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Chief Academic Officer and Provost Sue Subocz, Ph.D.

Walden University 2024

Abstract

Parents' Perspectives on Nutrition They Provide for Their Preschool Children

by

Jamari Chavon Fredenburg

MA, Touro University, 2017

BS, Sonoma State University, 2014

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education
Early Childhood Education

Walden University

May 2024

Abstract

The problem that was the focus of this basic qualitative study is that some parents in the United States do not always provide their young children with the nutrition necessary to support their healthy growth and development and provide the energy to fulfill their potential in school. The purpose of this study was to explore the perspectives of parents of preschool children concerning the nutrition they provide for their preschool children, the challenges they face, and the support they receive from their children's childcare center in providing the nutrition necessary to help their children achieve healthy growth and development and do their best in school. The conceptual framework of this study was based on the work of Contento in childhood nutrition. Purposeful sampling was used to identify 10 parents with a child enrolled in preschool in one state in the western United States; participants were recruited via informational flyer for semistructured interviews. Thematic analysis of interview data was performed to answer the research questions. One key finding was that all the participants indicated that they were aware of their children's nutritional needs; however, they found it difficult to provide quality nutrition on a daily basis due to various challenges. Future researchers might examine a different demographic group, use a more comprehensive sample with no criteria for preschool enrollment, or focus on ways to mitigate challenges parents face. This study may foster positive social change by providing insight that parents and childcare leaders can use to support children's healthy growth and development, both of which are pivotal for children to achieve their full potential in school.

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Dedication

Firstly, I dedicate my dissertation work to my three children, Juliana, Jayla, and Joseph Davis. Part of my inspiration to explore early childhood nutrition came from raising my own children and experiencing how important nutrition was for them. Every milestone and accomplishment I have achieved is due to my desire to be a better mom for them.

To my best friend, Roneesha Erby, for the words of encouragement and push to keep going even when, many times, I felt overwhelmed and wanted to give up.

To my supportive work friend and previous supervisor, Lisa Sauter, for allowing me creative space to complete my dissertation while working full-time and giving me time to complete my assignments or even time off from work when I needed a break.

To my children's father, Julius Davis, for helping me raise our three children while I finished school. He has been a great coparent during this whole process.

I also dedicate this dissertation to my mom, Debra McField. I appreciate her for helping me with my kids and being a source of support when I needed to refocus. Her love and admiration for what I do has been motivation for me to keep making her proud.

Lastly, I dedicate this dissertation to my dad, James Fredenburg. I am extremely full of gratitude and thankfulness for his unwavering guidance, support, love, and patience while I worked my way through this program. I appreciate every conversation, every suggestion, and every word of advice my dad has given me my whole life, but especially while I took on the challenge of completing a doctoral degree program.

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I would like to acknowledge my dissertation chair, Dr. Patricia Anderson, for her support and guidance. Dr. Anderson continuously provided encouragement and was always willing and enthusiastic to assist in any way she could throughout my dissertation project. Her motto during the program was just "get it done," and that helped to keep me on track and stay focused. I appreciate her kind, but firm, approach to get me through this program, and I am grateful for her involvement in completing my educational goal.

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Chapter 1: Introduction to the Study

In this study, I explored parental perspectives concerning the nutritional foundation necessary to support their young children's healthy growth and development. This study was conducted to provide a deeper understanding of how parents make food choices for their young children. I explored to what extent parents have an awareness of the connection between healthy food choices and their children's healthy growth and development, as well as their children's success in school. This study has the potential to contribute to positive social change in that it may provide knowledge that policymakers and early childhood educators can use to develop programs to effectively support parents in providing the nutrition necessary to help their young children achieve a healthy start in life.

In this chapter, I discuss the background of my study, describe the problem statement, explain the purpose of the study, and present the research questions. I connect this study with Contento's (2008) work regarding how parents choose the food they provide for their children and the personal and environmental factors, including the challenges, beliefs, attitudes, knowledge, skills, and cultural factors, which contribute to those choices. I identify the nature of the study; provide definitions of key terms; and discuss the assumptions, scope and delimitations, and limitations of the research. I also discuss the significance of this study before providing a summary of key points and a transition to Chapter 2.

Background

Preschool children, defined as 2 to 5 years old, need exposure to positive food experiences that are richly nutritious and energy fueled. Access to such experiences is an important component of their cognitive and physical growth and development (Wiseman et al., 2016). In addition to healthy growth and development, early exposure to good nutrition has also been recognized for its support of success in school (DiGirolamo et al., 2020). When parents provide their young children with healthy food options, they provide essential support for brain function, healthy bodyweight, and the ability of children to make better food choices on their own as they age (Wiseman et al., 2018).

