconnecting from what they learn in the home economics classes and how they can improve their everyday life outside schools. Lambert, Young, Roberts and Roberts (2014) explained that when students are not actively engaged in learning about food and healthier food preparation, the learning in the home economics classroom can quickly become what Freire (2000) referred to as ‘banking education’, a term that describes the classroom as a place where the teacher ‘deposits’ information into students’ heads, where they only listen to what the teacher says and not ask questions or have hands-on experiences. This banking approach to education reinforces students’ lack of opportunity to develop critical thinking and ownership of knowledge. It misrepresents how it is created as the result of the constructive process (Freire, 2000). Home economics should be related to students’ practice at home, making it easier to connect what they learn at school to real-life, and their everyday home experiences. Thus, for home economics, for learning to be meaningful, teachers ought to be drawing on a funds of knowledge approach to guide content delivery.

As evidenced from the discussion thus far, while it is important to understand students’ funds of knowledge it is equally important to examine teacher’s funds of knowledge as well. Student and teacher funds of knowledge influences their beliefs, practices, decision making and their interaction with each other in the classroom (Gupta, 2006; Hedges, 2012; Moje et al., 2004). While the focus of this study on teachers’ funds of knowledge, including reference to the

students' funds of knowledge helped to understand the various beliefs and perspectives being brought into the classroom.

Teachers are individuals who have funds of knowledge that include their personal beliefs and life experiences (Andrews et al., 2005; González et al., 2005; Gupta, 2006) that are tied in with their preparation to be a teacher and subsequent professional experiences (Hedges, 2012). It is this understanding that informs analysis of the experience of the teachers' who participated in this study. By closely exploring the teachers' experiences it is possible to understand the classroom interactions with their students, involvement in home economics practice and students' learning about home economics. For example, the interpretation of a teachers' perspective should enable analysis of food skills and knowledge to understand preparation, food choices, and eating patterns. This focus is explored in more detail in the section where the classroom experiences and practices are examined using a funds of knowledge approach.

2.2.2 Teachers Funds of Knowledge

Funds of knowledge have been used primarily to study what knowledge students bring with them into class in order to identify ways this knowledge can be applied to enhance learning (González et al., 2005; Llopart & Esteban-Guitart, 2017; Sebolt, 2018). The term 'funds of knowledge' has been subsequently extended to include a teacher's funds of knowledge as a way to determine how, teachers' life experiences which include their background, formal, and informal knowledge (e.g., out of school knowledge and academic knowledge), inform their decision making and teaching practices and influences their interactions with students (Andrews et al., 2005; Hearn, 2016; Hedges, 2012; Smith & Peterat, 1992).

The discussion of the following two studies highlights the value in using teacher interviews as a data resource about teachers' funds of knowledge and the impact on their approaches to

teaching and subsequently student learning. Hedges (2012) focused on teacher's funds of knowledge to explain that knowledge gained through life experiences was a major influence in their approaches to and decisions about teaching and learning practices in early childhood education. Hedges (2012) argued that a teachers' decision-making draws upon their formal knowledge, that is their professional knowledge, and informal or personal knowledge. Hedges noticed that teachers' funds of knowledge were used in different ways; their formal knowledge played a role in determining how students' learning was to be enabled and supported, and their informal knowledge influences the curriculum choices and teaching practices (Hedges, 2012).

In a qualitative case study, Andrews et al. (2005) considered how teachers of mathematics used their professional and personal knowledge. This study shows how teachers' professional knowledge and experience of being a mathematics teacher, and personal knowledge, such as, being a parent, sharing the same religion and community affected the teachers' daily practices (Andrews et al., 2005). Although there are only a few studies that explored the connections between teacher's funds of knowledge and their practice, the knowledge that teachers obtain from their life experiences is drawn from a base formed by opinions and beliefs and used in their everyday teaching practices (Andrews, et al., 2005; Hearn, 2016; Hedges, 2012). A teacher's funds of knowledge is therefore important to understand as it shapes their view of the school, the curriculum, and their students.

2.3 Curriculum and Reform

The curriculum is an educational path that identifies specific goals and objectives to be achieved, the topics to be covered and the methodology to be used for delivering the content in the teaching-learning process (Flinders & Thornton, 2017). Henson (2006) defined curriculum as the totality of the techniques and technology of educational practices that comprises the content

conceptualization, and transaction methodology, that help the students have continuing consciousness. On the other hand, Tyler (1969) viewed the curriculum as a practice anchored on the following four fundamental questions: 1) what educational purposes should schools seek to attain?; 2) what educational experiences can be provided that are likely to attain these purposes?; 3) How can these educational experiences be effectively organized?; and 4) How does one determine whether these purposes are attained? While these questions can be key during the initial development of the curriculum, they are equally pertinent during the curriculum reform process.

Tedesco, Opertii and Amadio (2014) assert that curriculum is not simply a collection of study plans, syllabi, and teaching subjects, but also includes the outcome of a process reflecting a political and societal arrangement about the what, why, and how of education for the desired society of the future. Kelly (2009) referred to the curriculum as the reconstruction of knowledge and experience, systematically developed under the auspices of the school to enable the learner to increase their control of knowledge and experience. Similarly, Marsh and Willis (1999) defined curriculum as the totality of learning experiences provided to students so that they can attain general skills and knowledge at a variety of learning sites.

Key to the idea of curriculum is that “all learning is planned and guided, whether it is carried on in groups or individually, inside or outside the school” (Kerr, 1968, p.16). Therefore, it is essential that the process of curriculum development, as well as curriculum reform, considers the need to support cultural diversity and ethics, that focuses on understanding the learner and creating a curriculum that is consistent with critical thinking (Jabbar & Hardaker, 2013). Thus, the curriculum should be grounded in practice. This is consistent with Stenhouse’s (1975) view that, like a recipe in cookery, “curriculum is an attempt to communicate the essential principles

and features of an educational proposal in such a form that it is open to critical scrutiny and capable of effective translation into practice” (p.4).

School curriculum is not so much concerned with how the curriculum is thought about, as to what its objectives and content might be (Brooks & Brooks, 1999). Expressed using a select group of people’s perspectives on what is needed to respond to society’s educational needs, very often, teachers have concerns about the cognitive development and intent of school curriculum in relation to students. Key to the development of students’ cognitive skills is to understand the curriculum theories applicable to the classroom environment. It is therefore essential curriculum theory reflects what students have an opportunity to learn in school and what they do not have an opportunity to learn, since not all matters are included in the formal curriculum (Flinders & Thornton, 2017).

As a guide for the teacher, the curriculum includes the expected knowledge, skills, attitudes, competencies, values and habits of mind that students are expected to acquire on completion of a learning process. As teachers develop and enact curriculum (Hedges, 2012; Smith & Peterat, 1992) they draw on their personal and professional experiences and knowledge to guide them. An important aspect in developing curriculum is therefore that teachers ought to understand their own values and beliefs not only in relation to their society and culture, but also in relation to the curriculum they enact (Flinders & Thornton, 2017). This is only possible if teachers take a critical thinking approach to the curriculum. Au (2012) underscored the importance of critical thinking in people’s relationships with the world around them and thus, the connection between individuals and their world to also seek to develop an understanding of their relationships to society and the global whole. When enacting the curriculum, teachers guide students to see things that they may not necessarily see within their everyday experiences and

learn something new about objects they have taken for granted in their day-to-day experiences (Au, 2012).

The idea of curriculum reform relates to the theory and practice of curriculum. In the field of academics, where rapid change and globalization is occurring, curriculum reform is argued to be a necessary process aimed at meeting societal needs and to adopt new ideas that are acceptable to society (Walker, 2003). Curriculum reform, as an area of study includes both the historical analysis of curriculum and ways of viewing current educational curriculum and policy decisions (Walker, 2003). Henson (2006) posits that curriculum reform must reflect the changes that occur locally at school, community and in society at large, and therefore the students' knowledge cannot be taken out of context. Additionally, curriculum reforms are to be understood alongside notions of classroom, teacher, lesson, and learning activities (Henson, 2006). According to Tyler (1969), curriculum reform requires a thorough understanding of the processes and principles of the changing paradigms that affect curriculum development. With a similar understanding Miettinen (2000) contends that the curriculum should not be presented as finished abstractions, rather it should include students' preconceived knowledge and also incorporate how students view their own world. Kaplan (1964) viewed the curriculum as a tool of inquiry assessed on the basis of the quality of implications it demonstrates.

2.4 Home Economics Curriculum

Home economics can be traced back to the late 1800s, as a response to the global changes and development with the intent to address social issues such as family life, health, hygiene, and women and children's rights (Nickols & Collier, 2015; Smith & deZwart, 2011). As a profession, home economics emerged from the Lake Placid conferences at the beginning of the 19th century (Pendergast, 2001). Globally recognized, home economics is a broad term that encompasses a

field of study and a profession. It is an interdisciplinary field that integrates theory and practice (Dewhurst & Pendergast, 2009). According to Smith and deZwart (2010) home economics, situated in the human sciences, draws from a range of disciplines that include socioeconomics, family and human development, nutrition, textiles, consumer education and the economic organization of the household.

The philosophy and knowledge base of any discipline is determined by society's existing problems at a particular time. Home economics is a discipline with a focus on the family as a unit of interdependence where people are committed to one another and share values, goals, resources, and decision-making (Dewhurst & Pendergast, 2009; Hook & Paolucci, 1970), as well as facing the common challenges of providing and using resources available for daily living, while pursuing improved opportunities across the lifespan (Renwick, 2016). In this way, families exist within a complex web of social, physical, and institutional systems (Renwick, 2016). In its nature as a discipline, home economics curriculum is concerned with the interface between families and households and their environments, both near and far, local and global, human and built. According to Brown and Paolucci (1979) it is in this basic unit of the family that the mission and nature of home economics are embedded as they state:

the mission of Home Economics is to enable family, both as individual units and generally as social institution, to build and maintain systems of action, which lead 1) to maturing in individual self-formation and 2) to enlightened co-operative participation in the critique and formulation of social goals and means for accomplishing. (p.23)

This mission statement highlights important goals for the field of home economics that also guide the educators and their practices (Smith, 2009). Smith (2009) observed how in some states

in the US, curriculum reform and instructional practices have often been guided by the system of action approach mentioned by Brown and Paolucci (1979). Given that the body of knowledge and practice developed in the home economics curriculum addresses family/household settings globally, the subject matter content of home economics curriculum crosses cultures and boundaries and is therefore globally influenced (Dewhurst & Pendergast, 2009).

Thus, the key to curriculum reform is the knowledge that each discipline is rooted in but not limited to its past (McGregor, 1997). However, from a contextual perspective, the question of access, relevance, efficiency, quality, and the effectiveness of a program become the basis for curriculum reform (Henson, 2006) even though curricula are nation specific. The premise of this thesis is that the global reform of home economics education and curriculum over the past forty years was influenced by various theoretical and philosophical assumptions. These include but are not limited to historical perspectives and philosophical assumptions that have come up as a result of different phenomena, as well the modernity of nation states and globalization as a result of global cultural flows (Appadurai, 1990). The next section considers how home economics education has been influenced by global reforms in curriculum.

2.4.1 Global Historical Perspective of Home Economics Curriculum Reform Since the 1960s

From inception, the home economics curriculum has always been motivated and designed to support women's work and their roles in society. Home economics emerged at the end of the 1800s as a response to worldwide changes and development with the intent to address social issues such as family life, health, hygiene, and women's and children's rights (Smith & de Zwart, 2010). The discipline focused more on teaching girls and women principles of domesticity that emphasized female roles and family life (East, 1980). However, this has not

remained the case and in this section, I present a historical perspective from the 1960s to the present to provide underlying assumptions that governed the essential aspects of home economics in the later part of the 20th century.

At the beginning of the 1960s, home economics was influenced by several different psychological and pedagogical theories. One of these was John Dewey's theory of "learning by doing" (Henson, 2006; Benn, 2012) where students "developed specific manual and domestic skills as a first step" (East, 1980, p. 29). As a way of building on Dewey's theory of learning by doing, Kolb, Boyatzis, and Mainemelis (2001) use the term experiential learning with concern for reflective practice. As an approach, experiential learning is a cognitive undertaking that can be seen as an ideology used at a time to confront diverse educational or societal challenges. Embedded in experiential learning is the idea that experience is tied to the humanistic anthropology and value system of psychological conceptions (Miettinen, 2000).

During the 1960s, teaching home economics teachers to set up laboratory kitchens, and their teaching practice were divided into two parts, the introductory method and the practical application (Benn, 2012). In the introductory method, the nature of teaching was transmission where each student worked individually doing assignments alongside but independent of each other (Benn, 2012). The practical component involved dividing students into pairs or small groups to work in small family style kitchens and guided by textbooks, which explained the recipes and the cooking methods (Benn, 2012; Stage & Vincenti, 1997). During this time, home economics education moved from cooking and sewing classes to a more critical level. The school kitchen took on educational and practical influences in the way of thinking about specific topics. Until the late 1960s, home economics as a subject was scientific in nature as it focused on

the application of scientific principles (East, 1980; McGregor, 1997) to understand what was happening and also, it included hygiene and food science (Benn, 2012).

Until the 1960s and 1970s, home economics continued to be viewed as a discipline that restricted girls and women to traditional domestic and maternal roles (East, 1980). However, some home economists, legislators, policy makers, and educators began to view home economics differently during the second wave of the women's feminist movement (Stage & Vincenti, 1997). This was a challenging time for home economics (Benn, 2000; Rossiter, 1997; Stage & Vincenti, 1997; Vaines, et al., 1984) given that feminists were challenging the idea of domestic restriction and housework was not seen as an essential focus in women's lives (Benn, 2012). Vaines et al. (1984) point out that it was also a challenging time for women's education. Rossiter (1997) observed that Home Economics as a female-dominated field, was attacked and threatened for contradictory reasons. Rossiter (1997) posits that the administrative level was dominated by men who held a hostile and sceptical attitude toward the discipline of home economics. Vincenti and Stage (1997) noted that while women have and continue to be enrolled in traditionally male-dominated fields, professional fields such as home economics attract fewer professionals. Benn (2012) explained that the general perception of home economics, as a field of study, was downgraded and integrated into other creative and practical topics (Benn, 2012). Benn (2000) also commented that the complex problems associated with food production and sales led teachers to focus more on the practical part of home economic education at the cost of its theoretical understandings. These shifts meant that the subject area, while defending itself, was actually moving away from the goal of home economics which "emphasized the active role of the family in forming and critiquing the social goals and the means to accomplish them" (Istre &

Self, 1990, p.6) and by stressing mostly nutrition and cooking rather than broader issues related to the home and life within it.

As McGregor (1997) observed, different perspectives began to change the way home economists saw and thought about life, and therefore home economics. Instead of seeing home economics as one discipline containing a diverse body of interdisciplinary and transdisciplinary knowledge it was increasingly being reduced to its component parts which included: food nutrition and health; personal finance; family resource management and planning; textiles and clothing; and shelter and housing. In order to build 'contemporary' categorisation of the subject area new labels emerged such as consumerism and consumer science, design and technology, human development, and family studies. Increasing vocationalism meant that home economics content was justified and/or taken over by food science and hospitality and education and community services, among other disciplines. In this way, the knowledge of how home economics was perceived and taught, changed as a result of the new ways it was perceived and understood (McGregor, 1997).

Home economists conceptualized the discipline as being associated with the concern for societal well-being and quality of family life (Smith, 2009). It was also a discipline that created vocational and economic opportunities for girls and women and offered a career path for teachers and researchers. According to Renwick (2016), the central focus of home economics education since its inception was the wellbeing of families and individuals in everyday activities. Based on this central tenet, there was a need for home economics to change as the structure and nature of home and family's social needs changed. Thus, the discipline of home economics continues to evolve and change based on its positioning around family as the core of society.

Approaching the 1990s, home economics specialists developed new knowledge and approaches that focused on problems associated with home, society, and institutions. Educators established theories influenced by home economics practices in the local and international contexts and other educational theories (Benn, 2012; McGregor, 1997). McGregor (1997, 1996) observed that during this time a number of approaches emerged including: global (Williams, 1990; Smith & Peterat, 1992), contextual (Baldwin, 1991; Istre & Self, 1990), human ecology (Bubolz & Sontag 1993, 1988; Vaines, 1994), critical reflective (Engberg, 1993; Vaines, 1990); and Hestian systems (Thompson, 1992). These approaches have influenced both content and approaches to teaching that content.

Reforms and practices within home economics curriculum have thus undergone a host of evolutionary changes over the past 100 years and more have occurred due to various sociocultural, economic, political and educational factors. These changes impacted the way home economists think about and implement home economics curriculum. Keeping in mind that the main goal of curriculum reforms is to meet current overall education objectives that reflect the change of society by improving the education systems and practices (Henson, 2006; Walker, 2003), the past 40 years have seen substantial reforms to home economics curriculum. These reforms were in response to social change that altered how we engage with work and different types of work because of the application of science and shifts in family models, specifically the roles of women roles both within and outside the home (Benn, 2012; Kieren, Vaines, & Badir, 1982). Contemporary home economists promote the holistic and integrative view of thought about and for family, which includes a combination of healthy living, sustainable use of available resources, human development social responsibility and cultural differences (Haapaniemi, Venäläinen, Malin, & Palojoiki, 2019; Turkki & Vincenti, 2008).

2.4.2 Home Economics Education – a Saudi Arabian Perspective

Rossiter (1997) notes that the language evolved surrounding home economics during the early 20th century, suggesting that although it was a scientific academic discipline, it was also an area of study that, in some quarters, was deemed as only appropriate for women students. This notion has not only been promulgated in the United States and other Western countries, but also resonates with Saudi Arabian understanding of home economics education. Formal education for Saudi Arabia women is a more recent social experience emerging in the 1960s and has been framed as a way to prepare for marriage and their roles as wives (Sabbagh, 1996). It was therefore thought appropriate that women be educated in home economics to achieve this. Bubolz (1991) alludes to a similar view about the ideology of women's primary vocation and that home economics emphasizes household technologies and 'traditional' values related to the home and motherhood.

In Saudi Arabia, cultural factors continue to be a powerful force in determining how home economics has been perceived and interpreted as a subject for young women only. At the establishment of women's education, the Saudi government separated boys and girls into different courses by a tracking system. In addition, boys have been explicitly forbidden from taking home economics, while the subject remained compulsory for all girls across the Kingdom (Alsuwaida, 2016). Thus, politics has and continues to play a major role in ascribing differences to teaching and learning (Nouraldeem & Elyas, 2014) based on gender. Kirk, Martin and Cummings (1993) also noted how gendered educational opportunity continues, and they suggest for a subject to keep up with societal needs and economic changes, the learning outcomes ought to reflect the country's culture. In the context of Saudi Arabia, sociocultural norms are founded on Islamic principles as a way of life, and difference based on gender and thus reflects current

cultural position. Within the framing of home economics as a subject for young women in Saudi Arabia, home economics reflects the family-based philosophy of the profession as evident in other parts of the world (Brown & Paolucci, 1979; Dewhurst & Pendergast, 2009; McGregor, 2011).