Some parents may be uninformed about the importance of childhood nutrition, may face challenges that make it difficult for them to provide daily nutritious meals for their children, and may need recommendations about what resources may be available to them to help support their children's healthy growth. This lack of knowledge suggests a gap in practice among childcare leaders. The Centers for Disease Control and Prevention (CDC, n.d.) estimated that most children in the United States do not meet the fruit and vegetable recommendations for children in the Dietary Guidelines for Americans. The National Center for Health Statistics (2020) reported that between 2015 and 2018, as many as 36.3% of U.S. children consumed fast food on a given day and that the food often had overly high amounts of salt, sugar, and unhealthy fat. Adequate hydration has been shown to improve cognitive function, which is important for learning and academic achievement, yet most children in the United States do not drink enough water on a daily basis (CDC, n.d.).

According to Contento (2008), some parents are not aware of the importance of good nutrition for their children's health and development. In addition, because of the challenges they face, such as food affordability concerns, lack of time to prepare nutritious meals, and the need to accommodate their children's food preferences, parents may make poor nutritional choices for their children, which can lead to their children lacking the nutritional foundation necessary for their healthy growth and development and, in some cases, experiencing household food insecurity. The United States

Department of Agriculture (USDA, 2022c) reported that in 2017 the overall rate of household food insecurity in the United States was 27.3%. Drennen et al. (2019) suggested that parents with young children who experience food insecurity may not fully understand the severity or effect it has on their children's cognitive and physical growth and development, as well as its potentially limiting of their children's full potential and achievement in school.

Problem Statement

The problem that was the focus of this basic qualitative study is that some parents do not always provide their preschool children with the nutrition necessary to support their children's healthy growth and development and to achieve their full potential in school. As Srivastava et al. (2019) asserted, parents are the primary teachers in their children's nutrition education. However, parents may experience challenges in providing nutritious food choices for their children, such as low income, time constraints, family traditions, and a lack of understanding about good childhood nutrition (Dev et al., 2017). Stage et al. (2018) suggested that children would benefit if parents received more

nutrition education from their children's childcare center. A gap in practice exists, in that some parents may be uninformed about childhood nutrition and the resources available to them to overcome challenges they can face in providing adequate nutrition for their children.

Forward (2017) stated that poor nutrition leading to childhood obesity has become a national health problem in the United States that needs effective interventions to prevent long-term detrimental health consequences and shortened life expectancy.

Pomeranz et al. (2020) asserted that it was important to take steps to fight against childhood obesity by encouraging good nutrition and healthy food choices, including lessening high salt and sugar intake, especially in fast food and sugar-sweetened beverages. According to the CDC (n.d.), between 2001 and 2010, consumption of sugar-sweetened beverages among U.S. children accounted for 10% of their total caloric intake. The agency reported that empty calories from added sugars and solid fats contributed up to 40% of daily calories for children, and between 2003 and 2010 most children did not meet the fruit and vegetable guidelines recommended by the Dietary Guidelines for Americans.

In addition to healthy childhood development, good nutrition has been associated with success in school. The CDC (n.d.) reported that a good nutritional foundation improves cognitive function (especially memory), reduces absenteeism, and improves mood for children in school. A survey conducted by a school district local to this study confirmed a positive correlation between vegetables, daily breakfast, and reduced sugar-sweetened beverage consumption and improved academic achievement. Kopkin et al.

(2018) and DiGirolamo et al. (2020) documented the connection between nutrition and children's performance in school. Hong et al. (2018) and Jakobovich et al. (2019) recommended that children need foods of adequate nutritional value to be sufficiently energized throughout a demanding school day. These findings all suggest that parents need to provide their children with the daily adequate nutrition necessary for their children to have healthy growth and development and to achieve their full potential in school.

Purpose of the Study

The purpose of this basic qualitative study was to explore the perspectives of parents concerning the nutrition they provide for their preschool children, the challenges they face, and the support they receive from their children's childcare center in providing the nutrition necessary to help their children achieve healthy growth and development. Understanding the perspectives of parents may assist parents in more fully understanding how they make decisions about food choices for their children (Halder & Kejriwal, 2016). I conducted this study to probe the challenges parents face in providing healthy and nutritious food for their children (see Nepper & Chai, 2016). Further, I wanted to explore what support parents might appreciate from their children's childcare center (see Dev et al., 2017). The need for further research on these topics supports the gap in practice. The findings from this investigation may inspire positive social change by helping parents and childcare leaders to support children's healthy growth and development and assist children in achieving their full potential in school.

Research Questions

Three RQs underpinned this study. This study focused on preschool children, defined as 2 to 5 years of age. These questions address the problem that some parents do not provide their preschool children with the nutrition necessary for healthy growth and development and to achieve their full potential in school. The RQs were as follows:

RQ1: What are the perspectives parents describe concerning the nutrition they provide for their preschool children?

RQ2: What challenges do parents describe in providing the nutrition necessary to support their preschool children's healthy growth and development and to achieve their full potential in school?

RQ3: How do parents describe the support they receive from their children's childcare center in delivering the nutrition necessary to support their preschool children's healthy growth and development and to achieve their full potential in school?

Conceptual Framework

The work of Contento (2008) provided the conceptual framework for this study. Contento examined how parents choose the foods they provide for their children; and to do so, considered personal and environmental factors such as beliefs, attitudes, knowledge, skills, and cultural considerations. This premise was elucidated in the responses by the parents in this study to the interview questions, which delved into how parents make decisions about the food they provide for their children, how much they consider the nutritional value of the food they provide, and to what extent they are aware of the nutritional requirements for preschool children. RQ1 addressed this line of inquiry.

Contento (2008) also outlined the challenges parents can face in providing a nutritional foundation that meets the needs of their preschool children, such as food availability, accessibility, cultural practices, family traditions, material resources, and food marketing practices. Sometimes parents may find it difficult to provide the nutritionally balanced food for their children that they would like based upon one or more of these challenges. I explored these factors in greater detail in order to compliment the inquiry into the decision-making process of parents and their knowledge of nutritional requirements in RQ2.

Contento and Koch (2021 explored nutritional intervention programs and how they might be supported through nutrition education outreach in childcare centers.

Contento and Koch recognized that many children spend a good part of their day in preschool and childcare, and often eat several meals there during the day. I explored parents' perspectives on the nutritional support they receive from their children's childcare center to more fully understand the foundational problem of why some children are not receiving the nutritional requirements they need to be developmentally healthy and to fulfill their potential in school. This line of inquiry was addressed by RQ3.

The work of Contento provided a useful framework for this study because it concerns reasons why some parents do not provide their young children with the nutrition necessary for healthy growth and development. This framework informed the study's RQs. I also used Contento's work to shape the interview questions about factors that affect parents' provision of nutrition for their children. More details about Contento's ideas are presented in Chapter 2.

Nature of the Study

I used a basic qualitative design with individual, in-depth interviews for this study. A qualitative research design was more appropriate than a quantitative research design or a mixed-methods research design. This is because I explored the perspectives of parents to determine factors they believe affect their nutrition decisions for their children, instead of measuring the effect of any predetermined independent variables (see Alchemer, 2010; Gammelgaard, 2017). The key concept that I explored was the perspectives of parents regarding their provision of their preschool children's nutrition.

I conducted semistructured, individual, in-depth interviews with 10 parents of preschool children who lived or worked in a suburban community in the western United States. Data from the United States Census Bureau (2021) show that this community was moderately diverse in terms of race and ethnicity, that almost two thirds of the population owned their homes, and the median household income was modest at less than \$75,000 per year. To identify parents who might participate in this study, I contacted center directors of my acquaintance who worked in preschools located in the target region. I asked for their assistance in identifying prospective parent participants and confirmed that their center met the criteria of using the recommended Child and Adult Care Food Program (CACFP) meal plan and following the National Association for the Education of Young Children (NAEYC) nutrition guidelines. I also confirmed with the center directors that their center enrolled at least 25 preschool children aged 2 to 5. The first centers that met these criteria and whose directors agreed to assist me in identifying prospective parent participants were selected to distribute a flyer to parents that described the study.

Parents were identified using purposeful sampling. Interviews were conducted and recorded virtually and then transcribed for analysis. I analyzed the data using thematic coding to segment, categorize, summarize, and reconstruct the data in a way that captured the important themes and concepts (see Given, 2008; Saldana, 2016).

Definitions

Food fussiness: In children, selective food intake involving rejection of foods that are familiar as well as those that are unfamiliar (Nekitsing et al., 2018). Food fussiness is typically measured by pediatricians using the Food Fussiness Subscale of the Child Eating Behavior Questionnaire (Kwon et al., 2017).

Food neophobia: Children's unwillingness to try new foods; it is often assessed by pediatricians using the Child Food Neophobia Scale (Kwon et al., 2017).

Nutrition education: Efforts that are intended to increase proficiency and knowledge about food-related practices, such as skills and behaviors, healthy food choices, culture and traditions, the role of emotions, and food systems (Truman et al., 2017).

Nutritious food choices: Food choices that provide essential nutrients and caloric intake required for optimal growth and development of preschool children based upon the recommendations in the Dietary Guidelines for Americans (USDA, 2022d).

Assumptions

Assumptions are often necessary to conduct a qualitative research study because some of the beliefs of the participants central to the study may not be objectively demonstrated, yet the beliefs must be relied upon to enable the study (Simon & Goes,

2013). There were four assumptions necessary for this qualitative research study. First, I assumed that the participants would be truthful and complete in their responses to the interview questions and subsequent follow-up questions. Second, I assumed that the participants were generally representative of preschool parents and that their children had nutritional needs typical of preschool children. A third assumption was that the participants had the responsibility for feeding their children and that this responsibility was not primarily delegated to others. Fourth, I assumed that the participants had an interest in their children's nutrition and their school success. These assumptions were necessary for the study because they suggested factors that could affect parents' perspectives or that could affect the validity of the results, but which were unknown and unknowable by me as the researcher.

Scope and Delimitations

The scope of qualitative research encompasses the study topic and the boundaries within which the research can be conducted, including the time frame and population (Root, 2021). The scope of this study was the perspectives of parents living in the western United States regarding the nutrition they provide for their preschool children. According to Root (2021), the delimitations in a qualitative research study determine the boundaries of the study, including the size of the population to be studied. This study was delimited to 10 parents of preschool children who lived in the targeted community. Ravitch and Carl (2016) confirmed that a relatively small number of participants is appropriate to achieve data saturation in an interview-based qualitative study. According to Ford (2020), in-depth interviews following a narrative inquiry model yield rich and

descriptive data in response to the RQs. Carefully defining the scope and delimitations of this qualitative study may contribute to its transferability for educators, researchers, and policymakers in other contexts.