According to Ministry of Education in Saudi Arabia (2017a) the overall aim of the home economics curriculum for elementary and middle school levels seeks to in norm an Islamic life where being responsible and able to cooperate with others as members of society. It also contains aspects that relate to each student's life, and that helps in building students' capacity to become an effective member of their family and society, and to have good use of their free time. The curriculum modules in home economics are tailored to the needs of the family, and to support their role in the development and advancement of society. According to Ministry of Education in Saudi Arabia (2017a) the main goals of home economics education in Saudi Arabia are:

- Aim to suit the orientations of female students and match the dreams of today's girls and the hopes of tomorrow's mothers.
- Educate female students in food and health.
- Encourage students to organize their time and taking care of personal appearance, while taking care of economics, saving and rationalizing consumption in various areas.
- Provide information on domestic affairs and family and social relations, and the deepening of self-confidence.
- Encourage students to make decisions and solve problems, with care to deal well with people care to rationalize consumption in various areas of processing and

household tools, designing some of the dressing pieces, in addition to their awareness of the guide card the attached to cloths.

- Make decisions and solve problems, with care to deal well with people care to rationalize consumption in various areas of processing and household tools, designing some of the dressing pieces, in addition to their awareness of the guide card the attached to cloths.
- Educate students about the benefit of using herbs and natural food.
- Educate students about suitable food for patients with diabetes and blood pressure.
- Educate students on safety and security principles in the house and outside their house.
- Educate students in food and health by focusing on the importance of the balanced food preparation.
- Educate students about the side effects of consuming too much fast food and other kinds of processing food.
- Educate students about the nutritional value of dates and preparing a different kind of dishes.

The curriculum encourages students to adopt a healthy living and that includes everyday activities such as making food choices, maintaining a healthy body and house. It is worth mentioning that the curriculum focuses on giving students the opportunity to think and engage in conversations with each other in the classroom.

Slater (2013) identified the classroom as a space that provides the context where the students' experiences manifest themselves. For this study, the classroom was an interface between learning about home economics and the cultural norms that govern the students and

teachers' home environments. There is an emphasis on social participation, relationships, and knowledge construction. With this in mind, this study draws on a combination of sociocultural theory (Rogoff, 2012; Vygotsky, 1980) and funds of knowledge as a theoretical framework (Moll et al., 1992) to understand the enactment of home economics in the classroom, with particular focus on food and nutrition in Saudi Arabian context.

2.4.3 Nutrition Education and School-age Students

The refinement of this study to consider explicitly nutrition education arises from a concern for the changing states of health in young people and the implications for current and future wellbeing. Literature that is germane to this study indicates that childhood obesity is a concern worldwide (Wieting, 2008) and increasingly within Saudi Arabia (Aljaadi & Alharbi, 2020). According to recent studies conducted by the Center for Disease Control and Prevention (CDC), results indicated that there is an increased prevalence of obesity in children of all ethnicities in the United States (Ogden, Troiano, Briefel, Kuczmarski, Flegal, & Johnson, 1997). Mei, Scanlon, Grummer-Strawn et al. (1998) observed that while the number of obese children in the age group of six to 11 years old in United States has tripled since the 1970s, the number of obese children in the age group between 12 and 16 has doubled. In their study El Mouzan, Foster, Al Herbish, Al Salloum, Al Omer, Qurachi and Kecojevic (2010) reported that children in Saudi Arabia who are between ages 5 to 16 years old, 23.1% were overweight and 9.3% were obese. According to the World Health Organization (WHO), in Saudi Arabia, 35.6% of children are overweight and 17.4% obese (WHO, 2017). However, obesity has a multifactorial etiology, and so it is not clear which factors are known to be the leading contributories.

In the United States of America, Centers for Disease Control and Prevention (CDC) showed that the prevalence of obesity between the year 2017-2018 among children aged 6-11

years was 20.3%, and among children aged 12-19 years old was 21.2% (2021). In a study by Novak and Brownell (2012), suggested that apart from broad environmental defaults like low food prices and food marketing, the widespread availability of unhealthy foods and changed eating habits have contributed to the rise in numbers of obese school-aged children. While the study describes the evidence that harmful dietary defaults are key contributors to obesity and discusses two possible policy interventions which encourage consumption of water instead of sugary drinks and improving the nutrition and food policy at schools as examples that show promise of reducing obesity in populations. However, it does not consider how the role of home economics has been compromised in enabling school-age children to appreciate the relationship between what they eat and their health.

Lakdawalla and Philipson (2007) argue that obesity has been more a result of technological change that induces weight growth by lowering food prices through agricultural innovations, limited physical activity, and increased food intake. Relatedly, increasing rates of overweight and obesity at a societal level are considered to be due to an easily accessible and palatable, though unhealthy diet coupled with modern technology that has changed food preparation techniques. Thus, students have a level of food literacy that cannot support their health. Lakdawalla and Philipson's (2007) concept of technological change directly ties in with Severson's (2010) view that when it comes to preparing home meals many people with minimum food preparation skills tend to reach out for new technology that is available for different kitchen appliances, allowing for a faster process for cooking.

The causes of childhood obesity are widely debated. While some researchers pointed to socioeconomic and lifestyle factors (Alyousef & Alhamidi, 2020; Aljaadi & Alharbi, 2020), other advocacy groups blame mass media and the marketing of junk food (e.g. energy dense

food) to children (Mazur et al., 2017). Increases in the amount and type of foods being manufactured outside the home, reduced physical inactivity, and parents/caregivers not ensuring a healthy diet are all seen as some of the contributing factors to poor nutrition in childhood specifically obesity (Aljaadi & Alharbi, 2020). Given the focus of home economics to support individuals, families and communities to attain optimal and sustainable living (Dewhurst & Pendergast, 2009) and the specific skills and knowledge that home economics teachers have around food and nutrition means that the subject offers one way to respond to concerns about diet-related disease.

2.5 Summary

This chapter provided a review and synthesis of the literature relevant to this thesis. It began with a consideration of sociocultural theory and then moved into considerations of a funds of knowledge approach. Drawing on sociocultural theory, a key position of this study is that no human knowledge or action takes place in a social and cultural vacuum. This collaborative knowledge construction calls for the use of sociocultural theories, including Vygotsky's sociocultural theory and funds of knowledge as put forward by González et al. (2005).

Since the 1960s social change has been facilitated through a range of movements including feminism and globalization. During the same time period there has been new understandings about curriculum development and subsequent curriculum reform. Within home economics education there has been substantial change, additions, and morphing (Lamy, 1987) of content, approaches to teaching and learning strategies. During this time reforms have enabled a mobility for the area home economics that has allowed crossing of national boundaries. This has been facilitated because of the profession's concern for the interconnectedness of systems-ecological, cultural, economic, political and technological global issues and problems-study of the persistent,

transnational, interconnected concerns of our age (Turkki et al., 2012; Williams, 1990; Smith & Peterat, 1992).

It is worth noting that as a result of prevailing theoretical and philosophical shifts, some individuals sought to maintain the status quo of home economics curriculum, while others promoted moderate reform of the existing curriculum, and still others advocated the fundamental transformation of the entire home economics curriculum. All in all, the changing perspectives and related prevailing assumptions, ideologies, values and belief systems were instrumental in bringing about the substantively reformed knowledge base of home economics as it is today.

Growing concerns for diet-related disease are often framed through biomedical concepts however there is evidence for the value of sociocultural responses. Here home economics teachers are able to bring their professional knowledge about food and nutrition to the fore as they work with young people to think about the food they consume, what the nutritional benefit is and how they might make different choices in their peer, family and wider social context. Sociocultural and funds of knowledge theory frameworks have provided the lens to critically understand and interpret the participating teachers' perspectives, their funds of knowledge alongside considerations about the culture and social contexts where they teach home economics education. In the next chapter, I discuss the methodological considerations of the study.

Chapter 3 – Methodology and Research Design

The aim of this study is to describe the methodology used to investigate home economics teachers' experiences and their funds of knowledge as they work with school-age children in their Saudi Arabian classrooms. The teachers' understandings and perspectives about the home economics curriculum explored using a funds of knowledge approach. Further detail was elicited through their engagement with the nutrition education curriculum. The nature of the research problem determined this study's methodological approach (Noor, 2008). This study drew upon principles of phenomenology (Creswell, 2014; Giorgi, 2009; Moustakas, 2004) and followed a case study approach (Merriam, 1988; 1998; Stake, 1995; 2000; Yin, 2014).

This chapter begins with the study context and purpose, and then details the methodological approach and methods employed to answer the research questions. The latter half of the chapter outlines the ethical considerations, study participants, data collection, and data analysis.

3.1 The Study

Teachers are often unaware of how their formal and informal knowledge informs their perspectives, teaching philosophies and practices in their classrooms (Hedges, 2012). Teachers' perspectives of the curriculum and their own funds of knowledge inform their decisions about the teaching and learning activities within their home economics classroom (Andrews et al., 2005). Despite the extensive coverage of health problems associated with obesity (Al-Hussaini et al., 2019; Aljaadi & Alharbi, 2020; Al-Dossary et al., 2010; Aldaqal et al., 2013), there is a lack of literature on the connections between curriculum, teachers' professional knowledge and students' food choices. To begin to understand the sociocultural context of schools as spaces for

education about food and nutrition, this research explored teachers' experiences and practices in elementary and middle schools' home economics classes. Further it sought to understand the teachers' experiences and practices over a timeframe over three months or a semester that included classroom observations and teacher interviews. In addition, the research explored the relationships between teachers' funds of knowledge and their experiences in the context of home economics classrooms. The following research questions informed the research design:

1. What is the experience of teachers in Saudi Arabian home economics classrooms?
2. How do the teachers' funds of knowledge inform and shape their experiences?

A phenomenological case study approach was employed to explore these questions. The research methodology and methods were used to examine teachers' personal and professional knowledges as a way to understand their curriculum related decisions and approaches to teaching and learning within their home economics classrooms. The methods used included a review of the official curriculum, semi-structured interviews with the teachers, and researcher observations within their home economics classrooms and associated field notes.

3.1.1 Research Methodology: a Phenomenological Case Study

A phenomenological case study was selected to investigate home economics teachers' experiences and their related perspectives about their home economics practice and their funds of knowledge within classrooms at the elementary and middle level. The teachers' experiences are documented as cases within the context of the home economics classrooms. A case study approach offers several views on what constitutes case study research and its purpose. This is evident across the work of Yin (2014), Stake (1995) and Merriam (1988). Yin (2014) presents case study research as a process which he describes as "an inquiry that investigates a contemporary phenomenon within its real context especially when the boundaries between

phenomenon and context are not clearly evident; and in which multiple sources of evidence are used” (Yin, 2014, p. 2).

For Yin (2014) the purpose of case study is to gain an in-depth understanding of a particular phenomenon within a real-life setting where the phenomenon constitutes the case. Yin asserts that the need for case study research arises out of the desire to understand complex social phenomena. Yin also argues that researchers employ case study research because case studies supports deeper and more detailed investigation of the type that is normally necessary to answer “how” and “why” questions (Yin, 2014).

Using a different perspective, Stake (2000) views case study research as a specific case or entity under study. For Stake, a case is an integrated system that should be studied holistically, taking into consideration the relationship between the phenomenon under study and its context. Thus Stake (1995) emphasizes that the purpose of case study research will depend on the purpose of the investigation. With this in mind, Stake offers two categories of case study: 1) intrinsic case study, in which the researcher’s intent is to better understand the case, and 2) instrumental case study in which the researcher’s intent is to accomplish something rather than understanding a particular situation. The value of a case study is therefore in its particularity and ordinariness; thus the case is itself of interest and motivates an investigation (Stake 1995).

Like Stake, Merriam (1998) views case studies as a bounded system that constitutes “a thing or single entity” (p. 27). However, according to Merriam, the researcher must be able to specify the case and to draw boundaries that enables the researcher to be able to investigate a phenomenon/case within its context. Merriam also specifies that a case can be a person, a group, an organization, a relationship, an event, a process, a problem or any other specific entity. In other words, for Merriam (1998), case study is meant to focus on a particular phenomenon by

giving it a comprehensive description. Thus, for Merriam the purpose of case study research is to provide “a holistic description and analysis of a single phenomenon or social unit” (1988, p. 21). From Merriam’s perspective, case study research is intended to focus on the end product of an investigation of a particular situation, event, program or phenomenon. In this way, Merriam views case study research as important for what it reveals the phenomenon being studied for what it might represent.

For the purpose of this thesis, case study methodologies were deemed appropriate for investigating the human experience of educational phenomena related to home economics. This is because qualitative methodological approaches to a case study are informed by interpretivist assumptions (Myers, 2009). Fundamental to the interpretivist position is the idea that knowledge comes from human experiences and that reality exists only through interaction (Lincoln & Guba, 1988). Hathaway (1995) suggests that study participants construct reality. Understanding the reality experienced by participants in regard to home economics guides the interpretive researcher. Denzin and Lincoln (2018) are consistent with this view in that they assert that reality can only be understood through social constructions such as language, consciousness and shared meanings within naturalistic settings of the participant and echoes the sociocultural theoretical framing of this study. The case study method provides an in-depth understanding of the problem through the eyes of the participants (Yin, 2014), takes into consideration the contextual and interpersonal nature of the issue being studied (Yin, 2014), and demonstrates different perspectives (Creswell, 2013).

Case study also guides the researcher to focus on a particular phenomenon to gain a holistic view of the matter under consideration (Merriam, 1988). Several researchers concur that a case study is helpful for interpretation since it focuses on specifics and gives an account of the

occurrence in action (Lincoln & Guba, 1988; Merriam, 2009, Yin, 2014). This also aligns with Walsham's (1995) suggestion that "the most appropriate method for conducting empirical research in interpretive tradition is the in-depth case study" (p. 68). Thus, this study involves understanding, interpreting, and making meaning of the participants' views and experiences. Smith (2004) stipulates that this is an idiographic and inductive method, which seeks to explore and understand participants' personal lived experiences, is phenomenological in its concern for individuals' views.

As a researcher I endeavour to understand the phenomenon through meaning making, and interpretive methods serve as a good guide towards understanding the context of home economics education and the ways it impacts participants. This phenomenological case study investigates phenomenon occurring within the home economics classroom and the contribution to the experience of both teachers and students.

3.1.2 Qualitative Methods

Van Manen (1990) explains that lived experiences are "the starting point and the end point for phenomenological research" (p.36). Phenomenological approaches aim for understanding people, how they make sense of their experiences and transform those experiences into the consciousness of individual and shared meanings (Patton, 2002). According to van Manen (1990), "the main assumption of phenomenology is the transformation of individual lived experiences into textual expression" (1990, p. 36) where the researcher removes their beliefs, values and previous knowledge to view both consciousness and experience of the lived experiences (Giorgi, 2005). In this study the use of phenomenological principles enables the researcher to work with teachers about their home economics experiences and to elicit understandings about the impact of classroom knowledge.

According to Merriam (2009, p.40) “case study is in-depth description and analysis of a bounded system”. Drawing on Merriam’s (2009) idea the case within this study is bounded geographically within Saudi Arabia and specifically in the city of Mecca, which is located in the west of Saudi Arabia. Given that phenomenological studies seek to explore and understand participants’ personal lived experiences (van Manen, 1990), case study has an interpretive aspect that blends well with phenomenological methodology. This combination will assist with understanding the phenomenon of teacher and student experiences in home economics classrooms. Interpretive studies that are phenomenological in nature, are similar to case studies in that they can offer insights into how participants make sense of a particular phenomenon in a given context (Larkin, Watts & Clifton, 2006). A common aspect to case study approaches are interpretive and phenomenological methodologies as they elicit the participants’ knowledge and experiences associated with the phenomenon being studied (Moustakas 2004; van Manen, 1990). When used together, case study and phenomenology bring about a clearer understanding of multiple perspectives of a phenomenon being studied.

From an epistemological stance, research that draws on phenomenological data collection methods is deemed as being appropriate to investigating human experience, in this case, home economics education. The reality is constructed within the classroom by the teachers, and the researcher is a key player in revealing this reality (Merriam 1998). A phenomenological case study involves the use of multiple sources of evidence to investigate a phenomenon within its real-life context, particularly when the boundaries between phenomenon and context are not apparent (Stake, 1995; Yin, 2014). In addition, phenomenological case study research provides an in-depth understanding of the problem through the eyes of the participants (Stake, 1995; Yin, 2014), and takes into consideration the contextual and interpersonal nature of the issue being

studied (Yin,2014). It also demonstrates different perspectives about the phenomenon under study (Merriam, 1998; Stake, 1995). Case study approaches guide the researcher to focus on a particular phenomenon to gain a holistic view of the matter (Merriam, 1988) being studied. Thus, case study research involves understanding, interpretation and meaning making of participant's perceptions and experiences.

In this way, the phenomenological case study approach used in this study served to guide a holistic view of the phenomenon under study. It allowed for understanding the context for Saudi teachers' perspectives about the effect of home economics education on their students particularly around food practices of their students. It also provided insight into understandings about the Saudi home economics curriculum specifically about how relates to their funds of knowledge and professional practices around food and nutrition education.

3.2 The Study Site

The geographical location of the study is Mecca city in the western region of Saudi Arabia. The area was chosen due to the reported prevalence of obesity and nutrition related conditions in the region (Badran & Laher, 2011) and how it may inform or be evident in the teachers' nutrition education practice and classrooms. According to a recent study 40% of children in the western region were deemed as being overweight or obese (Farsi and Elkhodary, 2017). Another study showed that abdominal obesity (waist-to-hip ratio) appeared to be highest among females living in the western region (Al-Hazzaa et al. 2014) In phenomenological research, locating and selecting the research participants based on "essential criteria involve: the research participant has experienced the phenomenon...is willing to participate in a lengthy interview and follow-up interview, grants the investigator the right to tape-record and publish the data in a dissertation" (Moustakas, 2004, p.107). In Saudi Arabia, only girls take the subject of home economics.

Participants will be elementary and middle school female home economics teachers were purposely selected to suit the study. For confidentiality and privacy reasons, I gave schools codes numbers and pseudonyms for the participants.



Figure 4: The Map of Saudi Arabia (Source -www.123rf.com, n.d.)

3.3 Data Collection

In this study the data collection consisted of three distinct phases. The first phase focused on the negotiation of my entry into schools selected for the study. The recruitment process began with seeking official consent from the Ministry of Education branch located in Mecca city, which supervised the schools where the study was carried out. After obtaining the Ministry of Education's permission, a copy of that approval was sent to the five schools before I visited. After obtaining the principal's permission, teachers in each of the participating schools were

contacted individually with both an invitation to participate and to seek their consent to participate in the research. The overall study and goal for conducting the research was explained to the teachers. The teachers were assured they would be kept informed of the progress of the study. I discussed with the teachers that it would be helpful to record their voices during the subsequent interviews. The teachers were given a period of time to decide and subsequently respond whether they consented to participate or did not wish to take a part in the study.

After the teachers' consented to participate was obtained, the second phase of the research involved visiting each school twice with one to two weeks separating each visit. These visits were intended to establish trust between the researcher and the teachers. It also helped to overcome any power dynamic between myself as researcher and the participating teachers by sharing more about the research and allowing the teachers to ask questions when needed. After these initial visits and informal conversational interviews with the teachers, I reflected on their comments about exploring certain topics with a focus on obtaining rich information to make sense of the phenomenon under investigation in this research.

In addition to the initial visits and informal conversational interviews with teachers, semi-structured interviews were conducted with the home economics teachers in the five participating school sites (two elementary and three middle schools) located in the north school district. The process of the semi-structured interviews made it possible to gain insight and allowing for an in-depth discussion into the home economics teachers' perspectives on the current curriculum and the ways in which they focused on their experiences in elementary and middle schools. The teachers were interviewed in the Arabic language as the formal language in schools using guided questions that were aligned to the larger research questions. Furthermore, in-depth interviews helped to determine participants' viewpoints and feelings on certain phenomena (Creswell,

2014), such as how teachers interpret and apply home economics content, and the ways in which they thought it would affect the students' food choices (see Appendix A and B – Indicative Interview Questions). The interview was conducted during the teachers' break between classes due to their busy teaching schedule. The participants were interviewed, and the interview sessions lasted between 45 to 60 minutes. During the individual interviews with teachers, I became a listener, and I elicited their perspectives regarding home economics content and the effect of on their students' food choices. After the interview sessions, the voice recordings were transcribed.

In the third stage of the research, I observed eight home economics classes one class observation per teacher. The goal of these classroom observations was to view the home economics teachers in context of their work and gain a sense of the realities of the classroom. The observations helped to understand teachers' perspectives obtained in the interviews prior to the classroom visits. Patton (2002) mentions that there are five advantages of conducting observations as a part of the research process; the first is to be able to describe the setting being observed, second to gain firsthand experience with the site, third the researcher has the opportunity to observe things that might help people who are usually on site but are not aware of it, fourth it offers a chance to learn things that people might not be unwilling to share during the interview, and finally to help the researcher to become familiar with the field site and draw from what is now personal experience that might help the interpretation and analysis. Furthermore, these visits offer the researcher an opportunity to notice the classroom atmosphere and organization, and to gain insights into how home economics content is being operationalized within Saudi's classrooms. Taken during the observation process in the classrooms, the field notes included the description of what being observed such as recall of direct quotations and

classroom activities (Patton, 2002, Croswell, 2014). According to Patton (2002) field notes “consist of descriptions of what is being experienced and observed, quotations from the people observed, the observer’s feelings and reactions to what is observed, and field-generated insights and interpretations” (p.305). During the classroom observation, the field notes were made of my own recording of everything that was happening such as making connection with curriculum context and students’ life outside school. In addition, the classroom observations focused on how teachers interpreted the home economics curriculum and utilized their funds of knowledge of what was available and practices by teachers (resources, activities and strategies utilized for teaching home economics) to educate their students about their daily practices of food.

In addition to the field notes (Croswell, 2014; Merriam, 2009), interview sessions were recorded by audio recorder. Having both field notes and recorded interviews enabled the subsequent analysis of the collected data after the completion of this stage. To increase the reliability and consistency of this research, Yin’s (2014) suggestion for documenting case study was followed which included the appropriate steps and processes. These appropriate steps included research questions, research methods, ethical consideration, interpretation of the data and criteria for assessment. A database was developed to include the notes from the research site, the interviews and observation, and the relevant documents collected from teachers and schools.

3.4 Ethical Considerations

This section outlines the recruitment process for the home economics teachers. It includes an explanation of what was done to limit research bias and an explanation of the research’s process for final ethics approval.

3.4.1 Ethical Approval

Official authorization was obtained from the University of British Columbia's Research Ethics Board (BREB) for approval (H17-02999), and from the Ministry of Education in Saudi Arabia (reference number 029277412), to carry out data collection. The ethical guidelines were followed in developing the applications to guarantee participants' rights and privacy. In accordance with BREB procedures, all participants received a "Consent to participate in the research" letter in Arabic language, which is the participants first language, outlining the principal investigators (see Appendix C and D – Letters of consent). To maintain privacy consideration was taken to ensure that the participation of respondents was voluntary. Participants' confidentiality and anonymity was addressed through the use of pseudonyms in this report. In the study, all of the participants were volunteers, and they were free to withdraw from the study at any time without any consequences. Lastly, I ensured that all data and files in this study were held in compliance with the University of British Columbia's Research Ethics Board (BREB).

3.4.2 Recruitment

After being granted ethics approval from both the University of British Columbia Behavioral Research Ethics Board (BREB), and the Ministry of Education branch in Mecca school district, verbal permission was gained from the principals of five schools who enabled contact with teachers seeking their participation. The principals assisted by contacting the teachers through an introduction facilitated in a small meeting room adjacent to their offices without the principals been present during the meeting with teachers. A brief introduction about the research was provided to the teachers individually who identified through family and friend's

networks on an individual basis that also enabled them to ask any questions they may have had regarding the research and its value.

Purposeful sampling (Merriam, 1998; Creswell, 2014) was applied when recruiting this select group of teachers (n=8). The study's eligibility criteria consisted of home economics teachers who are teaching in elementary or middle schools, with a minimum of five years of teaching experience in home economics. This was necessary since initial volunteering teachers were identified through networks of family and friends. These volunteers subsequently assisted by contacting other potential participants. It is important to note here that due to cultural norms, most teachers are not willing to give consent to participate in the research especially when the researcher is unknown to them. Moreover, recording the teachers' interviews, especially women, is difficult since they are usually unwilling to agree to their voices being shared with others outside their family.

The sample size in this research is small (n=8), and it is not representative of the totality of home economics teachers in Saudi Arabia. However, the "good case study does not depend on being able to defend the typicality of the case" (Stake, 1995, p.4). In addition, the emphasis of this study is to generate thick and rich descriptions (Merriam, 1998) of the perspectives of select home economics teachers in order to gain insights about their interpretation of home economics curriculum content and its relationship to students' food practices. The data collected from the individual interviews and classroom observation reached saturation because there was similarity among the participating responses and classrooms practices and there was enough information obtained to build the themes (Fusch & Ness (2015). Stake notes that, "a case study is both the process of learning about the case and the product of our learning" (p.237). The insights gained from this research may inform teachers' understanding in different parts in Saudi Arabia and at

international levels particularly in other countries that value addressing the issues of healthy diet and food choices within educational contexts.

3.4.3 Researcher Bias

There is a certain element of bias that I as the researcher bring to the study. However, any risk to the integrity of the research data was limited by applying bracketing. Originating in the phenomenological tradition bracketing lacks an agreed to definition (Tufford & Newman, 2012). However, the approach requires the researcher to consider their position in comparison to that of the research participants. In doing so the researcher does not need to be objective but neutral as they set aside their preconceptions about the phenomena being studied (Shaw & Holland 2014; Tufford & Newman, 2012). According to van Manen (1990), “the main assumption of phenomenology is the transformation of individual lived experiences into textual expression” (1990, p. 36) where the researcher removes her or his beliefs, values and previous knowledge to view both consciousness and experience of the lived experiences (Giorgi, 2005) in process called phenomenological reduction, which is where bracketing occurs (Giorgi, 1985; Vagle, 2014).

In this study, my approach to bracketing was based on a concern to maintain my curiosity: what I might not know about what the participant teachers were sharing with me. This applied to the areas of interest that were guided by the interview questions. Listening was especially important so that the teachers were able to express themselves freely. The participants were allowed to introduce topics of which I, as researcher, had no previous knowledge of. Thus, applying this method helped me to gain an in-depth understanding of the participants’ lived experience, as a part of the bracketing process.

3.5 Participants

Participating teachers in this study were involved in teaching home economics education in five schools, two of which were elementary schools and three were middle schools. The study took place in girls' schools where the formal language is Arabic and included eight home economics teachers of whom four taught in elementary schools and four taught in middle schools.

Most teacher participants had at least completed a bachelor's degree in home economics education, and two of them had a diploma degree. All were qualified in Saudi Arabia to teach home economics in schools. The teaching experiences of these teachers ranged between 5-30 years.

3.5.1 Teachers' Profiles

In this section, I present background information about each of the participants that were interviewed, and enabled the school visits and subsequent class observations.

3.5.1.1 Norah

Norah was between 40 to 50 years old and was a married woman with children. She graduated from Education College with a diploma in home economics education and has 19 years of teaching experience. She had previously taught at a high school level in the south region in Saudi Arabia. Nora currently teaches Grade 8 and 9 in middle school and 10 lessons per week. An idea of the space and resources allocated at her school to her home economics laboratory is offered in Figure 5, as is a space that is shared with Nadia. Norah said that her passion was on helping students with their healthy eating habits, and that had influenced her to try a variety of

activities in the classroom. Norah was interviewed over the three months of December 2017 to February 2018 during the end of the first semester and the beginning of the second semester.

3.5.1.2 Nadia

Nadia was between 35 to 45 years of age and was a married woman with children. She graduated from university with a bachelor's degree in education with a specialization in clothing and textiles. She had 13 years of teaching experiences, and currently taught Grade 7 and literacy classes for adults and teaching 11 lessons per week. Her home economics laboratory space was shared with Nora (Figure 5). Nadia shared that her passion for her students was about improving their lifestyle which included eating healthy food and improving their hygiene practices. Nadia was interviewed over the same three-month period as Norah.



Figure 5 Home Economics Laboratory - Norah and Nadia's classroom.

3.5.1.3 Rasha

Rasha was between 35 and 45 years old, a married woman with children. She graduated from university with a bachelor's degree in education with a specialization in nutrition and food Science. She had seven years of teaching experience, and currently taught Grade 7, 8 and 9 of 12 lessons per week. Images of her laboratory are offered in Figure 6. Rasha shared her passion for helping students find information on food and on developing a healthy life



Figure 6 Home Economics Laboratory – Rasha's classroom.

3.5.1.4 Jamila

Jamila was between 35 and 45 years of age and a married woman. She graduated from university with a Bachelor of Education specializing in home economics. She had six years of teaching experience, and currently teaches Grade 7, 8 and 9 and facilitating 10 lessons per week.

Images of her laboratory are offered in figure 7. She shared that she had always wanted to become a home economics teacher, and she wanted to teach young students about their health and body needs.



Figure7 Home Economics Laboratory – Jamila's classroom

3.5.1.5 Fatima

Fatima was between 40 and 50 years of age and was married with children. She graduated from university with a Bachelor of Education specializing in home economics and art education. She had eight years of teaching experience, and was teaches home economics and Islamic studies. She was a Grade 5 and 6 teacher and her schedule includes teaching six lessons per for home economics.

3.5.1.6 Asma

Asma was between 40 and 50 years of age. She graduated from Educational College with a Diploma in Education. She had over 30 years of teaching experience, and was teaching home economics education in an elementary school at Grade 1 to 4. She is teaching 15 lessons per week. Asma worked with Fatima at the same school, and they did not have a home economics laboratory.

3.5.1.7 Samar

Samar was between 40 and 50 years of age. She graduated from university with a bachelor's degree in home economics education with a degree in Nutrition and Food Science. She had 17 years of teaching experience, with most of her teaching experience in middle and high school, however she was currently teaching home economics in an elementary school for Grades 1 to 6. Samar shared her passion about nutrition and healthy food choices. She did not have a home economics laboratory in her school, but she used the home economics Laboratory that was available in Jamila's middle school (3.5.1.4). This was possible because they are located in the same building where the elementary school was on the first floor and the middle school was on the second and third floors.

3.5.1.8 Muna

Muna was between 35 and 45 years old. She graduated from university with a Bachelor of Home Economics Education with a specialization in clothing and textiles. She had five years of teaching experience with most of her past teaching experiences in middle and high school. She was teaching home economics and art education in elementary school to Grades 1 to 4 and Islamic studies for Grade 4. Muna shared her passion about education, and it was her dream since she was young to become a teacher especially the knowledge that related to healthy food

choices. She was the health supervisor in her school, and she was responsible for different health programs and activities. Muna worked with Samar and while she had an art education laboratory, she also had to use the home economics laboratory that was available at Jamila's middle school.

3.6 Data Analysis

The analysis process began “hand-in-hand with other parts of developing qualitative research” from the data collection to the analysis stage (Creswell, 2014, p.195; Merriam, 2009). After facilitating the interviews, I subsequently spent time replaying and listening while reviewing the notes and reflections after each school visit. The audio recordings of the teachers’ interviews were transcribed and reviewed to gain a sense of the teachers’ experiences. Then, I read the text freely and openly as often as necessary to get a solid grasp of the whole (Giorgi, 2009). In the same stage, I started coding the process by organizing the data by text, and writing themes in the margin (Creswell, 2014). Particular to this step, the different data sets were analyzed to look at common themes in terms of teachers’ experiences of home economics education and their students in terms of learning of food and nutrition.

I used the research questions as a way to think about and subsequently organize the data and to develop categories for emerging patterns or themes, responses to interviews questions coded and transcribed respectively (Merriam & Simpson, 2000; Stake, 2000). Guided by the research questions in order to understand teachers’ perspectives and experiences of home economics curriculum content, the transcribed data were organized, sifted, compared and contrasted (Miles & Huberman, 1994). As part of the inductive process, reading and re-reading the transcripts more than three times was necessary to enable the search for “units of meaning” (Giorgi, 2009; Moustakas, 1994). It also enabled investigation of the differences and similarities

among teachers' viewpoints that in term could be constructed into the emergent themes (Creswell, 2014).

3.6.1 Triangulation

Triangulation withing qualitative research can be achieve by combining both interviewing and observations (Patton, 2009). The data methods used in this study include semi-structured interviews and classroom observations. According to Creswell (2014), there are different steps that the research may apply to increase credibility of the researcher's findings. These steps include triangulation which checks for consistencies by using several sources of data; and using member checking which involves sharing the research report with the participants; and the use of peer debriefing as well to enhance the accuracy of the study (Patton, 2002; Yin, 2014) as it explained in the following section. As a researcher, there is also an "onus of ensuring that data is interpreted to contribute accurately to the existing body of knowledge" (Morse, Barret, Mayan, Oslon & Spiers, 2002, p.13). I used member checking which is a process where I took my findings to two of the eight participants as they were the only ones who had indicated that they had the available time. By sharing with them, they had the opportunity to make suggestions where they believed the explanations were not clear or did not reflect their views on what had been shared. In this study the participants were willing to accept the manner in which their data had been presented and concurred with the researcher's findings. As a result of these conversations with the teachers they indicated that they were accepting of findings.

3.6.2 Trustworthiness

Silverman (2001) suggests that the best way to ensure trustworthiness in a qualitative study and phenomenological study in particular is to incorporate issues that deal with trustworthiness within the very processes of the study. Guba's (1981) explanation of the criteria of

trustworthiness includes credibility, transferability, dependability and confirmability when undertaking qualitative research. Following Guba's (1981) criteria for assessing the trustworthiness of naturalistic inquiries such as in this research, during the entire process the researcher worked towards credibility by ensuring adequate representation of the constructions of the social world under study, which included engagement in the field over three months that enabled classroom observations. In qualitative research, credibility focuses on the accuracy of the research findings from viewpoint of the researcher, the participants and the readers (Creswell, 2014). To ensure credible results, the study conducted over a period of three months, which was sufficient to allow for collecting information about the phenomena under investigation (Patton, 2002). Moreover, as noted earlier, data was collected from two different sources including individual interviews and classroom observations. Additionally, both individual interviews and classroom observations were conducted by me as the researcher, and the interviews that were audio recorded in order to ensure integrity and accuracy during the analysis of the data.

Guba (1981) identifies that in qualitative research confirmability is used to prevent biases from the researcher perspectives in the research. Beside the member checking as mentioned in the previous section, I also utilised peer debriefing where a graduate student agreed to read my analysis and ask questions about the research (Guba, 1981). Furthermore, the data gained is rich and therefore would allow other researchers to make a judgment about transferability of the findings. Further to this, the characteristics of the data are able to be confirmed by other researchers (Bradley, 1993). All this has required a systematic approach to documentation of the data, and that the data analysis can readily be aligned to the issue being investigated (Patton, 2002) specifically the teachers' experiences in their classrooms.

3.7 Summary

This chapter detailed the research methods used to address the articulated research problem and purpose. I presented the overview of the research design, study context and followed by the details of the data collection and description of participants. I ensured that the research reflected the necessary ethical considerations including confidentiality and credibility issues associated with the data. I concluded the chapter with an outline of the data analysis and procedures used to examine the perspectives of the home economics teachers who participated in this study. The following chapter presents the analysis of the data collected.

Chapter 4 – Data Analysis and Findings

This study followed a phenomenological case study research design to investigate elementary and middle school teachers' perceptions of a home economics curriculum impact on their student's food practices, healthy diet, and eating habits in Saudi Arabia. Using an inductive approach to reviewing the data, three themes emerged: (1) Being a successful home economics teacher is a function of available resources, knowledge about food, student health and curriculum planning; (2) teachers' knowledge of local cultural food practices and perceived contradictions between curriculum content and students' social and cultural practices; and (3) student food choice as a function of cultural and social norms and school food menu. This chapter presents the data according to each of these themes.

4.1 Theme 1: Being a Successful Home Economics Teacher is a Function of Available Resources, Knowledge about Food, Student Health and Curriculum Planning

While reflecting on the meaning of teaching and learning about home economics in their schools and classroom, the participating teachers shared the position that it was an important subject for students because it responds to their students' need particularly around developing their daily skills such as food preparation, hygiene, and relationships. When describing the experiences of teaching home economics in their classroom and schools, teachers indicated they were proud of their work because they teach students necessary information that can stay with them throughout their lives, as evidenced in the following quote from Rasha:

In home economics, there are basic knowledge and skills to teach students, and it will stay with them and practice it for a long time in their future life, and

students will appreciate it later. For example, the main component of a healthy meal (calcium, protein, vitamins, carbohydrate), and what the meaning of each element, and provide examples of food choices available in their environment. Also, I think students need to understand the benefit of each component for their body especially at their age, and how the necessary elements help their body grow healthier... Another example of teaching students everyday needed skills is by teaching them safety rules to arrive at school safely after leaving their home for school in the morning and after leaving school in the afternoon... (Rasha's interview).

Fatima explained that being a home economics teacher helped her to become familiar with her students and their family backgrounds as she taught a subject that touched different aspects of her students' daily life:

I always give my students advice about what is available in the food canteen menu and how they can pick up the healthier choices from it. One day I was teaching a lesson from food and nutrition units and it was before lunchtime, so I talked to them about lunch time and what healthy food choices were available. Then at the end of the lesson, two students came to me and told me that they would buy the healthy choices in the canteen, but they cannot because their parents did not give them money to buy food today. I spend some time with each student to understand why their parents send them to school without food or money to buy food. I think if I am not a home economics teacher, I might not get a chance to know some of my students' backgrounds. (Fatima's interview)

These comments indicated that the teachers enjoyed being a home economics teacher and also engaged with their students in different ways. In addition, the teachers indicated that if teachers teach topics essential to their students' daily activities, this approach could also enhance and improve teacher-student relationships.

Further exploration of these teachers' perspectives about their roles as home economics teachers revealed they considered their success relied on the school having sufficient resources to engage with the required curriculum content. Teachers described how the school's physical classroom arrangements played an important role in determining the adequacy of the laboratories, as well as the required materials and equipment. The teachers explained how their school buildings were originally built as an apartment complex. As a result, the rooms were designated for classrooms use only with no designated laboratory space. The teachers emphasized both the 'importance' and the 'need' for their schools to have a home economics laboratory to enrich the experiences of and learning opportunities for their students, particularly when engaging with the practical arts:

One of the necessary things I need as a home economics teacher is having a laboratory. The students face difficulties to comprehend some of the lessons that I teach, especially the practical lessons. For example, I teach them a unit on salad, and it has lessons on making a different kind of salad, as a teacher I cannot teach them how to clean the vegetables properly as it explains on the curriculum, and I cannot cut the vegetables and add other ingredients. Because I do not have a home economics laboratory basically, I have nothing to teach with, except the pictures and the PowerPoints slides. From my view, I think this is something negative about teaching home economics curriculum in my

schools unlike other subjects; there is no need to have a laboratory ...

(Fatima's interview).