Limitations

Limitations in a qualitative research study are concerns that can reflect weaknesses in the design, methodology, and conclusions of the study (Root, 2021). Simon and Goes (2013) stated that limitations are generally beyond the researcher's control yet need to be recognized and documented. Doing so can help ensure the dependability and transferability of a qualitative research study. I carefully considered the limitations of this qualitative study to minimize any potential research concerns and to support the dependability and transferability of its findings.

One potential limitation was that participating parents might have felt reluctant to fully answer the interview questions because they might have been apprehensive about being judged. I let them know from the very beginning that their interview would be conducted in a nonjudgmental environment in which they could speak freely and confidentially. I also informed participants that their identities would not be included in the data or revealed at any time. A second potential limitation was the use of virtual interviews via WebEx to collect data from participants. This made it difficult for me to discern the body language of the participants when they responded. Therefore, I was extremely sensitive to participants' tone of voice and made sure to ask an appropriate amount of follow-up questions. Before beginning each interview, I ensured that the

participant had access to the technology needed for a virtual interview and that they were comfortable with the format.

A third limitation that could have potentially affected the ethical considerations of this study was my own personal views regarding the importance of nutrition for preschool children. I was very careful to make sure that I did not persuade the nature of the study based upon my personal beliefs, experiences, or preferences concerning my views of early childhood nutrition standards. I strove to collect data to allow for an objective analysis of parental perspectives. To minimize potential biases, I was vigilant to avoid influencing participants during the interviews and in my analysis of the data. I also utilized reflective journaling to aid in reflexivity, as suggested by Ravitch and Carl (2016).

Significance

The findings of this basic qualitative study may be significant in that they may increase the understanding of how parents perceive the nutrition they provide to their children and how this nutrition affects their children's well-being and academic performance. The research may make an original contribution to the field concerning how parents make their decisions about food choices for their children and what challenges they face in this endeavor. This study may also yield valuable insights about the support that parents would like to receive from their children's childcare center in providing a healthy nutritional foundation for their children. The findings from this investigation may be significant because, according to Dev et al. (2017), many children spend nearly as much time in a childcare center and preschool as they do at home. Hong

et al. (2018) recommended that childcare providers can support parents in fulfilling their children's nutritional needs for healthy growth and development. The results of this study may inform early childhood educators and policymakers about the perspectives of parents regarding early childhood nutrition. Furthermore, the results may inspire positive social change by supporting children's healthy growth and development and helping them to achieve their full potential in school.

Summary

In this study, I explored the perceptions of parents of preschool children to develop a deeper understanding concerning the nutrition they provide for their children, the challenges they face in doing so, and the support they would like to receive from their children's childcare center. This was accomplished by conducting one-on-one, semistructured virtual interviews of parents with children enrolled in preschool. Because some parents may not realize the importance of childhood nutrition and may not provide children with a balanced diet that follows recommended guidelines (CDC, n.d.; National Center for Health Statistics, 2020), it is important to explore parents' perspectives regarding childhood nutrition and determine what supports they need (Hong et al., 2018). The results of this study may lead to increased collaboration opportunities between parents and early childhood educators to support a healthy nutritional beginning for children. In Chapter 2, I describe the search for literature pertaining to my study, provide an in-depth description of the study's conceptual framework, and present a review of current research relating to early childhood nutrition.

Chapter 2: Literature Review

The problem that was the focus of this basic qualitative study is that some parents do not provide their preschool children with the nutrition necessary for healthy growth and development, and to help them achieve their full potential in school. A good nutritional foundation is an important component of the cognitive and physical growth and development of young children (Wiseman et al., 2016). In addition to healthy growth and development, good nutrition has also been recognized to support success in school (DiGirolamo et al., 2020). When parents provide their young children with healthy food options, they provide essential support for brain function, healthy bodyweight, and the ability to make better food choices on their own as they age (Wiseman et al., 2018). Some parents may be uninformed about the importance of childhood nutrition and what resources may be available to them to help support their children's healthy growth. The CDC (n.d.) estimated that most children in the United States do not meet the nutritional recommendations for children in the Dietary Guidelines for Americans. Forward (2017) stated that poor nutrition is the primary contributing factor to the childhood obesity crisis in the United States.

Contento (2008) suggested that some parents are not aware of the importance of good nutrition in correlation with their children's health and development, and because of the challenges they face, such as food affordability concerns, may make poor nutritional choices for their children, which can even lead to household food insecurity. The USDA (2022c) reported that for 2017 the overall rate of household food insecurity in the United States was 27.3%. Drennen et al. (2019) suggested that parents with young children who

experience food insecurity may not fully understand the severity or effect it has on their children's cognitive and physical growth and development, as well as potentially limiting their full potential and achievement in school.