Samar shared her experiences of not having a home economics laboratory. She described how it created difficulties for teaching the required curriculum, especially in lessons on cooking and food preparation:

It is a little bit challenging for me that I do not have a home economics laboratory, so I have to prepare everything from home and bring it with me the next day to show students. For example, making different kinds of sandwiches, cake, Arabic coffee and salad, I show the students pictures and sometimes PowerPoint slides, and I share with them what I made at home, so they taste the food... (Samar's interview).

While some of the teachers had the luxury of having a home economics laboratory, the teachers also noted the importance of having the equipment necessary to deliver the curriculum content.

The school has a big home economics laboratory, the one we are in right now, but there is no equipment or only the stove, and it does not work all the time... I have a unit about home appliances, and I teach students by using PowerPoints slides, students cannot see the appliances and how to use it properly and how to clean it, this is a challenge for students. If the appliances can be carried out like cloth iron, I bring it with me from my home because it is essential to teach them how to use it. Using kitchen appliances has a lot of benefits and one of them reduces the time that we spend on food preparations... another example there is a lesson on making pancake and sandwiches, I bring the sandwiches

and pancake makers with me, and I asked other students if they have it at home, they might ask their mother to bring it school the next day to work in their small groups... and then I think the equipment should be available in the laboratory and I have a budget for it... (Norah's interview).

The wide variety of challenges teachers faced in their classroom resulted in their teaching and student learning being constrained when equipment was not available. The teachers spoke of their concerns about not being able to achieve curriculum learning outcomes when compared to schools where resources were readily available and accessible. These teachers acknowledged that their principals were providing all the materials they could, given the school budget.

The teachers shared their concerns about the shortage of food resources in their schools including food such as flour, sugar, salt, eggs, vegetables, and other supplies such as paper and pens. It was common to have a lack of resources which resulted in students not receiving a full range of learning experiences. The teachers shared how difficult it was for them to ensure students' learning and engagement in the teaching and learning process without sufficient materials and resources. This is evident in the following quote from Asma:

In the schools, there is no home economics laboratory which makes the teaching and learning process challenging tasks for me... I am always thinking about what the students take away from the experiences of being in home economics class, and what they learn and can practice later in their life, but with no laboratory, it is even harder for students to get advantage from being in the classroom. The school building is small compared to other schools in the city, and does not have enough resources to have a home economics room... (Asma's interview).

The analysis of my field notes further revealed that a lack of required resources created challenges for the provision of practical classes. For instance, Asma was teaching a lesson about making Arabic coffee and she did not have a home economics laboratory. She facilitated the lesson by showing students pictures and videos using a projector she purchased with personal funds. At the end of the lesson, she gave students Arabic coffee which she prepared at home before coming to school so they could drink the coffee even though they could not make it in class themselves. It was not possible to prepare the coffee at school given the lack of a stove, sink, or any other necessary equipment. This meant that students could only gain an understanding about safety concerns, in this case boiling water, in an abstract way. Thus, the teachers acknowledged the challenges associated with the lack or absence of resources as well as their recognition of the need for a well-resourced home economics laboratory to enhance student learning.

The teachers worked to utilize the time allocated to home economics classes effectively. They acknowledged the variety of lessons they were expected to teach that required hands-on experiences. The teachers also noted the allocation of one class of 45 minutes per week was not sufficient for students to have the same rich engagement with the content compared to other students whose elementary and high schools offer additional class time.

The teachers showed concern for the lack of class time and how it affected the students' learning experiences in the classrooms. Despite students enjoying the practical part of the curriculum, having insufficient class time created barriers for developing skills through hands-on experience. The class duration for home economics, especially for middle school teachers combined with the urgency to finish the curriculum content on time was an ongoing challenge for the teachers. Jamila explained:

One class session per week 45 minutes is not enough time to finish one lesson. For example, the salad lesson I cannot give the whole lesson in one week, so I have divided the lesson to two weeks, the first week I teach the theoretical part and the following week, I start right away to the practical part... the students enjoy the hands-on activities in the class all the time, especially for their age... I let them do work even when I am teaching theoretical concepts; I ask them to write on the whiteboard or some group activities in their tables... (Jamila's interview).

Norah also noted the different time allocation for home economics classes in elementary and middle schools. The one class per week made it difficult to offer a practical lesson. She discussed her experiences covering lesson content in the time available:

The class time one session per week for 45 minutes is very challenging for me to teach the practical part of the curriculum, and I have to teach students lots of information before the food preparation part... I am always trying my best to cover the lesson content, and it is a struggle for me... In my opinion, it supposed to be two sessions per week in two different days unlike home economics class in the elementary level grade 1, 2 and 3 they have three sessions per week, and grade 4, 5 and 6 have two sessions per week, and their curriculum has a few practical parts that do not need much time for food preparations... (Norah's interview).

The teachers also expressed concern about time restrictions and noted it was more common to give students the information in one session without clarification than teaching hands on activities to enhance the learning process. The teachers noted that the pressure to 'finish' the

curriculum on time made it difficult to gauge their students' level of knowledge and understanding, as well as an assurance that the students' involvement was adequate. Rasha commented:

One of the concerns for me as a home economics teacher is the one class session per week. The weekly time is not adequate to cover the lesson and the goals in a way that the students benefit from it, and for me to check for their understanding and explain more... I feel that I am always in a hurry to finish the class because I have other topics that I have to cover too during the semester, and I cannot be late. I do have a curriculum plan for every semester, and I have to follow it, and I cannot leave any lesson in that plan without teaching it... (Rasha's interview).

While teachers considered the allocated class time a challenge, they also spoke about instances where they found themselves concerned about their teaching practices and what was being taught about their students' health and wellbeing.

4.1.1 Concerns about Student Health

The participating teachers indicated they often dealt with students' health concerns which they brought into the classrooms. As home economics teachers, they felt a need to respond to these concerns, as shared by Samar, Muna and Asma:

I am always worried about the students who are overweight; in my class, I encourage them to change their eating habits. Most of these students like to eat French fries during their lunch or snack time, and I am always advising them to try something else and healthier like vegetables... they are young at the

elementary level, and they are overweight, it really concerns me... (Samar's interview).

The students eat a lot of chocolate and candy at different times during the school day, and that concerns me. A regular check by the nurse in our school revealed that most of the students have dental problems like cavities which is caused by what they are eating mostly unhealthy food choices...So when I am teaching, I provide the needed learning information and materials for my students to help them see the side effects of consuming more sweets...

(Muna's interview).

Asma offered the following explanation as to why her students come to school without having breakfast:

Most students do not have their breakfast at home, so they come to schools with an empty stomach...then they purchase food from the canteen and generally the food would be chips, chocolate or cookies... (Asma's interview).

Norah shared her concern about the health of her students. Some students were overweight and mentioned they felt rejected at home and in school. Students at this age were beginning to engage with what they saw as societal norms and preferences of being thin instead of overweight. The following excerpt from Norah's interview details an experience in her middle school classroom:

I was teaching a Grade 8 class, and there is a group of students who are overweight, and I ask them "what is your opinion if we start a healthy diet for this semester, and we can see the advantage of that in our weight loss?". I

created group roles and a list of food choices that can go to our everyday meal for one month. In that food list, the day started by seven pieces of dates and a cup of milk exactly as the Prophet Mohammad has advised. So, students eat their breakfast at school, we meet in the home economics room and share the food. At lunchtime, students eat at their home, and they said to me we want a burger, and I advise them to grill the burger rather than fried. Every day, we meet as a group and share what we had at lunch, dinner, and snacks in between. For snacks, I know that chocolate is one of the favorite foods for them, so I advise them to have a small piece of it instead of the whole chocolate bar... I gave them a lot of choices on how to choose food that has fewer calories, is healthy and tasty at the same time. I could not believe the result just after one month of starting the healthy diet program, students lost weight, and they were delighted with the result and motivated to continue to follow the healthy food choices...One of the students lost around 13 kilograms in three months, and she was so excited and felt confident and motivated to participate in other school activities... (Norah's Interview).

The teachers' knowledge about their student's health helped them to make decisions about selecting learning materials, topics, and methods for their classroom teaching.

4.1.2 Knowledge about Food

Many of the participating teachers spoke about healthy food and what that knowledge meant for students making healthier choices. The teachers recounted teaching specific topics in food and nutrition, however they questioned the appropriateness and relevance of the content

taught at a specific grade level. Teachers shared their knowledge of healthy and unhealthy food based on their experiences and teaching practices of home economics. Fatima explained:

I believe that healthy food depends on the content of it, for example, the content in terms of the available protein, vitamins, and other elements as I studied before. The food is unhealthy, I think the kind that are full of oil and high in cholesterol... and I think some other ingredients could harm the body more than the benefits of it ... In the past, I wasn't aware of the different healthy and unhealthy food, but today I am trying to educate myself more and more because I realize it has an effect on my body...also, I am trying to pass this knowledge to my students... (Fatima's Interview).

In a similar vein, Jamila valued the diverse approaches to food preparation as a way to recognize healthier food options:

I think the difference between healthy food and unhealthy food depended on the preparation methods... for example, the fried food which is full of oil, but if I use steam or grill methods would be much healthier...I always advise my students to avoid fried food as much as they can, but most of them told me they like fried food... so I recommend that eat it once or twice a week, not more, and try other methods of cooking... (Jamila's Interview).

Asma spoke of how healthy food impacted student's growth and engagement in classes. She elaborated:

Healthy food gives students many advantages for their growth such as their mental, body and thinking developments...Also, it gives them the energy to be active and participate in classroom activities... (Asma's Interview).

Nadia also shared how learning experiences with children from her community and school shaped her food knowledge, and how the various changes in culture helped promote the food culture in her classroom:

In my community and school, we do have lots of children overweight, and I think the reason behind that is eating a lot of unhealthy food... For example, children like to buy their food from outside home restaurants like AlBaik (famous fried chicken restaurant in the West region of Saudi Arabia) and food burger and shawarma...today there are lots of restaurants, and it wasn't the case similar in the last 10 to 15 years ago. In my view, today there is increasing obesity in children because of the food diet that includes less fruit and vegetables, and at the same time full of fat and oil...Also the mini-market in every neighborhood there are more than three, and children buy from these stores most of the time like chips, candy, ice-cream, and chocolate... (Nadia's Interview).

Acknowledging their food knowledge and particularly categorising food choices as healthy versus unhealthy, the participating teachers admitted that having inactive students in their home economics classroom helped them select the information for their food's classes, and it created opportunities for critically reflecting on their own students' health. The following quote from Muna reveals how having students who she perceived as inactive, helped her recognize some of the unhealthy effects of not having breakfast in the morning:

In my opinion, the big difference I see between healthy and unhealthy food is the effect on the student's general health condition. As home economics teachers and the health supervisor in my school, I see students who are inactive compared to their peers, and when I asked them, they told me that they did not eat breakfast in the morning, so I have to prepare something for them like cheese sandwiches or give them dates... I am concerned about them because I think it reflects on their learning ability... (Muna's Interview).

The teachers also expressed how interactions with their students in home economics classrooms allowed for bridging between their professional knowledge about growth and development and the students' health. Norah and Samar shared examples of this kind of experience. Norah taught middle school and Samar taught elementary school:

Honestly, I view the food should be healthy for their younger age mainly because it helps during their growth process and for their skin to be fresh and radiant... for example, I have some students whose mothers give them breakfast in the morning before coming to school, while others do not... One student told me about her breakfast before school. That it was only water and chocolate... and I think the chocolate makes the student super active then suddenly inactive... (Norah's interview).

I am constantly telling my student's healthy food gives your body a healthy immune system and healthy skin, and ... I have students that when I look at them, they are thin, and I think they have malnutrition problems because they

don't eat enough food or they eat mostly not enough of the right and healthy food... (Samar's Interview).

The teachers recognized relationships between food knowledge and problems associated with their students eating unhealthy food. The following theme reflects the teachers' perspectives on the associated benefits and challenges of home economics content.

4.1.3 Teachers' Perspectives on Home Economics Content in Connection to Students' Life

During the interviews, the participating teachers identified home economics curriculum content as connecting to both the students' life and other school subjects. Valuing new developments of home economics curricula in recent years, teachers acknowledged that this development helped them ensure their students' learning was connected to life beyond the school boundaries.

The teachers shared that they were able to focus on drawing from the home economics curriculum in ways that informed their teaching and learning practices and linked to students' life outside school. With the most recent version of the curriculum, the teachers started to consider students' life experiences which enabled student focused learning, including peer to peer interactions. Many of the participating teachers recognized this connection as a considerable improvement in the new curriculum, as shown in the following interview excerpts from interviews with Fatima and Samar:

The new curriculum improves from the old one... the content is relevant to the students in many ways for example, in helping the students in their daily personal cleaning activities like using the toothbrush, and how they use it correctly... I was surprised when I found out that some of the students in grade

one do not know how to clean their teeth and they do not see any value of why they should ...and how to clean your body especially after going to the washroom, some of them do not know how, and when I asked them, they told me no one like mother or sister in their home told them how... Some students do know how to clean their teeth and body, but it is slightly different than what in the curriculum... and they get to learn more information about hygiene... (Fatima's interview).

The current curriculum has changed then the old one in a way that it becomes more relevant to student's daily life... For example, social skills units, students learn how to talk and build a relationship with different people in their life and that includes neighbours, the elderly, and people with special needs...also, how to look after her body and cloth hygiene and clean her school uniform every day... I think in the current curriculum book units, and lessons explain most of the things that students need while they are at their house or outside in the street or the school...such as lessons in preparing a healthy snack, traditional food in different events, safety roles, how to get in the care prayers for getting out of the house, and how greeting people...Also, the curriculum teaches students what to do if their mothers or others in their family become ill in terms of taking care of the sick person and welcoming the guests who would come to visit him or her... and my students always to teach them more and share with them more stories from real life... (Samar's interview).

Similarly, Nadia and Jamila shared how recent changes to the home economics curriculum added new opportunities for student learning. These changes involved more real life, relevant, and

meaningful experiences and helped the teachers promote collaborative classroom learning that benefitted the students' lives outside the school environment:

In my view, the current curriculum content becomes more natural and closer to the student's life... students can use most of the information and apply it to their life in school and outside school... one of the examples that the current curriculum expands the lessons and the explanation about it is the menstrual cycle. Most of the time when I am teaching menstruation units, students tell me that it is the first time they heard about some of the information about the topic for example, what the different kinds of pads available in the stores, and how they use it. Also, regarding the hygiene of their body, the type of body products for shower, and lotion for different kinds of skins... I show them examples of everything that I explain in the class, so they know the products when they want to buy it later... My students live in the city, but I was surprised that some of them have little knowledge of these topics that I am teaching them in class... During the food and cooking units, it becomes easier if students are able to try it at home with their mothers, like a different way of making sandwiches and salads... (Nadia's interview).

Moreover, Jamila perceived that the change in the recent curriculum increased the popularity of home economics as a subject among students due to the expanded scope of the curriculum which now included real life experiences. In her opinion, these changes contributed significantly to student learning about their health and well-being:

Today the curriculum becomes close to the students' life compared to the previous one when it was only focused on cooking main dishes and sewing, and students felt bored because of the heavy contents... but today home economics one of the likeable and popular topics for students... for example, issues related to menstruation period, some of the students do not know how to use pads and other supplies, how to deal with the pain, what kind of food are women benefits more from eating it during to menstruation period... Also, what young girls should do during this time in relation to the Islamic faith like they cannot pray and enter the mosque... and how they clean their bodies after the menstruation cycle has finished, according to the Islamic faith advice about women... (Jamila's interview).

Acknowledging the enhancement of curriculum content as a positive move, the participating teachers found that teaching the new curriculum within their home economics classrooms subsequently helped them broaden their understanding of their students' backgrounds. This understanding created opportunities for teachers to critically reflect on their teaching practices and the ways they could reach out to all students in their classroom. Rasha's interview quote below expresses how the current curriculum helped her students open up and talk about "sensitive" topics:

One of the lessons is on the menstruation period, and at the beginning of the class, students felt a shame to discuss or even participate in the class because it is unusual for them to discuss this topic in public places like school... After I realized that when I talk to students about how privileged they are to be in the class and able to talk about such topics with your teachers in a safe and

educational environment, rather than keeping all your questions without satisfying answers... I always give students the freedom to ask any questions in the classroom related to any topics whether in class or private time... I was shocked when I find out that some students do not know the Islamic faith process of cleaning after menstruation is done... because women are responsible for all their actions regarding prayers and other duties as young Muslims... (Rasha's interview).

Teachers also noted that the content and topics offered in the latest curriculum were appropriate to the students' age in middle school. The new curriculum helped students to focus on their needs at their particular stage of life. Norah shared:

I think the current curriculum is relevant to my student's life, for example, Grade 8 has a unit in ideal personality, teaches them how to behave appropriately to Islamic and Saudi culture, and to respect others in their environment... Also in grade 9, students have units in self-confidence and the budget and how students can spend their money and how they build and arrange the budget...another unit on making a decision it is relevant more in middle school and high school rather than both elementary and middle school because I think students could make a decision about the high school sections she want to study in or could think of what she going to do in the next summer vacations in terms of considering summer courses or working in summer job... I think most of the units and lessons are close to my students' life, despite the previous curriculum contents... (Norah's interview).

Thus, the teachers' perception that the current version of the curriculum builds a connection between school knowledge and life outside the school was important for how they made decisions about what content to cover, keeping their students' needs in mind. The teachers recognized the importance of content that was effective and appropriate for the students' culture as well as their age group and related life experiences.

4.1.4 Teachers' Perspectives on Home Economics Content in Connection to other Subjects

The teachers found connecting home economics to other subjects seemed to have a positive effect on student learning within and beyond the classroom. The teachers also found this connection across subjects had a positive effect on student engagement, most noticeably in the home economics classrooms. Jamila and Norah discussed the benefits of making connections among subjects:

Home economics curriculum for middle school has been improved and students are enjoying the class more than before...also, one more thing I notice is the connection with other school subjects like psychology and sociology especially the theatrical lessons... because the association has a positive effect on students learning from my experiences with my students, I am always trying to find and make links between home economics and other topics...Also, another example linking with mathematics in the budget unit ... (Jamila's Interview).

One of the positives aspects of the home economics curriculum today is the link to other school subjects that expand students' perceptions... like the connection to chemistry and mathematics by applying measure size, length and

size... usually, I do my research in other curriculum books like a science text when I prepare for any unit or lesson that I want to teach so that I can make a clear connection to students in the classrooms... (Norah's Interview).

In addition, to recognizing and appreciating the benefits of making connections between and across the curriculum content, the teachers also shared instances where they were challenged by the cross disciplinary nature of the curriculum. In particular, curriculum content that was unpopular with students, such as the sewing and embroidery unit.

4.1.5 Unpopular Units

The participating teachers had reservations about the sewing section of the home economics curriculum. In particular, they were concerned about how to deal with students who were not excited about learning to sew due to the lack of relevance to their daily lives. Teachers expressed apprehension about spending time on unpopular content. Nadia offered her opinion of the sewing unit in the following interview excerpt:

In my opinion, the sewing unit is not necessary for the curriculum because the students do not like it, and always complain about it ... and I think they do not value the content or see the connection to their life by studying the sewing current content, it is mostly about different kinds of stitches... (Nadia's Interview).

In addition to the sewing unit being unpopular with students, the teachers also had concerns about teaching sewing. There was extra work for the teachers due to the available resources and tools. There were also safety issues as Samar explained in her interview:

In teaching the sewing and embroidery unit, most of the students do not like it at all, and they do not want me to teach it, but I cannot skip the unit, it is mandatory to teach it... during the class, I do most of the work for them, for example, they do not know how to use the needle to apply thread or yarn. I think today most of the young girls especially at elementary school do not use and apply the sewing skills in their life... maybe at a higher level, they would benefit more... Other concern I have regarding the sewing and embroidery unit is the student's safety because we are using needles and scissors, I think it is still not safe for them to use it without an adult with them, and this is taking a lot of the class time ... and I always feel uncomfortable teaching it to them... (Samar's interview).