Therefore, the purpose of this study was to explore the perspectives of parents concerning the nutrition they provide for their preschool children, in order to provide insights for parents as well as policymakers about ways that parents can help their children develop a healthy nutritional foundation. In this chapter, I discuss the literature search strategies, present the conceptual framework, review current literature, and provide a summary of the chapter.

Literature Search Strategy

Walden University Library. Databases included ERIC, SAGE Journals, and Dissertations & Theses @ Walden University. I also used the search engine Google Scholar, the results of which often led me to SAGE Journals, another database, and to ResearchGate, a repository of academic literature, as well as governmental websites. Whenever possible, I focused on peer-reviewed studies conducted and published within the 5 years prior to the completion of this study. Search terms included early childhood educator parental support, early childhood nutrition education, early childhood nutrition, nutrition and academic achievement, nutrition and school success, parental interviews, parent nutrition education, parental perspectives, qualitative case studies, qualitative OR quantitative, semistructured interview guide, thematic coding and analysis, World Health

Organization growth charts, healthy style eating pattern, nutrition, good nutrition, nutrition and preschool children, and Dietary Guidelines for Americans.

Conceptual Framework

The conceptual framework for this qualitative study was the work of Contento (2008). Contento (2008) examined how people choose the foods they eat, citing personal and environmental factors such as beliefs, attitudes, knowledge, skills, and cultural factors. Contento also studied the challenges that families with young children can face in providing good nutrition for their children, such as food availability, accessibility, cultural practices, family traditions, material resources, and food marketing practices.

Contento and Koch (2021) suggested that early childhood nutrition can be improved with early intervention and an introduction to a nutritious diet for young children at an early age. Contento and Koch proposed that the earlier children are exposed to healthier food options and encouraged to freely choose these foods, the more likely they are to develop a healthy lifestyle that is fueled by nutritious food choices.

Several authors have confirmed and extended the work of Contento (2008) and Contento and Koch (2021). For example, Srivastava et al. (2019) found that parental beliefs and traditions matter and contribute to the healthy development of nutrition for preschool children. Nepper and Chai (2016) examined the challenges parents sometimes face that interfere with nutritious meal choices for their young children. DiGirolamo et al. (2020) found that the earlier a child is provided with good nutrition, the higher the chance of them having positive growth and development. They also found a strong correlation

between a child's early introduction to nutrition and cognitive development, which can be beneficial to the child's school success.

The work of Contento (2008) provided a useful framework for my study because it suggests reasons why some parents do not provide their preschool children with the nutrition necessary for their healthy growth and development. It also supports efforts to close the gap in parenting practice through targeted parent nutrition education and awareness. This study benefited from this framework in guidance for the individual indepth interviews with parents exploring their perspectives regarding child nutrition and the challenges they experience in providing their children with a healthy nutritional foundation.

Literature Review Related to Key Variables and Concepts

In the literature review, I examine current research regarding the role of nutrition in the preschool years of a child's development, and the important connection with their health and success in school. I explore research concerning the nutritional requirements for preschool children in order to establish a nutritional baseline for this study. I examine contemporary research focusing on how parents make their decisions concerning the nutritional food choices they provide for their young children. Challenges that parents may encounter in providing nutritional food choices are described as reported in the literature, and I discuss the nutrition support and nutrition education that childcare centers provide for their children and their parents. This review explores key factors that may affect parents' perspectives regarding the nutrition they provide their preschool children.

Nutritional Requirements of Preschool Children

The nutritional foundation for preschool children for optimal growth and development is based upon an adequate intake of healthy proteins, carbohydrates, fats, oils, vitamins, minerals, and water (USDA, 2022d). To achieve optimal growth and development, a young child's healthy diet should provide enough essential nutrients to support developmental processes throughout each stage of growth while keeping a balance of energy and avoidance of excessive weight gain or underweight issues (USDA, 2022d). Key nutrients for cognitive and physical development, such as macronutrients that come from proteins, carbohydrates, and fats, as well as micronutrients, such as vitamins and minerals, along with adequate hydration, provide support for healthy growth and development and help a young child's body to process necessary chemical reactions from foods (Cusick & Georgieff, 2017). Healthy brain functions, nervous system maintenance, physical and cognitive development, and sensory system connections all require an adequate intake of nutrient-rich foods (Schwarzenberg & Georgieff, 2018). Proteins, carbohydrates, fats, vitamins, minerals, and water all contribute to a young child's healthy growth and development, and each provides a different support to a growing and thriving body (USDA, 2022d).

Young children need a variety of proteins for their bodies to function properly and sustain healthy development (USDA, 2022d). Proteins help build and repair body structures, produce body chemicals needed to balance nutrients, carry nutrients to cells, and help regulate body development by strengthening muscle tissues, all of which are important for a young child's growing body (Ferreira & Butler, 2020). Proteins can be

found in both animal products and plant-based foods, and they are essential for a young child's healthy growth and development (USDA, 2022d). Ongoing research has proposed that children can live healthy lives and achieve growth and developmental goals with a plant-based diet (McDougall, 2013).