The teachers also found students lacked motivation when learning about sewing as they did not value developing sewing skills. Students had no interest in learning how to sew and embroider because they did not use these skills in their life; nor did they expect to require these skills in the future.

While there was the understanding that teachers must cover all home economics curriculum units including sewing, the teacher interviews as well my classrooms observations revealed a different reality. Due to limited class time, teachers often spent less time teaching certain sewing and cooking lessons and, in some cases, they did not teach these sections of the curriculum at all. The teachers acknowledged that some of the food studies content not covered in the classroom, could possibly be addressed at the school canteen where students exercised food decision making skills.

4.2 Theme 2: Teachers' Knowledge of Local Cultural Food Practices and Perceived Contradictions between Curriculum Content and Students' Social and Cultural Practices

As mentioned in Theme 4.1, section 4.1.3, most participating teachers identified home economics curriculum content as relevant and connected to students' life, and found that unpopular units such as sewing were not valued by the students due to the lack of relevance to the students' own lives. However, it was interesting that during my class observations, I identified various incidents that demonstrated contradictions between the curriculum, the teachers' approach to teaching particular content, and the students' cultural background.

There were times when teachers noted how their own beliefs and practices were inconsistent with the students' beliefs. One example was when the students were listening to the teacher explain how to clean their body after menstruation. When Jamila finished her explanation, one of the students questioned the practice. Below is an excerpt from this conversation documented during a classroom observation:

Student: Why do I have to clean my body after the menstruation period finished in the same way you explained to us?

Jamila: it is important to follow that order in cleaning your body because you need to be clean, so you can start your duties as Muslim, and that includes your prayers...

Student: But I can just stand under the shower, and my whole body will be clean at the same time, why so I have to start cleaning with my right side of my body rather than the left side?...

Jamila: this is the Islamic tradition for women to clean their bodies, and it is necessary to do their duties, this is explained in your curriculum book in detail...

Student: what will happen if I do not clean my body in the same way you explained...

Jamila: You will not be pure and clean, and that results in not accepting your prayers and other tasks we do as Muslims... (Field notes).

In another example, Asma engaged in conversation with a student when teaching a lesson on Arabic coffee:

Asma: what do you think of Arabic coffee? Do you drink it at home?

Student: no, I do not like it at all, but my parents drink it.

Asma: why?

Student: I like cappuccino more?

Asma: why? this is not our traditional coffee, and we should drink it at least in special events.

Student: why don't we have a lesson on how to make cappuccino?

Asma: It is not in the curriculum, so I cannot teach it... (Field notes).

These conversations documented during classroom observations provide examples where the teacher's responses to their students' queries were informed by their knowledge and understanding of their shared culture. The students' perspectives represented a younger

generation and different intergenerational life experiences, which varied from the teacher's life experience and from the mandated curriculum.

4.2.1 Perspectives of Students' Food Diet

When expressing concerns about the available food choices at the school canteen, the teachers discussed about the students' level of healthy food knowledge. The teachers noted there was limited information regarding curriculum content and related resources to help them teach students about healthy food choices. Jamila shared her concern in the interview excerpt below:

I am always focusing on promoting healthy food choices when I am teaching units of food and nutrition... Also, I am asking my students before I start teaching, "what is your opinion about today's lesson?" or "tell me what did you eat today for breakfast or yesterday's dinner?".... So I have some information about their food practices before I start lessons related to food...For example, most of my students like soft drinks, and they told me that at different times, so when I am teaching the lesson about obesity and diseases associated with that, I go back to what they said to me about the soft drinks...and I expand my teaching with more examples from their life so that they can connect the teaching materials to their everyday life... another example, when I am teaching soup lessons, some students said we do not like it... so I asked them what do you think we can add to it, and you would like it... so they said we like sour things.... And I told them ok; you can add lemon, or sour cream and a final step you can eat it with bread... we tried it in class, and they enjoyed it... and the next class some of them told me that they tried it at home for their families and everyone finds it tasty... (Jamila's Interview).

The students' limited access to healthy food information impacted their learning and healthy eating choices. The teachers discussed how they advised students to eat their breakfast at home before coming to school due to the heavy workload in the morning before lunch break. The teachers discussed the possibility of developing a relationship with the students' mothers to assist them in developing their daughters' food knowledge using available school resources. Asma expressed her concern about the students' diet and noted possible reasons for students not eating before coming to school:

One of the big concerns I have for my students' diet is not having breakfast before coming to school, so they have an empty stomach for the first half of the school day without food or get some food from the school canteen – like chocolate or juice which is not a healthy meal to start a busy day... I think some of the student's mothers or families do not take it seriously how important it is for students to have their breakfast before coming to school in the morning... but at the same time, it might be the students who refuse to eat in the morning because they are late or they eat a heavy meal at dinner time, or they want to buy from the school's canteen like their friends... (Asma's interview).

The teachers' knowledge of the students' diet informed their selection of learning materials. Teachers also relied on their knowledge about the students' food choices when selecting learning materials and teaching strategies particularly those that would be familiar and therefore applicable to their students.

4.2.2 Factors Impacting Students' Food Choices and Practices

There are opportunities for students to enact food practices at school. The participating teachers acknowledged that the food choices available to students at the school canteens were not congruent with the students' learning about healthy food choices. Teachers shared that the school canteen not only sold what the students wanted and preferred to eat but also, the canteen offered food products that would increase sales and be profitable. As a result, it was typical that high caloric foods such as chocolate were available for sale and were preferred by the students over healthy choices such as fruits and vegetables.

The provision of school meals is a common practice in Saudi schools. Since most of the students do not bring food from home, what is available from the canteen influenced students' food choices. According to the participating teachers, teaching food diet and healthy food choices often contradicted or conflicted with what was provided in the school canteen. The teachers shared how the students' perceptions of the food and nutrition content was not supported or promoted in the school environment. The teachers described how programs and activities promoting healthy food choices among students and programs and related activities such as the healthy breakfast and guest speakers had limited impact based on student feedback.

Raising the issue of the available food choices at school such as chocolate and candy, the participating teachers found when the students consumed these high calorie foods, their behaviour was affected and in some cases, students exhibited hyperactive behaviours such as being off task and distracted during lessons. The teachers added they found promoting healthy food practices and supporting learning about healthy food choices in their home economics classrooms to be challenging. While the teachers often advised students not to buy from the canteen and instead prepare and bring their own food from home, many purchased their lunches

and snacks from the school canteen. The teachers also attempted to advise the school canteen vendors about providing healthier choices for students. Muna discussed her concerns about the foods provided at her school canteen:

The school's canteen is open all times during the school days, and most students did not bring their food from home, so they buy their food from school,... and I always check with the people who work there and try to determine what they sell to the students... mostly the canteen sells what students want to buy because people who rent it want to make a profit... in the morning I observe students buy chocolate milk, honestly, I prefer the white milk, but students do not like it... one of the constant advice I give to the school principal and the people who work at the canteen , do not sell the French fries because of it is full of oil, and students like it very much... (Muna's interview).

Interestingly, Norah explained the challenge students faced when it came to buying healthier food from her school canteen. She explained healthier foods were expensive and often only available to school staff:

At school we have a school canteen, most students buy their food from there... I observe a few students bring their own food from home, ... I check what is sold at the canteen, and it is mostly French fries, quick-make noodles (called Indomie), juices, chocolate, and candy... I notice that at the canteen, there are some choices of healthy juices, but it is available only to staff members and teachers because it is expensive and students cannot afford to buy it... even the

chocolate bars, there is a range of kinds available there, but students only can afford the cheaper brands rather than the other famous chocolate company names which are expensive... (Norah's interview).

The teachers found providing healthy food choices at school was challenging for a variety of reasons including the cost and availability of healthy food. In addition, according to the teachers, many students were not able to afford the healthy food offered in the school canteen.

The teachers acknowledged to communicate with canteen food providers, it was necessary to go through the school principal who served as a mediator. The teachers were actively working on limiting unhealthy food in the school canteen with the rationale that these choices did not align with the mandated curriculum promoted by the schools. Nadia offered her opinion on the school canteen:

In my opinion, the school's canteen mostly offers unhealthy food choices for students ... I have seen things that sell like chocolate bars, Turkish coffee, and once or twice a week there is a hot meal like macaroni, shawarma with salad and deserts... and mostly the expensive products are for teachers and other workers here because students cannot have enough money to buy it... I have told my students, do not buy from the school canteen, prepare your food from home, it is much cheaper... I always talk to the school's administration and the canteen administration, and they said to me that the rent is high, and we need to make a profit, so we have to sell what students, the teachers, and staff want to buy. The school's administration said to me that they do not have control over what school canteen wants to sell, the Ministry of Education has one rule – no soft drinks.... What I want and I will continue to ask for is the food price,

most of the things there are expensive, and I know some students have little money to buy their food from school... (Nadia's interview).

Thus, teachers' experiences with the school canteen and the unaffordability of healthier foods for students revealed the challenges teachers faced when teaching about healthy food choices into the classroom.

The Saudi Ministry of Education requires teaching programs to inform the healthy food choices of students. Muna, was her school's health advisor, and she spent time organizing a range of health activities and programs as she described in the following interview excerpt:

I am the health supervisor at my school, and I organized a program required by the Ministry of Education which exists to enhance healthy breakfasts among students... the program length is one week at the beginning of the school year. I brought and prepared healthy food choices for students in the morning, so every class gets to share their breakfast together and share the provided fruit, and dates ... I encourage the students to bring their own food from home and share it with their classmates the following week, and the class continues towards a prize at the end of the second week... I also organized the morning school announcements for that healthy breakfast one-week activity, and I talked to students about the benefits of a different kind of food especially at the beginning of the day... and I also highlighted the advantages for their body by eating seven pieces of dates in the morning as prophet Mohammad said ... (Muna's interview)

Muna further elaborated about how she spent time informing families about the health programs the school offered and hoped that this would increase student participation in these programs. However, family engagement in health promotion was only evident during the program and for a short period of time after it ended, as Muna revealed in her interview:

We do have one meeting with the students' mothers every term, so I spoke to them about the healthy food choices for their children and themselves... I also prepared papers to send with students to their mothers and families at home, and it contains food information...honestly, I only see the fruit and other healthy food choices with students in the two weeks of the healthy breakfast at the start of the school year, after that those students feel less motivated to bring and share with their friends in the classrooms... I am concerned about that, and I do not know what I should do more to motivate them... they are at a young age, and they need healthy food to grow strong ... (Muna's interview).

Thus, activities that promote healthy food practices exist in the schools, but any positive effects on student engagement with these activities and related healthy eating choices are not sustained over time. As Norah explained in her interview:

In my school, there is a program called safety and security. Part of this program focused on promoting healthy food choices among students, but honestly, I did not see anything remarkable or evident in this program... it might be because of the school resources and budget... (Norah's interview).

In addition, Norah commented about a holistic health program aimed to enhance and promote learning about healthy food and lifestyle among students. She provided recommendations for the program frequency and content:

In my view as a home economics teacher, it should be at least once every week in the morning school announcement, the health supervisor gives students a topic on food choices to enhance students' knowledge about food, for example, the first week it could be on salads, and give students a sample and encourage them to taste it. And the following week it could be a different topic related to food like dates because it is one of the main products here, so the health adviser and her team could prepare a new idea by using dates because students do not like it as it is... the third week could be on the different kinds of breads and what the difference between the white, brown and the multigrain kind... schools could do that in the morning or the activities session, every week we have at school one activity session... I advised the school health supervisor about that... (Norah's interview).

For both Nora and Muna, their experiences as home economics teachers and health supervisors in their schools gave them insights into the efficacy of the health programs and activities. Muna modified health activities and programs whenever she could, while Norah drew upon her experiences as a way to plan future health programs and activities in the school.

4.3 Theme 3: Student Food Choice as a Function of Cultural and Social Norms and School Food Menu

As mentioned in Theme 2 section 4.2.2, most of the participating teachers identified food choices and practices at school as a challenge when meeting the needs of students in their home economics classrooms. It was interesting that these teachers identified various reasons that could contribute to student food choices in schools, and these reasons represent a challenge to what the teachers taught in the home economics classroom.

4.3.1 Peer Pressure

Some participating teachers considered peer pressure to have an impact on students' food choices. Knowing the students' home environment and culture helped teachers to realize the impact of peer pressure on students' food choices. Samar discussed an incident in her home economics class:

One of my students drinks Bison, a kind of energy drink, and I was shocked because she is in elementary school and so young to drink this kind of beverage... I talked to her after class in a private meeting, and she said, I cannot stop drinking it because the only friends I have are my cousins, and I always drink Bison with lots of chips with them... I think the students felt the push to drink with them because they always play together, and she wants to look like them even though it is not healthy at all...At one parent meeting, I met her mother, however, I could not tell her because my student was afraid that the mother might punish her daughter... I was thinking about my student, and I could not say anything to the mother... until today I keep talking with

that particular student about her food choices, and I keep advising her of what she should eat for her age... (Samar's interview).

Similarly, Rasha acknowledged the peer pressure students experienced in school and at home and emphasized that being a mother herself helped her recognize the pressures students faced was also a barrier to bringing food from home to eat at school:

I always encourage my students to bring their food from home, but they refuse, and they said the food in school is tasty and there is no time to prepare food in the morning before school... In addition, I see that in my son too...I often ask him to take fruit or vegetables with him to school as a snack, and he never listens to me... and he told me “mother everyone at school who sees me with the fruit or vegetables would laugh at me” ... (Rasha's interview).

Both Rasha and Samar recognized how friends or similar in age family members could influence a student's food choices.

4.3.2 Social Norms

In addition to peer pressure about food choices, many of the participating teachers noted the social norms within their students' life could also affect their food choices. Samar highlighted how the students' home and school experiences could influence their food choices:

I think most of the students understand what it means the difference between healthy food and an unhealthy one, but eating becomes a routine for most of them and it is hard to break that... some of the students shared with me that they do not like fruit and vegetables at all because they do not eat them ... I have a lesson on fruit and vegetable salad, and most of them said we do not

like it... and some of them said they do not have it in their home... I think the student's environment plays a role in influencing what they are eating if the mothers do not bring this food and encourage them to eat, I do not think students usually eat this kind of food... (Samar's interview).

Similarly, in a classroom context, Jamila discussed how she attempted to explain the consequences of eating fast food by showing videos on the deleterious effects on human health and wellbeing. After she finished teaching, Jamila talked to students about their eating habits. She shared in the interview how teaching about the negative effects of junk and fast food on human health was not enough as the family had to be involved as well:

One of the students told me that she liked most of the food from restaurants because it is tasty ... I think most of them prefer to purchase food from outside their homes, and most of the food is full of fat and calories... so if buying food from outside is OK for them, they will continue that unless their mother or other family member discourages them... (Jamila's interview).

In the same vein, Muna discussed the social norms for the student population in her elementary home economics classrooms. Many were buying unhealthy snacks on the way home from school which detracted from the healthy eating food activities at schools:

I think students change when they go to grades 5 and 6 in a way that they become not excited about the different food activities in school ... I believe most of them behave differently in school compared to outside school... because most of them tell me that on most days as soon as they get out of

school, they go to the local mini-market and buy candy, chocolate, soft drinks and chips that are not available in schools' canteen (Muna's interview)

These teachers engaged in conversation with their students during classroom activities. This engagement enabled them to develop relationships with their students and helped them know more about their students including their food preferences, and what influenced their choices.

4.3.3 Food Choices Available in Schools

In their interviews, participating teachers shared what they believed influenced the available food offerings at the schools' canteens. The teachers were concerned about the contradiction between what they taught in home economics and what was offered to the students in the school canteen. Norah offered some insights into this contradiction and the implication for her teaching home economics:

As a home economics teacher, I feel disappointed sometimes because I spend so much time and energy in teaching the curriculum, students do not take it seriously... I remember one day I was teaching a practical lesson from the food and nutrition section in the curriculum, and I invested so much time in the preparation of that class... when the class ended, I watched students going to the schools' canteen and purchasing chocolate bars... I felt upset that what I just taught had no effect at all for some of the students... (Norah's interview).

Fatima also spoke about the food choices available in the school canteen, and how these foods contributed to her students' learning about food. She explained her position on what she taught in home economics and what was offered in the school canteen and shared that she did not have the authority to change what the canteen sold to the students:

I think it becomes a challenge for me when I am teaching the food and nutrition section from the home economics text book because students asked me why you are saying candy and chocolate is not healthy, and it is in the school canteen ... I cannot say anything because I do not have any authority regarding what it sells there... (Fatima's interview).

Some of the home economics teachers were assigned to supervise students during the lunch break. This supervision allowed the teachers to observe students' food choices. With these observations in mind and their concern about promoting healthier food choices in their classrooms, teachers were conflicted about the discrepancy between the foods served at the canteen and what they taught in home economics. Samar discussed how she approached students who were overweight or malnourished due to unhealthy food choices:

In my class, I often discuss the food practices, and I listen to my students telling me what they eat during the day, it helps me when I am preparing my class, especially the one related to the food and nutrition ... I always notice the students who need extra attention, for example students who are overweight or malnourished... Sometimes in my regular weekly lunch supervision, I see some of my students who hide from me because they were eating French fries... I have spoken to those students before; do not eat food full of oil like French fries because of their weight... I understand they are children, but I am trying my best as their teacher to educate them ... (Samar's interview).

The classroom observations and field notes I recorded during school's lunchtime revealed that most students bought French fries and typically purchased chocolate, candy, and juice drinks. All of these are energy dense junk foods. My observations confirmed the comments made by the

teachers and supported their concerns about the students' food decisions and the menu at the school canteen.

4.3.4 Sharing Ethnic, Islamic Background and the Local Community(ies)

All participating teachers were Saudi Arabian nationals and shared their Islamic faith with their students. The teachers discussed how they were aware of and familiar with the students' home lives and their family backgrounds, which in many cases enabled them to understand their students' eating patterns and food choices. For example, Norah indicated that most of her students do not have breakfast before school (as noted earlier); so her advice to them was to have seven dates in the morning with a cup of milk as Prophet Mohammad advised his Muslim followers to do. During my classroom observations, Rasha, Jamila, Asma, Samar, and Fatima taught using a framework which considered educational objectives and outcomes as incorporating and reinforcing the sharing of their Islamic faith and traditional Saudi culture.

The classroom observations and associated field notes revealed that the teachers' guidance to students included directing their behaviours in ways that were both culturally and religiously appropriate. Teachers emphasized and reinforced Islamic rules and practice, especially related to food consumption. Rasha discussed how she included the importance of religion when teaching about food choices and rules:

When I am teaching, I often try my best to include evidence from the Quran or Hadith... because they need to know what their religion offers them as guides practically when it comes to food choices and eating rules... (Rasha's interview)

Nadia also used Islamic roles and cultural practices to enhance learning experiences in her classroom. She explained how she provided students with the opportunity to learn more about their faith and cultural practices:

The curriculum references to Quran and Hadith in different units and lessons, and I like that because it reminds students of their culture, and students should embrace that... (Nadia's interview)

In addition to sharing their students' religious and ethnic background, most teachers lived in the same local community as their students as Jamila noted:

I live near the school, and I know most of my students' families...so when I am in the classroom with them I always keep in mind that we live together in one community... for example, when I am teaching lessons from food and nutrition unit, I try to make a connection to them based on my knowledge of our community...sometimes the curriculum references to a plate name that is not common within the students' community, so I give them an example to another plate that is similar... for them to understand the topic... (Jamila's interview)

The teachers share Islamic and cultural values with their students and these connections influence the learning activities and teaching methods. However, these cultural values varied among teachers and students and there were differences in how culture was both interpreted and expressed.