Simple and complex carbohydrates provide a child's body with the most important source of energy, and ideally, they originate from healthy food choices (USDA, 2022d). Simple carbohydrates are made up of sugars, and they are utilized during the body's food processing and refining stage of sugar conversion into energy (Ferreira & Butler, 2020). Simple carbohydrates are absorbed quickly to supply the energy children need for healthy growth and development, especially for the central nervous system and brain, and they are also an important immunity source that helps protect young children against disease (Cusick & Georgieff, 2017). Complex carbohydrates, or foods that produce starch, are primarily found in foods such as whole grains, pasta, potatoes, beans, and vegetables, and the body changes complex carbohydrates into simple sugars to provide the energy children need for healthy growth and development (McDougall, 2013). Additionally, complex carbohydrates contain various vitamins and minerals, as well as fiber, all of which are essential elements necessary for young children's good health (USDA, 2022d).

Healthy fats are a natural component of various foods such as avocados, nuts, olives, and oils (USDA, 2022b). They help keep a child's blood sugar balanced, and help decrease potential long-term health risks, such as future cardiovascular disease, Type 2 diabetes, arthritis, cancer, and Alzheimer's Disease (Mayo Foundation for Medical Education and Research, 2021). Healthy fats have additional benefits for young children,

such as helping their growing bodies absorb vitamins and minerals, acting as a powerful source of anti-inflammation, and supporting many of the essential functions in a young child's body, including blood clotting, healthy cell growth, muscle movement, proper brain development, hormone production, and immunity responses (Ferreira & Butler, 2020).

Vitamins and minerals are important components of good nutrition for young children (USDA, 2022d). They help fight diseases and support healthy brain functions, and they are necessary for the absorption of proteins, carbohydrates, and fats (Cusick & Georgieff, 2017). Vitamins and minerals can also support and boost immunity, vision, fertility, healthy bone and teeth development, as well as contribute to lifelong diabetes management, lung functions, and cardiovascular health (Ferreira & Butler, 2020).

Holben and Marshall (2017) recommended parents follow the Academy of Nutrition and Dietetics (2017) guidelines, which recommend that young children consume fruits and vegetables daily to obtain adequate amounts of vitamin rich foods. According to the Mayo Foundation for Medical Education and Research (2021), all the important vitamins and minerals a young child needs for healthy development can be found in a healthy balance of proteins, vegetables, fruits, fortified breads and cereals, beans, and whole grains. Baroni et al. (2018) added that while milk has traditionally been considered to be a primary provider of the calcium intake needed for strong bone and teeth growth, other options are available for calcium intake that can be offered to young children who may have a milk allergy or are lactose-intolerant, such as plant-based milk alternatives like almond milk and calcium fortified juices.

Water provides a young child's body with hydration and oxygen and is a vital requirement for good health (USDA, 2022d). Water helps a young child's body regulate body temperature, carry nutrients and oxygen cells to the bloodstream, provide shock absorption, and flush away waste and toxins, and water also helps cushion joints and protect organs and tissues (Ferreira & Butler, 2020). Many foods, especially fruits and vegetables, contain a lot of water, and an excellent source of water for a young child is to simply drink natural, unsweetened spring water (USDA, 2022d).

These building blocks of good nutrition have been codified for parents as well as healthcare providers into the Dietary Guidelines for Americans. The Dietary Guidelines for Americans (USDA, 2022d) was originally developed as part of the 1990 National Nutrition Monitoring and Related Research Act. Their mission is to provide science-based and evidence-based recommendations on healthy food choices to promote good health for Americans of all ages, and they are an important resource for many federal food and nutrition recommendations and programs, and are often relied upon by health professionals and nutrition program administrators, as well as nutritional researchers (USDA, 2022d). The Dietary Guidelines for Americans (USDA, 2022d) embody the idea that a healthy eating pattern is not a diet, but an adaptable lifestyle in which children can enjoy nutritious food choices that meet their personal, cultural, and traditional preferences.

The recommendations for young children from the Dietary Guidelines for Americans (USDA, 2022d) include a variety of fruits and vegetables, whole grains, low-fat dairy products, a variety of protein-enriched foods, and healthy oils and fiber, all of

which are important nutrients for proper growth and development during the preschool years. Holben and Marshall (2017) also recommended that whole grain foods, such as brown rice and oatmeal, should be included in young children's diet, along with a healthy mix of legumes, since they can provide children with much needed protein and dietary fiber. Ramsay et al. (2017) stated that a variety of fruits, vegetables, proteins, and whole grains for young children can be an important influence for improving children's overall diet quality and health status later in life. Blackstone et al. (2018) suggested that an emphasis should be placed on minimally processed fruits and vegetables and those low in added salt and sugar, which are consistent with the Dietary Guidelines for Americans recommendation that a healthy lifestyle for young children should limit the consumption of saturated fats, trans fats, added sugars, and sodium. Emphasis on minimally processed fruits and vegetables has been promoted as part of MyPlate, a nutritional outreach program of the USDA (2022d) for children and their parents, and which the parents who participate in this study may be familiar.