4.3.5 Recognizing the Different Backgrounds of Students in Classrooms

Any variation in culture arises in part because of what is practiced in the home environment. For example, Norah attempted to simplify some of the food dishes being prepared in home economics curriculum as some students were not familiar with these dishes due to differences in names and preparation. She explained how she introduced dishes in class that students would recognize from their home environments even if they knew the dish by another name:

I always consider different perspectives that the students share with me regarding dish preparations and names because in Saudi Arabia we eat similar food in different parts of the country but with different names and sometimes slightly different ways of doing it... for example in the curriculum section food and nutrition, I teach a lesson called (Almasabib), and the students linked this dish to the pancake and waffle because of the similarity between them... another lesson about (Altawh), it is a kind of dessert, students linked it to other dish called (Jabania) and another (Jiab Alttajir)...Also, I give my students the opportunities to share their own in the classroom and I let them try in class and compare with the one in the curriculum book... because it makes sense for them more in terms of understating the content which aligns with their backgrounds... (Norah's interview).

Norah's interview provided some examples of how she modified her teaching strategies, the names of dishes and different methods for food preparation to facilitate a shared understanding among her students. By incorporating foods familiar to the students, she was able to encourage them to find similarities between the different dishes.

4.3.6 Parenting

Teachers referenced their life experiences and how they frequently drew from their professional practices, as mentioned in Themes 4.1, 4.2 and their personal life experiences in their teaching. Valuing their experiences as teachers, mothers and members of the community, the teachers acknowledged these experiences helped them to understand their students' backgrounds. The teachers further elaborated that this familiarity included awareness of the student's home environment. Also, the teachers noted that their shared religion and community influenced the teaching and learning strategies they employed.

Participating teachers drew from their experiences as mothers to deal with food choices among their students. Rasha's personal experiences helped her to explain why she valued encouraging food choices as a strategy for supporting her students:

I am always thinking about my students when they told me that we do not like to eat from home or what our mam prepared for us... food from the restaurants is tasty and we have a lot of restaurants, cafes, and bistro with different kinds of food, so we do not need to cook at home...And what my students told me similar to what my son is telling me at home... my son is in high school, and mostly he does not listen to my advice regarding his eating diet and food choices... at lunchtime he often told me, mother, this food is not tasty and sometimes he says "I am full" ... because he had already eaten from the school canteen or bought something from outside on his way back home ... (Rasha's interview).

Moreover, Rasha further explained how her knowledge and experiences as a mother helped her conceptualize the food program at her school:

Also, I would like to add that as a mother, I have my daughter she is four years old, and she goes to the daycare... the daycare doesn't provide food for the children, so I have to prepare lunch and snacks for my little girl every day... and I notice that the daycare teachers also check what the children bring from home if it is not healthy, the teacher's advice the mothers of what the best to deliver with the children of food choices ... I remember a couple of times I forgot to add milk to my daughter's lunch box. The teacher called me aside saying "please send milk next time it is important for the children at this age"... I wish if we can apply this idea to my school and other schools as well... (Rasha's interview).

Similarly, Muna's experiences as a mother with two sons meant that she was aware of how challenging it was to encourage and promote healthy food choices with her students throughout the school year:

My students are always motivated at the beginning of the school year ... when I started the healthy breakfast program and another program called "my fruit is my happiness" and most of my students were excited for the new school year and they wanted to do most of the work at school, but after that, I think they feel less motivated to continue and apply it outside school... I see this happen with my two sons ... at the beginning of the school year, they eat what I cook for them at home during lunch and dinner times ... but later they do not prefer

to eat from home, and they bring their food with them like chips, chocolate bars, and Jelly candy from the mini-market near to my home... (Muna's interview).

Promoting healthy food choices posed a continual challenge for teachers both in their roles as teachers and as mothers. Norah shared her experiences with her overweight son and how these experiences helped her to advise students about food preparation, especially overweight students:

During my time with my students in home economics classroom mainly when I am teaching cooking and food preparations, I explain to them some tips to reduce fat and calories ... to control their weight... and that experiences of food preparation techniques come from my life with my family as a mother... when my son was in middle school, he was obese, and mostly he was eating food with high calories and fat like chips and candy especially when he was mad or angry... so I started a food diet for him that has fewer calories and fat ...and thank Allah he lost so much weight, and he became confident in his life... now he is at the university and has a healthy body weight... (Norah's interview).

For the teachers in this study, being a parent was significant in enabling them to understand how young people learn about healthy food choices. Norah's elaboration on how she used her insights to promote a healthy lifestyle is important as she connected personal experiences with her son to her selection of learning materials and teaching methods.

4.4 Summary

The findings presented within this chapter provide an in-depth analysis of the participating teachers' perspectives about their experiences teaching home economics elicited during individual interviews. In addition, informal classroom observations were used to complement the individual interviews and included two visits to five of the teacher's home economics classrooms. Considering the research questions, the constant comparison and triangulation of the perspectives, the analysis elicited three themes:

Theme 1: Being a successful home economics teacher is a function of available resources, knowledge about food, student health and curriculum planning;

Theme 2: Teachers' knowledge of local cultural food practices and perceived contradictions between curriculum content and students' social and cultural practices, and

Theme 3: Student food choice as a function of cultural and social norms and school food menu.

In Chapter 5, drawing upon the data presented in this chapter, I will discuss the findings within the context of the research questions and conclude with this study's contributions, implications, and recommendations.

Chapter 5 – Discussion, Implications and Conclusion

The premise of funds of knowledge is that we all have knowledge that we bring with us into the classroom (González et al., 2005). For teachers this includes their subject content knowledge, their pedagogical content knowledge and their cultural knowledge. González et al. (2005) first wrote about funds of knowledge as a way for teachers to think about how to engage with the families of the students in their classroom. Within this work there was a particular concern for teachers to have different appreciation “of working-class or poor communities and to view these households primarily in terms of their strengths and resources (or funds of knowledge) as their defining pedagogical characteristic” (p. x). Unlike the teachers within González et al.’s research, the teachers who participated in this study lived and worked within the communities where they taught. These communities could be described as monocultural as they shared specific beliefs, cultural traditions and social values (AlMunajjed, 1997; Al Lily, 2016). As a result, it is possible to surmise that these teachers would be able to draw on both the students’ and their own funds of knowledge to inform their curricula decisions and pedagogical practices.

Teachers are exhibiting aspects of sociocultural theory when they create learning opportunities drawn from shared social and environmental experiences (Namazzi, 2015; Nashon & Anderson, 2013). In this final chapter of the thesis, the findings are summarized according to the research questions and discussed using funds of knowledge as a theoretical framework. The chapter concludes with the implications for theory, practice, and research in home economics education in Saudi Arabia.

5.1 Teacher Experiences in Saudi Home Economics Classrooms

As detailed in the preceding chapter, all eight of the volunteer home economics teachers described various aspects of their professional practice. These aspects included managing the available resources and class time. There were both differences and similarities amongst the teachers regarding how these aspects of teaching home economics informed their practices, but all aspects were reflective of sociocultural theory. Teachers structured learning opportunities that mediated students' understandings of "how they might live in the world" (Lantolf, 2000, p. 1) and as a result, teachers' concerns for learning and teaching was a common theme. As teachers shared their perspectives, it was possible to gain insights into the first research question which framed this thesis.

Research question 1: What is the experience of teachers in Saudi Arabian home economics classrooms?

This question sought to identify the teachers' professional practices as they facilitated their home economics classes. Their practices ranged from making decisions about what subject content to teach, identifying and utilising resources to teach, and creating learning experiences that made sense within the context of the students' lives.

5.1.1 Content Knowledge about Food and Nutrition

The teachers in this study identified how their level of food knowledge was one of the key benefits of being a home economics teacher. Within the data presented in Chapter 4, it is possible to see how the teachers' food content knowledge created a level of confidence that influenced how they viewed their experiences and shaped their practices both in and outside school. Drawing on their knowledge and experiences, the teachers reported what they observed as an increase in the number of students with a poor food diet and associated conditions such as dental

problems and obesity, as confirmed in the literature (El Mouzan, Foster, Al Herbish, Al Salloum, Al Omer, Qurachi & Kecojevic, 2010). The teachers felt that their students had inadequate food knowledge (Al-Dossary, Sarkis, Hassan, Ezz El Regal, & Fouda, 2010) and this became a guiding concern for teachers' choices of resources and teaching strategies. Teachers were working to compensate for what they saw as a lack of opportunity for learning about healthy lifestyle to enhance their students' healthier food choices.

The concern of teachers to enable students to make healthier food choices highlighted a gap between curriculum and subject content and students' day-to-day practices, which has also been noted in other countries (Volman & 't Gilde, 2021). The participating teachers also reported that many students with a poor diet did not eat breakfast before coming to school, and they preferred eating fast food, similar to what Al-Othaimeen, Al-Nozha, and Osman (2007) found in their study that students were mostly skipping their breakfast. The teachers reported that they perceived their students had increased their consumption of unhealthy food choices such as chocolate and the deep-fried foods, both readily available at the school canteen and at home.

The students' increasing consumption of these foods was in contrast to what was outlined in the curriculum and therefore affected what was taught in home economics especially within food, nutrition and cooking classes. The participating teachers provided food knowledge that aligned with their funds of knowledge. Teachers believed education and school could effectively support students and parents in terms of teaching and learning about healthy life, through food choices and physical activity. However, in this study the teachers noted the discontinuity between school and outside school knowledge and that consisted with what Volamn and 't Gilde explain in their study (2021).

The students' beliefs about food and their decisions about their diet led to some resistance from them on certain aspects of the home economics curriculum content relating to healthy food choices. Engaging with healthy methods of food preparation and how to improve daily food intake influenced the participating teachers' teaching approaches to meet what they perceived to be the needs of their students. As previous studies reported, the connection between teachers' funds of knowledge, their own teaching strategies and students' knowledge influences students' achievement (González et al., 2005; Vélez-Ibáñez, 2018). According to Volamn and 't Gilde (2021) successfully engaging students is not only about drawing on the knowledge they acquire within their family context but also focusing "on knowledge and skills that students acquire in their peer groups and from popular culture" (p. 2). While there are studies which make the correlation between teacher's food knowledge about students' food choices and their teaching strategies, which in turn improves students' healthy food diet (see for example Fisher, Nicholas & Marshall, 2011; Kandiah & Jones, 2002), there is a need to recognise how peers and media inform a student's funds of knowledge in ways that are not necessarily recognised within the curriculum.

5.1.2 Being a Successful Home Economics Teacher

The teachers described how home economics is an important subject of study for students. Their conceptualization of teaching home economics highlighted the value of teaching of practical skills especially those associated with food preparation (Alharbi & Renwick, 2017; Smith & de Zwart, 2010). The concept of funds was originally drawn from understanding the strategic practices (i.e. funds of knowledge) within households (Rodriguez, 2013); thus, teachers' views of the importance of home economics on day-to-day wellbeing has the potential to support

the development of household funds for their students. However, for this to be possible it seems that a reciprocal exchange is needed between the teacher and student's funds of knowledge.

Hedges (2012) posits that a teacher's funds of knowledge provide an initiative basis for the curricula and pedagogical decisions that they make. One of the teachers, Rasha described her experience of being a successful home economics teacher as a way of teaching students the skills and information that they need in everyday life (see Section 4.1). Two participating teachers, Norah and Samar identified food knowledge of her students on the basis of students' age, body needs, environment and resources. Teachers conceptualized the need for students to be familiar with the food choices available in their environment. They drew from their content knowledge to source information about daily choices that could be applicable both for today and for their future, where there might be challenges for using available resources for everyday life (Renwick, 2016).

According to Renwick (2016), such a conceptualization of teaching home economics often leads to improving opportunities for individuals and families across their lifetime. As explained by Rasha, being a home economics teacher required engaging with students and being familiar with what was happening outside the school and in the community. For example, she indicated that she taught her students how to follow safety steps to arrive at school safely after leaving their home for school in the morning and after leaving school in the afternoon. This had been prompted by an event where a student had been assaulted. This is significant in that being a home economics teacher was not limited to teaching subject content in the school context but clearly beyond it as well, a key element of funds of knowledge (Rodriguez, 2013).

In Saudi Arabia, there is an emphasis on understating home economics as having a holistic and integrative perspective, which includes a combination of healthy living, sustainable use of

the available resources and human development social responsibility (Turkki & Vincenti, 2008). In thinking about what makes for a successful home economics teacher it is in part a function of available resources, knowledge about food, student health and curriculum planning (see section 4.1). Teachers acknowledge that not having necessary resources such as a laboratory space with home economics resources created a challenge to make their classroom teaching and learning “comprehensible” for their students. They commented on the difficulties associated with not being able to engage with the practical experiences such as food preparation without a home economics laboratory where students could be involved with active learning. Not having appliances and equipment made it difficult to create opportunities for students to understand the required lesson in any practical way, and for the teachers to reflect on their teaching of practical skills.

The teachers shared the many challenges associated with the shortage of resources, which included their experiences of teaching practical lessons as it is explained by Arnett (2012) as well, such as on the preparation of salads, sandwiches, pancakes and cake as well as the challenges in creating different learning experiences for their students by using a variety of kitchen equipment. The daily decisions and actions of teachers are done to make sense of the curriculum have been noted on (Hedges, 2012; Smith & Peterat, 1992), especially in circumstances with limited available resources and equipment such as in this study. The teachers identified how a shortage of resources had implications for their teaching practices and their students’ learning.

Research suggests that teachers’ experiences on dealing with situations where needed resources are not available lead to teachers applying a new and creative way of teaching methods (Hearn, 2016; Hedges, 2012) which resulted in positive effects on students’ learning outcomes.

During the interviews, teachers spoke about having to be creative in their teaching methods. For example, they asked their students to bring readily portable kitchen equipment from home to use in class. While this strategy worked to cover the shortage in resources it also enabled a connection “with students’ existing forms of knowledge” (Rodriguez, 2013, p.91).

Teachers’ perceptions about the effectiveness of their teaching varied depending on the lesson content. Topics cited by the teachers included healthy living, sustainable use of the available resources, human development, social responsibility and cultural differences. Effectiveness of the content was often measured according to the level of engagement by their students in the classroom, as confirmed by Turkki and Vincenti (2008). All participating teachers were concerned that their students’ engagement with the topics, especially the practical lessons, would be restricted because of the limited resources. However, in practice, the teachers reported the availability of appliances hindered learning activities in the classroom.

The time allocated for home economics classes each week was identified by the teachers as another key challenge. As indicated in the data, teachers commented that there was insufficient time to cover the lesson content, which they believed negatively impacted students’ ability to process and engage with the lesson and learning materials. The teachers reported a decrease in student engagement in the classroom as there was insufficient time to provide supplementary activities. They added that with less available time for home economics classes at the middle school level combined with the restricted number of resources, they were under pressure to conclude the lesson in one teaching session rather than enable students to engage with the content at a slower pace. While teachers tried to find ways to compensate for the limited block time including dividing the lessons into smaller time segments across the week, covering content was prioritized over student mastery of the content.

A common strategy used by the participating teachers was to divide the practical lessons (e.g., food and cooking lessons) into two parts. They allocated the first 45 minutes session for teaching theoretical concepts, and then in the following week, the session was used for the practical components. Teachers believed this strategy of dividing the lesson into two sessions helped them to cover what the students needed from the course. This experience is echoed by Arnett (2012), who reported that many teachers of home economics struggled with time management in the classroom and covering the required curriculum. By engaging students with one lesson over two home economics sessions, the teachers were given additional time and opportunity to evaluate students' skills (Smith, 2009).

Hedges's (2012) claims, regarding teachers utilising their funds of knowledge as they enact their teaching practices, can be seen in how they deal with classroom situations and managing the available class time. In fact, most of the participating teachers in this study reported they found it challenging to support the learning of their students. The teachers felt that they were under pressure to complete the lesson in the required time period as well as cover the prescribed content. The teachers would check on students' understanding either after each step of the lesson or at the end of the unit. The teachers on the whole were dissatisfied with the Ministry of Education's allocated weekly class time for home economics education as they felt that it did not allow them to cover the required content. Nor did the time available allow teachers to ensure students were able to learn both the theoretical and practical components.

5.1.3 Teachers' Perspectives about Home Economics Content and Connection to Students' Life

Being a successful home economics teacher is in part a function of available resources, knowledge about food and student health, and curriculum planning. One of the teachers, Jamila,

described how the home economics curriculum needed to connect “naturally and more closely to the student’s life”. For the teachers in this study, the aspect of being more natural was associated with connecting to the students’ everyday lives as a way to address their needs. The teachers reported that the current home economics curriculum responded to society’s changing needs. Teachers indicated that home economics content recognized the needs of students to prepare and enable them to participate in society. This position is associated with socialisation and resonates with Volman and ’t Gilde’s (2021) work on the potential for funds of knowledge to support students’ development in social domains. The authors noted that while funds of knowledge originated to support students from diverse and economically challenged families and communities to attain educational qualifications, funds of knowledge could also develop and enhance skills “in interpersonal interactions and in society at large” and “outcomes of education at a collective level, such as social cohesion” (p. 3).

The teachers identified their students’ daily needs on the basis of personal hygiene, bodily health relationships, and inside and outside school safety. Teachers’ conceptualization of connection to everyday life resonates with the notion of holistic and integrative thinking, where multiple needs are present together, but each need is visible and important today and in future society (Turkki & Vincenti, 2008). According to Turkki and Vincenti (2008), such conceptualization of connection to everyday life activities led to more promotion of family and individual well-being. These findings provide new ways of thinking about the connection between the curriculum and the student's life inside and outside schools, which is consistent with the Saudi government’s goals (Vision2030, n.d.). In thinking about enacting the curriculum, teachers also needed to consider the differential between what was prescribed and what the students already knew and enacted. As already identified in 5.1.1, teachers had concerns about

the gaps between the curriculum content on healthy eating and the students' choices of food that were high in sugar and fats with little nutritional value.

Additionally, teachers navigated between an older version of home economics curriculum that was teacher centric and the current curriculum which is move toward learner-centred according to participating teachers views and that offered possibilities for reflecting on the relevance of home economics in the context of students' lives. Teachers believed the newer curriculum was interconnected with other school subjects. From the teachers' perspectives, linking home economics to other school subjects (e.g., mathematics, chemistry, psychology and sociology) was seen as an improvement within the current curriculum, offering possibilities for a positive effect on students' learning experiences. Although teachers spoke about the links between the curriculum and students' everyday life, there were no requirements or capacity for teachers to be able to actively engage with what students experience and practice outside the school environment.