Nutritionists have also explored calorie intake in addition to the building blocks of nutrition to offer recommendations and guidelines to promote the health and well-being of children. According to Blackstone et al. (2018), calorie intake is a fundamental part of achieving and maintaining a healthy balanced diet for young children. Blackstone et al. (2018) also noted that since all foods and many beverages contain calories, the total number of calories can vary depending on the macronutrients being consumed, and the total number of calories a young child needs each day depends upon their age, gender, height, weight, and level of physical activity. The recommended calorie intake and also

vary based upon a child's need to lose, maintain, or gain weight (Blackstone et al., 2018). The USDA (2022c) recommended 1,000 to 1,600 calories per day for young children, based upon their age, gender, and level of physical activity. The daily macronutrient recommendations in USDA's healthy eating pattern for young children, which are based upon the agency's recommended calorie level for this age group, range from 44 g to 78 g for proteins, 129 g to 197 g for carbohydrates, and 14 g to 25 g for fiber (USDA, 2022c). The Dietary Guidelines for Americans (2022) recommend that the food consumption for young children should include fewer than 10% of the total calories from added sugars per day, fewer than 10% of the total calories from saturated fats per day, and fewer than 1,200 to 1,500 mg of sodium per day.

Young children grow in spurts, so their appetites change, and their individual nutritional and calorie requirements may need to be adjusted accordingly to support healthy growth and development (American Academy of Pediatrics, 2020). Boundy et al. (2020) stated that pediatricians in the United States regularly assess the growth and nutrition of children throughout childhood, and they often measure a child's growth progression using the World Health Organization (2022) growth chart. This chart measures the standards of a child's development, such as their length or height for their age, their weight for their age, and their body mass for their age (Boundy et al., 2020). Healthy growth patterns are seen when children receive sufficient nutrition to support expected growth, as indicated by the standards of the World Health Organization growth chart (Drennen et al., 2019). Although parents are encouraged to adjust their child's nutritional requirements accordingly, a young child's growth rate is normally slower than

it was during infancy, and is often accompanied by a reduced appetite, which can sometimes be surprising to parents and lead to the development of poor eating habits (Drennen et al., 2019).

Contemporary nutritional research often relies upon the Dietary Guidelines for Americans as a starting point and a baseline for their studies, and the Dietary Guidelines for Americans is continually updated with the latest nutritional research. These guidelines might be familiar to parents from visits to their children's childcare center, healthcare provider, or pediatrician (American Academy of Pediatrics, 2020). Governmental agencies and programs, such as the CDC, USDA, MyPlate, CACFP, and NAEYC, also depend upon the Dietary Guidelines for Americans as a reference and starting point for their nutritional outreach programs. This study will use the Dietary Guidelines for Americans (2022) recommendations as a nutritional baseline and primary reference for the nutritional for preschool children for optimal growth and development, as well as support to achieve their full potential in school. However, most young children in the United States are currently not meeting the recommendations for good nutrition in the Dietary Guidelines for Americans.

Parents' Nutritional Food Choices for Preschool Children

Parents are the primary providers of nutritious food choices for preschool children. Many factors enter into the food choices parents make for their preschool children. Contento (2008) suggested that food availability, food affordability, generational family traditions, cultural preferences, time constraints, children's preferences and health concerns, degree of knowledge concerning the nutritional

requirements for young children, as well as many other factors are all things that go into the food choices parents provide for their preschool children.

A parent's understanding of the nutritional requirements for healthy growth and development of young children is an important factor in providing nutritious food choices for their children. According to Black et al. (2020), early childhood nutrition awareness by parents can be essential in a child's developmental growth and progress, because challenges like under nutrition, micronutrient deficiencies, becoming overweight, and children not reaching their developmental potential are often a result of inadequate nutritional intake. Yen (2020) added that parental attention to fulfilling the nutritional requirements for their young children is a critical element necessary for children's normal growth, and is vital for a child's healthy development, both to protect their health and support their growth and to introduce and reinforce beneficial eating habits. Kurtulmus (2016) emphasized the importance of parental involvement in their children's nutritional experience, and suggested that when parents need nutrition education, parent/teacher conferences could be used to introduce information to parents about providing their children with healthy nutritional food choices.

Early childhood educators are often aware of the importance of nutritional awareness of parents. Childcare centers ideally offer nutrition education outreach for the parents of the children in their center. Kiral (2019) explored teacher perceptions concerning the responsibilities of parents to provide healthy food choices for their children and found that teachers felt that although some of the parents were generally aware of their responsibilities to provide nutrition for their children, at least half were not

compliant with fulfilling their responsibilities, possibly because of a lack of nutritional awareness. Stage et al. (2018) further examined Head Start teacher perspectives of parental influence on the nutritional awareness of their preschool children and recommended that parents needed more training and collaboration opportunities to learn ways to promote positive nutrition and understand why healthy food choices were so important for their children.