The differences between content and some students' home practices became evident during classroom activities as student knowledge did not align with the prescribed curriculum (See Chapter 4). One of the teachers, Jamila, had a student in her class ask if there was another alternative for body cleaning after the monthly menstruation. A method that would clean all body parts at once, instead of showering by bucket. This example highlights the evolving nature of funds of knowledge (Moll et al., 1992) where particular actions make sense within specific experience and because of available resources. The student was not debating the need for a cleansing process. Rather she was drawing on her funds of knowledge to explore possibilities within a household where potable running water was readily available. The teacher in turn was drawing on her professional and faith-based knowledge "to make connections between formal

and informal knowledge” (Hedges, 2012, p. 10). Even though the teacher tried to defend and justify her teaching materials as the right way to clean after menstruation, the situation is complex because it reflects different practices from those where the student came from. This is consistent with Alnahdi’s (2014) view of the Saudi Arabia curriculum not always being able to satisfy both individual and societal needs. By understanding and drawing upon students’ funds of knowledge, teachers would be able to develop their own professional practice, inform their funds of knowledge (Hedges, 2012) and therefore be in a stronger position to support their students as they related their practices outside school to those within the home economics classroom (Moll, et al., 1992; Zipin, 2009).

While the participating teachers expressed overall satisfaction with the new curriculum, they were less satisfied with the units available for the elementary and middle school levels. They commented on how the students did not engage with the sewing unit. According to the teachers, the students did not like sewing and had limited their engagement with the learning experiences as they did not see the relevance of learning to sew and embroider. At the elementary level most teachers found it challenging to teach sewing. It was the teachers’ belief students were still too young to use the skills taught in the sewing units. One of the participating teachers, Samar suggested that it might be more suitable for older students because of the safety issues involved due to the use of needles and scissors. This raises a challenge for teachers as there was a perception that the students’ lacked the informal, family-based knowledge that they could draw upon and utilise in the classroom (Hedges, 2012). Further the teachers’ own stance about what elementary and middle schools’ students can and should be doing influenced how they approached the curriculum content and the learning experiences they offered.

5.2 Teachers' Knowledge of Local Cultural Food Practices and Perceived Contradictions between Curriculum and Students' Social and Cultural Practices

As presented in the Chapter 4, all teacher participants described the various factors that informed students' food choices. The focus on food for this discussion can be explained as follows. Firstly, that food and nutrition classes were prioritised by teachers due to the limited allocation of time to the subject. Secondly, teachers articulated substantial funds of knowledge based on informal and formal food and nutrition knowledge. Thirdly, the school canteen contributed additional experiences around food that had little to do with the formal curriculum.

Research question two: How do the teachers' funds of knowledge inform and shape their experiences?

This question sought to identify the ways in which teachers' funds of knowledge informed their professional practices and shaped how they saw their work with students modified or at times negated because of students' experiences outside the home economics classes.

5.2.1 Teachers' Personal Knowledge

Most of the participating teachers in this study mentioned that in addition to being home economics teachers, they were also mothers. Being mothers provided some advantage as they were familiar with their students' educational experiences which often echoed those of their own children. Teachers could explicitly acknowledge students' food choices and diet in their home economics classrooms which indicated how the teachers' funds of knowledge informed their approaches in similar ways as Hedges (2012) found in her study. Teachers spoke about how they modified their teaching strategies based on their perspectives as mothers because of the connection they made between their own children's food practices and their students' (see Chapter 4, Section 4.3). However, the professional knowledge of teachers contributed to some

differences. As professional educators with explicit knowledge about food and nutrition meant that some of their food practices varied from those of the students. As teachers, they were concerned with specific food eating habits that influenced their teaching strategies around specific food knowledge and eating habits within the home economics classroom.

The teachers were also aware of students' food preference for high fat foods. Norah focused on food knowledge such as food preparation techniques to reduce fat in meals. She was believed it was important for students to learn about fat in the diet, and she acknowledged her beliefs came from her own experiences as a mother cooking for her family. The teacher also shared that she was aware of certain food preparation techniques, and that "it would help them to control their weight" (see Chapter 4, Section 4.3.6). Teachers drew from their personal and professional knowledge to educate and influence their students' food practices; however, as previously noted, the teachers were limited by the available resources in their home economics laboratory.

One of the aims of home economics education in Saudi Arabia is to prepare young girls to be active in the home environment (Al Lily, 2016), where women have purview and responsibility over home and household (Thompson, 1992). This aim reflects the gendered role of women in Saudi and the importance within the curriculum. Thus, identifying and categorizing students' knowledge about capabilities to be used within the home such as healthier food preparation methods in home economics classroom was a significant consideration for the teachers. Teachers drew from their personal knowledge, their knowledge as mothers, and sharing of the cultural background to their students. The recognition of these limitations as explained above by the teachers, helped influence their current teaching strategies as they aimed to empower their students to become more autonomous, specifically regarding their daily choices

of food for themselves and for their family and that similar to what McGregor discussed in her article (1997).

The goals and rationale of the Saudi Arabia curriculum encouraged teachers to utilize Islamic values and Saudi cultural practices to promote the learning in ways that connected students to the world and built on existing student understandings (Ministry of Education in Saudi Arabia, 2019). Andrews, et al. (2005) also found in their study that when teachers and students shared ethnic and Islamic background it helped the teacher to develop strategies based that were understood to be practiced in the community. Such as when the content included food knowledge and eating habits. This approach to teaching about food knowledge in their home economics classroom is consistent with the idea of funds of knowledge emphasising the “strategic knowledge and related activities essential in households' functioning, development, and well-being” (Moll et al., 1992, p.139).

5.2.2 Moving Knowledge between the Classroom and Beyond

The findings shared in Chapter 4 demonstrate the ways in which the home economics education messages of promoting healthy food choices were often challenging given the food choices available in their schools. Two teachers, Norah and Fatima described how the food choices offered by the school canteen contradicted the official curricula and textbooks advocating healthy food. The teachers reported that the home economics curriculum encouraged teachers to incorporate a variety of food and cooking preparation techniques (Ministry of Education in Saudi Arabia, 2019). They utilized students’ funds of knowledge approach to learning about the world and building on existing understandings about Saudi’s food culture by utilizing recipes for meals that reflected Saudi cuisine (González et al., 2005). In comparison, the

teachers noted that the food choices in the school canteen rarely included healthy food options such as vegetables and fruits (see Section 4.2.2).

The teachers focused on integrating food knowledge in their classroom in spite of the absence of adequate healthy food choices at school canteens. In many ways they were limited in their advising and encouraging of students to improve their eating habits, while knowing about students' food choices from a school canteen menu that offered little to no healthy choices (see Chapter 4, section 4.2.2). Teachers' knowledge about their students' food practices in and outside of the school environment meant they focused on trying to build students' knowledge about making healthier choices in meaningful ways and given the context (Hedges, 2012). Teachers focused on promoting knowledge about healthy food and aimed to assist students to develop connections about their food choices that could be contextualised in their home and culture (González et al., 2005; Llopart & Esteban-Guitart, 2017; Sebolt, 2018). The emphasis on food choices is one aspect in the everyday life of students, and the building of capacity and competencies for everyday living is an essential aspect of home economics education (McGregor, 2011).

Everyday living for the teachers and students is framed within the Islamic culture, and the education system remains firmly rooted in Qur'an and Islamic rules (Elyas, 2011; Alharbi & Renwick, 2017). Al-Salloom (1991) noted that "Islam is not only integral to Saudi's education but also serves as the very essence of the curriculum" (p.9). In this study, one of the participating teachers, Norah reported that linking the home economics curriculum and school activities to the Islamic culture is important in terms of eating habits and food choices. She explained how she "highlighted to my students that our Islamic culture provides us with food knowledge. For example, the benefits of eating seven dates in the morning as prophet Mohammad said instead of

skipping breakfast before coming to school”. The teacher described the prophet Mohammad’s eating habits, especially in the morning, when he ate dates so that nothing could harm him during the day. In another example, one of the participating, Nadia teachers described a perspective about food in the Qur’an by explaining the meaning of “وَكُلُوا وَاشْرَبُوا وَلَا تُسْرِفُوا”. This translates as “eat and drink, but not to excess”.

The teacher qualified how it was important that her students ate well, and how this would impact on their physical and emotional wellbeing. In particular this teacher emphasised how becoming overweight and obesity was a growing concern in Saudi and other Arab states (Samara et al., 2019) and that it was linked to making poor food choices and eating more than what the body needed. Alharbi and Renwick (2017) emphasise that “home economics is a subject that provides young people with unique and lifelong skills that are meant to benefit them both at work and at home. In order to be relevant, (the) curriculum should reflect the students’ culture and societal needs” (p.110). The teachers’ concerns about not only what the students ate but also how much energy dense food was linked to what they saw as the importance of home economics education in connecting knowledge between students’ life inside and outside school, both during and after finishing their schooling.

The teachers reported that students were skipping breakfast before coming to school. They noted this practice was common and were concerned that students were not meeting their nutritional needs for their growth and development. These findings confirm the findings of researchers who identified “skipping breakfast” habits amongst students, and the negative impact on school students’ health (Farghaly, Ghazali, Al-Wabel, Sadek & Abbag, 2007).

The participating teachers identified the food on their schools' canteen menu as primarily unhealthy and high in fat content and calories such as French fries, candy and chocolate. This

research highlights how teachers' perspectives about educating for healthier food choices is often contradicted by the food choices available to students at the school canteen. The teachers were aware of the difference between food choices at the school canteen and those recommended in the home economics curriculum and associated textbooks. The teachers found this difference challenging when teaching about healthy food to students. They shared their experiences of confronting students eating practices at school, and the students' resistance to making healthy food choices when buying unhealthy food provided by the school's canteen. In addition to the lack of healthy food choices at schools, the teachers also recognized the need for more programs and activities during the school year that would support home economics education messages and support students in their everyday life.

5.2.3 Student Food Choice – Cultural Norms and the School Canteen Menu

In addition to identifying food choices and practices at schools as one of challenges that home economics teachers face, the participating teachers recognized additional factors which also affected students' food practices (see Chapter 4, Section 4.3), such as peer pressure and social norms in varied contexts. Studies conducted in the United States showed that several factors play a role when children are overweight or have other health problems (Lakdawalla & Philipson, 2007; Novak & Brownell, 2012). There is growing concern for enabling healthy choices to address growing levels of obesity in the Arab States and Saudi Arabia specifically (Samara et al., 2019).

Teachers who participated in this study recognized that peer pressure was one of the factors that affected student food choices. Teachers emphasized they see peer pressure both inside and outside school, resulting in students choosing foods that would make them feel welcome and provide a sense of belonging amongst their friends. Teachers invited the students to

consider why they made specific food choices. One of the elementary teachers shared her experience about a student bringing an energy drink to school. The drink was popular amongst a group of students who also happened to be members of the student's extended family. According to the teacher who discussed the choice of beverage with the student, "she cannot stop drinking it because the only friends she has are her cousins". The teacher reported the student felt pressure to continue drinking energy drinks as a way to create a sense of belonging and acceptance within a specific cohort of friends (see Chapter 4, section 4.3.1).

The teachers emphasized their concerns about the foods that the school canteen sold to students. They described the different kinds of unhealthy foods on the menu and that most students purchase items such as French fries and desserts. They believed the unhealthy food offered at school hindered the teaching and learning in the home economics class as the canteen menu reinforced unhealthy eating habits. As one teacher noted, "I feel disappointment sometimes because I spend so much time and energy in teaching the curriculum, and students do not take it seriously" (Norah).

In their interviews, teachers shared that teaching home economics enabled them to know about their students' food eating practices, especially outside school. These teachers were cognizant of the benefits in aligning their students' learning about food with their home environment wherever possible. The teachers shared that they were aware that certain food practices are related to cultural food practices at home, which influenced students' beliefs in negative ways, such as when they did not eat fruit and vegetables at home. Teachers in this study were aware of the effect that social norms and related food practices have on students' lifestyle and food diet beyond their schooling years. However, the efforts of these teachers were limited,

and they tried to discuss the school canteen menu with their school principal. They also met with students' mothers and spoke with them about their daughters' food practices.

The teachers' willingness to become familiar with the food practices of their students and then to make connections between the textbook and a student's practices outside school draws on a funds of knowledge (González et al., 2005) approach. Teachers attempted to incorporate examples from the students' home environment into the home economics classroom activities in ways that would enhance students' knowledge of healthy food choices. These situations often required teachers to incorporate their own experiences and knowledge, their personal and professional funds of knowledge (Hedges, 2012; Volman & 't Gilde, 2021), in a way that supported their teaching strategies and pedagogical decisions in their classroom.

Additionally, the teachers acknowledged the different food preparations skills that students practiced at home. While teachers recognised most of the students were from Saudi Arabia, this was not necessarily a fully homogenous group so they worked to become aware of the students' different regional backgrounds. One of the participating teachers shared in her interview, "I always consider different perspectives that the students share with me when reading dish preparations and names. In Saudi Arabia, we eat similar food in different parts of the country but with different names and sometimes slightly different ways of preparing it" (Jamila). This teacher encouraged participation from students who have different names and methods of preparation for the different kinds of dishes that are presented in the classroom. The funds of knowledge theory emphasises the need to connect knowledge created within the home to those within the school context. This was possible when teachers allowed students to utilize their food knowledge while they were participating in foods-based classroom activities. This is consistent with what other researchers have noted (see for example González et al., 2005; Llopart, &

Esteban-Guitart, 2017) all of whom have discussed teachers supporting their students to apply their knowledge during classroom activities.

Permitting students to express and share the different cooking methods and names for the dishes with others in the class, helps facilitate the development of those students who came from different parts of the country or abroad. This provides opportunity for all students to develop and enhance their own funds of knowledge through their participation in the classroom activities (Hedges, 2012; Moll et al., 1992).

5.3 Implications

It is evident from the study that teachers understand Saudi's culture and Islamic values as key elements in teaching and learning in all classrooms in Saudi Arabia. Additionally, teachers considered home economics education as a subject for teaching skills for everyday life, and they emphasized they taught their students just as they taught their own children at home. Teachers were aware of their students' different backgrounds and tried to incorporate these backgrounds while teaching home economics. In addition, teachers often used their personal and professional funds of knowledge in their home economics classroom without identifying these as such. However, their teaching strategies were limited to the available resources in schools as well as the time allocated to their subject. With this in mind implications for a theoretical approach using a funds of knowledge approach and ongoing research are offered as explanation of how the findings are important for policy, practice and theory for home economics education in Saudi Arabia.

5.3.1 Implications - Using Funds of Knowledge Theory in Home Economics Classrooms

The perspectives of teachers participating in this study highlight the challenges in promoting healthier food practices among their students in home economics classroom. This study builds on past and current theories in home economics on preparing young students with the necessary skills that make them ready for making decisions regarding their everyday and family life (Farrelly, 2012). This study largely responds to the concerns raised by several researchers about growing incidence of overweight and obesity in Saudi Arabia (Samara, 2019) and amongst school children in Saudi Arabia and other countries (Aljaadi & Alharbi, 2020; Hammad, et al., 2017; Ahmed et al., 2016; Alazzeah, AlShammari, Smadi, Azzeh, AlShammari, Epuru, Qiblawi, et al., 2018; Al-Hussaini, Bashir, Khormi, AlTuraiki, Alkhamis, Alrajhi, & Halal, 2019). Teachers contribute to the shaping of young people's understanding about the value of engaging with healthier food choices in the home economics classroom (Vaines, 1994). The complexity of issues that teachers in this study encountered while teaching home economics classrooms also provides insight into the various factors that inform the knowledge and skills needed by students about healthy eating practices.

The study demonstrates that teachers applied both their personal and professional knowledge in the home economics classroom. These knowledges constitute the teachers' own funds of knowledge and were used to devise and adjust their own teaching strategies accounting for the available resources and what they perceived their students needed to learn home economics that also enabled connections to everyday life. The home economics teachers were challenged to examine how the value of home economics education was undermined by the shortage in allocated time limited resources and the contradictory messages promoted by the school canteen.

The study explored the teachers' views of food diet and eating habits represented within the elementary and middle school home economics curriculum in Saudi Arabia. It was specifically framed around home economics teachers' funds of knowledge (González, Moll, & Amanti 2005; Hedges, 2012) and explored their professional practices when working with young people about their food choices. Funds of knowledge provided a theoretical base for inquiring into teachers' teaching and learning strategies by focusing on "historically accumulated and culturally developed bodies of knowledge and said skills essential for household or individual functioning and well-being" (Moll, Amanti, Neff, & Gonzalez, 1992, p.133).

Accordingly, the views of the teachers as research participants were elicited when they described their work with their students in activities that connected classroom learning with the students' lives. This suggests that teachers acknowledged, respected, and engaged with the students' funds of knowledge in thoughtful ways. This was evident in the discussion around menstruation and Arabic coffee where teachers engaged in these conversations in culturally specific ways, drawing upon funds of knowledge. In these instances, the difference in the funds of knowledge between teachers and their students had less to do with sociocultural variations rather it was generational. The funds of knowledge approach provided a lens to study the teachers' specific knowledge, both professional and personal, and how they utilized that knowledge in their classroom (Hedges 2012). Funds of knowledge is a specific "informal, everyday knowledge (that is) found in families that describes their diverse knowledge and experiences" (Hedges 2012, p. 10) and as such, aligns with everyday practices as a key element of the home economics profession (Vaines, 1990, 1994, 2004).

The teachers' funds of knowledge were used to understand how Saudi's teachers interpret home economics curriculum. In particular there was a focus on how their funds of knowledge

influenced what they taught their students in food and nutrition education classes. Furthermore, the theory was important in understanding how teachers recognized, evaluated, and reflected upon their teaching approaches as they engaged in home economics classes that aligned with their everyday life experiences outside school (Andrews et al., 2005). Using funds of knowledge was important in informing how teachers' experiences of teaching home economics connected to their students' world beyond the school. (Hedges, 2012).

5.3.2 Implications for Research

The study was facilitated in the social and cultural context of Saudi Arabia. It aimed to explore teachers' perceptions about the home economics curriculum and the impact on teachers' classroom practices and their students' food practices. The insights generated through this study have implications for future research in home economics education, food choices at school, and health promotion programs in schools in Saudi Arabia. This study calls attention to issues that need to be explored and addressed in order to develop comprehensive understanding of teachers' knowledge and students' food practices in the home economics classroom. This includes shifting the focus of nutrition education away from a biomedical perspective to one that is more sociocultural in perspective and therefore, inform students about engaging with food as a social experience.

Additional research is warranted that explores the perspectives of home economics teachers in different regions in Saudi Arabia. In particular there is scope to explore teachers' teaching and learning strategies to influence students' food practices within the home economics classroom. There is value in documenting current teaching practices of home economics teachers, and identifying the challenges they face in their professional practice. This information could be used to offer professional development to home economics teachers, and be utilized to

promote healthy food habits among young people. Such an approach would contribute to the intersectoral work required for a “Health for All” approach and a necessary health promotion strategy identified by Samara et al (2019) to respond to growing numbers of overweight and obesity in Saudi Arabia and other Arab Gulf Countries.

5.3.3 Implications for Practice

The study finding revealed that teachers experienced challenges when teaching home economics lessons due to the lack of resources. Some teachers interviewed suggested home economics’ department at the Ministry of Education need to request that every school should has a home economics laboratory. On the other side, home economics laboratory should also be equipped with resources so teachers can demonstrate their lessons and practice them during the lesson rather than teachers bring some resources from their home or ask their students. This is can save time for teachers especially who teach several lessons in a day for different classes.

Another challenge that teachers were facing difficulty in teaching food and nutrition units due to the contradiction between the curriculum content and what the school’s canteen offer to students. The data indicate the need for healthy food training for Saudi teachers and principals is required to refine their food knowledge, perception, attitudes, and confidence in making decisions on what kind of healthy food should be available in their canteen, rather than thinking of what kind of food more profitable. If schools are afforded opportunities to refine school’s canteen menu to include healthy food, students might change how they view food, particularly to think critically of how healthy food improve their health in general and change their lifestyle.

5.4 Summary

Guided by a funds of knowledge framework, this study revealed some key points about the nature of home economics teachers practices in Saudi classrooms. Firstly, teachers' understanding of students' food choices and eating habits is drawn from teachers' daily experiences shared with students. Teachers observed that the food choices available at the school canteen were a negative characteristic of the school, as the canteen is for profit rather than based on offering healthier choices for students and enacting curriculum as governmental policy. Thus, teachers expressed their concern about the challenges they faced in teaching home economics in a context that undermined the curriculum and the subject. Teachers shared their additional concerns about students consuming unhealthy food and developing eating habits. They argued these conditions made it difficult to develop appropriate teaching and learning strategies for a food studies program that also promoted healthy food.

Time management issues were a perennial problem that teachers faced, especially when teaching practical lessons at the middle school level. The lack of resources hindered what could be taught in the home economics classroom and compromised possibilities for any positive curriculum outcomes. The teachers identified students' eating habits as a challenge to their teaching and learning strategies in their home economics classroom. The school canteen offered poor choices, in spite of being the first location where students could begin to exercise informed decision making. Findings illustrated the need for stronger healthy eating programs and possibilities to promote a healthy food eating culture in schools that meet the nutritional needs (Farghaly, et al., 2007; Hammad, et al., 2017). The findings of this study highlight the complexities of being a home economics teacher and the need for their students to engage with a

healthy lifestyle when faced with direct challenges such as having a school canteen focused on profit rather than student wellbeing.

The study recognises recent changes to the home economics curriculum connected to the needs of students within the context of their everyday lives, a key aspect in the field of home economics. The relevance of curriculum content to students' culture and daily practices was identified by the teachers as a significant improvement to the curriculum that enabled integration of healthy food knowledge, personal hygiene, relationships and safety both inside and outside schools. However, teachers believed that the textile units in the elementary and middle school home economics curriculum were not adequately addressed because of the students' dislike of the experiences and engagement of this section in the curriculum. The safety considerations related to students using potentially dangerous equipment directly correlated with teachers' reluctance to enact textile skills at this age. On the other hand, there was no attempt by teachers to consider how they might offer different and less risky textile activities that could invite greater student engagement.

The limitations of the study are evident in that it is a small-scale study that involved only eight volunteer teachers from five schools. The schools were all located in the western part of a Saudi Arabia in the city of Mecca. Secondly, the data for this study was collected within a short time, approximately three months during the 2017 – 2018 school year. As such this study offers insights into a group of teachers' perspectives about their home economics education classrooms who are located in a small geographic area. The purpose of this study was to understand the case under study. By drawing boundaries such as the number of participants (eight teachers), select geographical region (Mecca city) and school (two elementary, three middle schools) around the

case enabled the researcher to emphasize only in investigation of the participants' experiences in the specific context.

This study has contributed to the understanding of teachers' perceptions of students' food practices in school and beyond schooling. The study demonstrated how teachers use their funds of knowledge to guide them in teaching home economics, and how they evaluate their students' health needs based on their personal and professional knowledge. This study is significant as it is the first time that a qualitative phenomenological case study exploring teachers' funds of knowledge has been employed as a research approach in Saudi Arabia context. The results of this study have implications for Saudi policymakers and curriculum developers in the move to create relevant and meaningful sustainable home economics education teaching and learning strategies in addition to implications for theory and research. Insights from this research could be used to inform teachers' understanding about their professional work as well as home economics research and practices.

The three months engagement in the participant schools allowed me both as an educator and as a researcher to appreciate and reflect upon the implementation of home economics curriculum and the ongoing educational reform in Saudi Arabia. As a novice researcher, I have come to an understating that research is all about being humble and patient. Listening to teachers' voices and observing them with their students enabled me to discern the complexity and challenges teachers encounter every day in schools. This is set against a backdrop where the wider Saudi Arabian society has experienced rapid changes particularly over the past ten years. Educational researchers have a responsibility to position teachers' perspectives at the center of study in ways that can enable the noticing and wondering of the possibilities and capacities of teachers within the Saudi education system.

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Appendices

Appendix A – Indicative Interview Questions (English Version)

Introduction and Brief Background about Teacher

- 1) Could you briefly share a bit about your education/professional background?

Teachers' Perceptions about home economics available resources

- 1) Could you explain what kind of resources that are available to home economics teachers in your school?
- 2) Could you explain how you plan your lessons every week?
- 3) What do you think about the home economics curriculum?
- 4) Do you use only the provided curriculum or you use extra resources?
- 5) What do you like most about it? And what you do not like most please explain?
- 6) What kind of food program available in school? And what do you think of it in terms of the food choices provided for students?

Teachers' perception about the relevant of the curriculum to students' life outside school

- 1) In what ways do you think the home economics curriculum you teach your students is relevant to their life outside school?
- 2) From your experiences with your students, what do you think of students' food practices in their daily life at school?
- 3) In what ways do you think that the knowledge in home economics course enable students to make a better food choices?
- 4) Could you explain to me what do you think of "healthy food"? And do you think it is available to students in school and outside?
- 5) In what ways do you think your students understand the healthy consequences that could apply by eating unhealthy food?
- 6) Is there anything else that you'd like to add that you feel I might have forgotten to ask?

Appendix B – Indicative Interview Questions (Arabic Version)

بروتوكول المقابلة

اسئلة المقابلة مع المعلمات في مادة الاقتصاد المنزلي/التربية الاسرية

معلومات عامة عن المعلمة

- 1/ هل من الممكن ان تتحدثي قليلا عن نفسك/ ماهي درجة تعليمك وخبراتك؟
- تصورات المعلمة عن المصادر المتوفرة لمادة الاقتصاد المنزلي/التربية الأسرية
- 1/ هل من الممكن ان تشرحي ماهي المصادر المتوفرة لمعلمات مادة الاقتصاد المنزلي/التربية الأسرية في مدرستك؟
- 2/ هل من الممكن ان توضيحي كيف تخططي للمادة كل اسبوع؟
- 3/ ماهو تصوركي لمنهج الاقتصاد المنزلي/التربية الأسرية المتوفو حاليا؟
- 4/ هل تستخدمي فقط المنهج الحالي او تستعيني بمصادر اخرى ؟
- 5/ ماهو اكثر شئ يعجبك في المنهج؟ و / ماهو اكثر شئ لا يعجبك في المنهج؟
- 6/ ماهو برنامج الغذاء المتوفر في المدرسة؟ وماهو اعتقادك عن البرنامج من حيث الخيارات المتوفرة للطالبات؟
- تصورات المعلمة عن علاقة منهج الاقتصاد المنزلي/التربية الأسرية
- 1/ ماهي اعتقاداتك عن وجود علاقة بين منهج الاقتصاد المنزلي/التربية الأسرية وحياة الطالبات خارج المدرسة؟
- 2/ من خلال خبرتك مع طالباتك ماهي توقعاتك عن العادات الغذائية للطالبات في فتر المدرسة؟
- 3/ ماهي توقعاتك بالنسبة للمعرفة في منهج الاقتصاد المنزلي/التربية الأسرية وعلاقتها بقدرة الطالبات علي اتخاذ قرارات افضل للأختياراتهم الغذائية؟
- 4/ هل من الممكن ان توضيحي ماهو اعتقادك عن الغذاء الصحي و الغذاء الغير صحي؟ وهل تعتقدين ان الغذاء الصحي متوفر للطالبات في المدرسة؟
- 5/ ماهي اعتقاداتك عن فهم الطالبات للأضرار الصحية التي ممكن ان يكون سببها الغذاء الغير صحي؟
- 6/ هل هناك اي اضافة تودين اضافتها او تتوقعين انك نسيت ان تذكريها؟

Appendix C Interview Protocol (English Version)

THE UNIVERSITY OF BRITISH COLUMBIA



Faculty of Education
Department of Curriculum Studies
2125 Main Mall
Vancouver, B.C. Canada V6T 1Z4
Tel: (604) 822-5422 Fax: (604) 822-4714

TEACHER INFORMED CONSENT FORM

for participants of the study

Interview about teaching/learning home economics

I. Study Team: Who is conducting the study?

Principal Investigator: Dr. Kerry Renwick, Faculty of Education, Department of Curriculum Studies, University of British Columbia.

Co-Investigators:

Ms Masha'el Alharbi, PhD. Student, University of British Columbia.

Dr. Anthony Clarke, University of British Columbia. e-mail:

Dr. Sandra Scott, University of British Columbia. e-mail:

II. Purpose: Why are we conducting this study?

The purpose of this study is to explore the home economics curriculum and food practices of school age children in Saudi Arabia. We are interested in knowing the ways in which the expectations of a healthy diet and eating habits as espoused in the home economics curriculum at the elementary and middle schools level are influencing the ways in which food practices of school age children are practiced both by the children in Saudi Arabia and their parents.

III. Project Procedures: What happens if you give consent to participate in the study?

If you agree to participate in this research study, you will participate in a class observation and an audio recorded interview. The school is the place where teachers teach home economics curriculum, and students learn the subject within one context. The observation will include students and teachers' interaction during home economics lesson, how teachers using different pedagogical tools and activities and how students interact with it and students engagement with the learning contents and materials of home economics that provided by the teachers will be observed. In the observation, the co-investigator will only use her own observation notice. The interview will be audio recorded and it will take no more than one hour of your time, and it will be inside school during the break time. It will allow a more in depth insight into how teachers perceive home economics. The interview data will then be transcribed verbatim before and direct quotes are chosen to support the research findings in the written report.

You will also be invited to share your course syllabus materials with the researcher. This will assist the researcher to understand how your approach to home economics teaching and learning works in practice.

IV. Study Results:

The results from this study will be reported in Mashael Alharbi's thesis dissertation for her Doctorate of Philosophy, which she anticipates to finish by December, 2018. It will also be available for you to read upon request. The results of this study will be reported in a graduate thesis and may also be published in journal articles and books.

V. Potential Risks of the Study: Is there any way participating in this study could harm you?

There are minimal risks associated with participating in this study. The questions and ideas being explored in the study are not outside the normal realm of what teachers would consider and discuss within professional conversations between peers covering pedagogy and professional practice. You will have an option to not to respond to a question within the interview; and you can engage in private communications with the primary investigator and/ or co-investigators outside the interview on your own reconnaissance. You are free to opt out of the study at any time. In this circumstance, the data you provide will not be included in the study results.

VI. Potential Benefits of the Study: What are the benefits of participating in this study?

By participating in this study, you will have the opportunity to share stories about how you practice teaching in your own classroom and the benefits and challenges you face as a teacher of home economics. In the future, other educators may benefit from hearing your stories.

VII. Confidentiality: How will your identity be protected?

Your confidentiality is of utmost importance during this study. Any data resulting from this study will be kept strictly confidential. All paper based documents will be kept in a locked cabinet in the co-investigator's office. Any digital recording information will be kept in secure electronic files, and be both password protected and encrypted. Any report that is written about this study will, by making use of pseudonyms, preserve your anonymity and your schools.

VIII. Contact for information they study: Who can you contact if you have questions about the study?

If you have any questions or want further information about this study, you may contact Dr. Kerry Renwick

IX. Contact for complaints: Who can you contact if you have complaints or concerns about the study?

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics

IX. Consent:

Please understand that your participation in this research study is entirely voluntary. You have the right to refuse to participate in the study. You may further withdraw from the study at any time without providing a reason and with no consequence. In this circumstance, the data you provide will not be included in the study results.

If you wish to participate in this study, please complete and detach the consent slip on the next page.

Thank you.

Mashale Alharbi

PhD Student

Dr. Kerry Renwick

Dr. Anthony Clarke

Dr. Sandra Scott

Committee Members

DETACH CONSENT SLIP AND RETURN

Please check the box indicating your decision:

☐

I CONSENT to participate in an interview for the purposes of the above described study on blended learning.

☐

I acknowledge that I have received a copy of this consent form.

Name (please print) _____

Date: _____

Address _____

Signature _____

3. If you wish to receive a summary of the results of the study please check the box indicating your decision:

☐

I wish to receive a summary of the results of the study. Please provide your contact information (phone or email):

☐

I do not want to receive a summary of the results of the study.

Appendix D Interview Protocol (Arabic Version)

THE UNIVERSITY OF BRITISH COLUMBIA



Faculty of Education
Department of Curriculum Studies
2125 Main Mall
Vancouver, B.C. Canada V6T 1Z4
Tel: (604) 822-5422 Fax: (604) 822-4714

موافقة المعلمات للمشاركة في المقابلة عن تدريس مادة الاقتصاد المنزلي/ التربية الأسرية

السلام عليكم ورحمة الله وبركاته,

فريق البحث: من يعمل في البحث؟

الباحث الرئيسي: الدكتورة كيري رينوك من كلية التربية قسم المناهج وطرق التدريس في جامعة بريتش كولومبيا. رقم الهاتف:

الباحثين المشاركين:

مشاعل الحربي, طالبة دكتوراه بجامعة بريتش كولومبيا في كندا.

دكتور توني من جامعة بريتش كولومبيا في كندا. البريد الالكتروني:

دكتورة ساندرا من جامعة بريتش كولومبيا في كندا البريد الالكتروني:

الغرض من البحث

الغرض من البحث هو دراسة و استكشاف التوقعات للعوادات الصحية و الانماط الغذائية لطالبات المرحلتين الابتدائيه و المتوسطة, وكيفية تأثير التغييرات المستحدثة في العادات الغذائية للطالبات وامهاتهم في المملكة العربية السعودية, تحت عنوان منهج الاقتصاد المنزلي/ التربية الاسريه والعادات الغذائية لأطفال المدارس في المملكة العربية السعودية.

انا مشاعل الحربي, طالبة دكتوراه في كلية التربية في قسم المناهج وطرق التدريس بجامعة بريتش كولومبيا في كندا. أطلب منك الموافقة للمشاركة كمعلمة في المرحلة الابتدائية او المتوسطة لمادة الاقتصاد المنزلي/ التربية الأسرية وطالباتي في بحث لدراسة "منهج الاقتصاد المنزلي/ التربية الاسريه والعادات الغذائية لأطفال المدارس في المملكة العربية السعودية".

خطوات البحث: ماذا سيحدث اذا اعطيت الموافقة للمشاركة في الدراسة؟

المعلمة مدعوه للمشاركة في مقابلة لمدة ساعة، وأيضا مشاهده للفصل من قبل الباحثة. الملاحظات من قبل الباحثة ستكون بغرض ملاحظه التفاعلات داخل الفصل الدراسي للمادة بين الطالبات والمعلمة، وكيفيه استخدام الوسائل التعليمية والأنشطة المختلفة من قبل المعلمة، وكيفيه تفاعل الطالبات مع الأنشطة، وأيضا كيف تتفاعل الطالبات مع محتوى التعليم والتعلم والمواد العلمية المختلفة المقدمة من قبل المعلمة. وستكون المقابلة مسجلة صوتيا، هذه المشاركة تطوعية. الغرض من المقابلة سيكون للتعلم في كيفية التصور لمعلمات الاقتصاد المنزلي/ التربية الاسرية. المعلومات التي ستوفرها المقابلة ستستخدم لدعم النتائج النهائية في البحث.

المعلمة مدعوه ايضا للمشاركة في هذه الدراسة كمعلمة للمادة لتوفير المواد العلمية للمادة من مصادر اخرى للفريق البحثي.

النتائج المتوقعة

النتائج المتوقعة من البحث ستستخدم في تطوير التدريس و التعلم في لمادة الاقتصاد المنزلي/ التربية الأسرية للمرحلتين الابتدائيه و المتوسطة بشكل واسع. أيضا النتائج ستكون جزء من اكمال مرحلة الدكتوراه في جامعه بريتش كولومبيا في كندا.

المخاطر المحتملة من الدراسة: هل هناك اي مخاطر محتملة من اعطاء الموافقة للمشاركة في هذا البحث؟

هناك مخاطر ضئيلة جدا مرتبطة بهذه الدراسة. جميع الأسئلة المستخدمة في هذا البحث عادية و مستخدمة بكثرة في الابحاث المشابهة. لكي الحق في عدم الموافقة للمشاركة في البحث في اي مرحلة من مراحل البحث بدون اعطاء اي اسباب. ايضا لكي الحق في عدم الاجابة على اي سؤال خلال المواقلة، وتستطيعين ان تتحدثي مع الباحثة مشاعل او اي احد من الفريق البحثي خارج المقابلة الرسمية بسرية تامة، والمعلومات التي توفرينها لن تستخدم في البحث.

الفوائد المحتملة من المشاركة في الدراسة: ماهي الفوائد من المشاركة في هذه الدراسة؟

بمشاركتي في هذه الدراسة, سيكون لديكي الفرصة في اخبار قصصكي عن كيفية التدريس في فصلكي الدراسي و الفوائد و التحديات التي تواجهينها كمعلمة لمادة الاقتصاد المنزلي/ التربية الأسرية. في المستقبل سيستفيد المعلمات والباحثات من تجربتك.

السرية: كيف ستكون هويتك محمية؟

إذا وافقه المعلمه على المشاركة في البحث, هويتها ستكون في سرية تامه, وهذا من الاشياء المهمة جدا في البحث, وإذا سيكون هناك اي استخدام لهويتها سيكون تحت اسم مستعار. جميع الملفات المكتوبة و التسجيلات الصوتية سيحتفظ به في مكان امن في جامعه بريتش كولومبيا و من يستطيع الاطلاع عليه فريق البحث. أي استخدام لهويه المعلمه في المجالات العلميه سيكون تحت اسم مستعار.

كل الملفات المتعلقة بالبحث سيحتفظ بها في جهاز حاسوب باستخدام كلمه سرية فقط مشاعل الحربي ومساعدتها في البحث يستطيعون الوصول للمعلومات, مع العلم كل المعلومات ستعامل بسريه تامه لحماية هويات جميع المشاركين في البحث وهذا جزء جوهري من متطلبات البحث العلمي.

للتواصل:

إذا كان لديكم اي استفسارات او اسئله ارجوا التواصل مع الدكتورة كيري رينوك من كلية التربية قسم المناهج وطرق التدريس في جامعة بريتش كولومبيا

إذا كان لديكم اي استفسارات او اسئله عن حقوقي كمشاركة في البحث, يمكنكم التواصل مع مكتب ادارة خدمات البحوث في جامعة بريتش كولومبيا بكندا

شكرا ,

مشاعل الحربي

د.كيري رينوك

د. توني

د. ساندر

الموافقة:

أنا أعلم ان المشاركة في هذه المقابلة تطوعيه و ممكن ان أرفض المشاركة ,والانسحاب من المقابلة في اي وقت من غير اي عواقب.

استلمت نسخه من هذه الورقه للأحتفاظ بها لنفسي.

أنا أوافق / لا أوافق (ارجوا اختيار احد الاختيارين) في عمل المقابلة معي وتسجيلها صوتيا.

أنا استلمت / لم استلم (ارجوا اختيار احد الاختيارين) نسخة من هذه الورقة.

أنا أوافق في المشاركة في المقابلة.

الأسم بالكامل: -----

التوقيع: -----

التاريخ: -----

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في حالة الرغبة في الحصول على ملخص للدراسة بعد الانتهاء منها ارجوا الاختيار:

انا ارجب / لا ارجب (ارجوا اختيار احد الاختيارين) في الحصول علي نسخه من الدراسة بعد الانتهاء من الدراسة.

في حالة الموافقة ارجوا اضافته طريقه للتواصل (هاتف، جوال ، او بريد الكتروني):