Throughout my research, I found that studies exploring the nutritional awareness of parents of young children were often quantitative and tended to provide secondhand information, although they were generally accurate and informative. This gap in knowledge regarding firsthand accounts from the perspectives of parents became one reason for a qualitative focus for my study: exploring the perspectives of parents regarding their children's nutrition. The results and conclusions from the qualitative studies I reviewed that analyzed the nutritional awareness of parents from the firsthand viewpoints of parents often agreed with the quantitative studies. For example, Schuster et al. (2019) conducted a qualitative study featuring a semistructured interview process based upon open-ended questions. The parents in Schuster et al.'s study discussed often making food decisions for their children based on their own childhood mealtime experiences, with some recalling positive experiences and others recalling negative ones. The positive experiences primarily came from having parents who initiated nutrition goals and were motivated to incorporate nutritional balance at every meal. Parents with negative experiences often attributed these to less exposure to home-cooked and nutritious meals, as well as affordability concerns, such as the family not having enough

money for balanced and nutritious meals. These findings concur with those of Jackson et al. (2019), who conducted a quantitative study in which they examined the connection between adverse childhood experiences of parents and the nutritional experiences they provided for their children, based upon data from the 2016 National Survey of Children's Health.

Time and context were also important considerations for parents in providing food choices for their young children. According to Loth et al. (2018), most of the parents interviewed in their qualitative study felt that their use of specific food-relevant parenting practices varied across time and context. Specifically, parental food-relevant practices might change with consideration of the eating occasion, or perhaps with the context, such as the day of the week and time of the day (Loth et al., 2018). Parents in their study talked about creating their food practices around food availability and routines, and some parents also discussed their home environment as either a hindrance or a support to their parenting practices in providing healthy food choices for their children (Loth et al., 2018). Schuster et al. (2019) reported some parents indicated that not having enough family time together during mealtimes affected how they provided food for their children. In a similar finding, Scaglioni et al. (2018) suggested that family meals have significant social importance in a child's life and recommended that parents should provide a range of healthy food choices for their children, learn how to establish long-term healthy habits, and provide pleasant eating patterns for their children, as well as realizing that they are important role models for their children's nutritional development; however, even when

parents are aware of the nutritional needs of their young children, sometimes they face challenges in providing their children with healthy and nutritious food choices.

Nutritional Challenges Parents May Encounter

When parents try to provide their young children with healthy food choices based upon their nutritional awareness and cultural and generational traditions, they may be challenged in many ways. Parents may find it difficult at times to provide nutritious food choices by their young child's developing food preferences. According to Nekitsing et al. (2018), food dislikes can occur once children begin to develop their palate and express their opinion about their food options. Food fussiness, such as selective food intake involving rejection of foods which are familiar as well as those which are unfamiliar, can also develop in young children, and this can be a challenge that parents face as their children begin to develop their food preferences (Nekitsing et al., 2018). Dahlsgaard and Bodie (2019) found that excessively picky eating among young children is a common problem that can develop from lack of exposure to new foods or rejecting new foods, as well as avoidant/restrictive food intake.

Kwon et al. (2017) stated that food fussiness is widespread among young children. According to Smith et al. (2017), food fussiness can develop when children become unwilling to accept and try new foods, either because they are unfamiliar, have had little exposure, reject the sight, smell, or taste, or because they have developed a preference of high fat, salt, and sugary foods, such as fast foods. Children ideally learn to like a wide variety of healthy foods through exposure in their early feeding environment, and while children may naturally reject some foods during this learning process,

persistent refusal may be perceived as fussy or picky eating (Harris et al., 2019). Smith et al. (2017) found that food fussiness can sometimes be more associated with a child's behavior and less associated with their food preference, as they may exhibit greater fussiness when there is a food offered because they simply do not want to be cooperative. Kwon et al. (2017) suggested that food fussiness and food neophobia are highly correlated, especially in early childhood, and both are often associated with a low intake of fruits and vegetables, although the development of food avoidance behaviors, or food neophobia, can sometimes be a consequence of the natural evolutionary process in which children's instinctive behavior is to avoid unknown foods.

Food neophobia in children, the unwillingness to try new foods, is often assessed using the Child Food Neophobia Scale (Kwon et al., 2017). Food fussiness and food neophobia are known to peak between 2 and 5 years of age, and children in this age group are also prone to acquiring new food preferences as their sensory abilities change, so an introduction to healthy food choices is very important for preschool children (Kwon et al., 2017). Both of these conditions can also lead to streak eating, in which children only want to eat the same thing for a long period of time (Dahlsgaard & Bodie, 2019). Kwon et al. (2017) stated that food fussiness and food neophobia can have an adverse effect on healthy eating, since by choosing only preferred familiar foods, children may limit the quality and variety of their diet, especially when they select unhealthy foods.

In response to these concerns, Wiseman et al. (2018) suggested that young children should be given choices by their parents to decide what healthy food choices they want, because this way children can begin to develop their own nutritional decision-

making skills and may be more encouraged to choose healthy foods because they have the option to choose for themselves. Hong et al. (2018) investigated whether family involvement could increase young children's healthy food preferences, and found that a family backpack activity, where children were allowed to pack their own backpack with healthy food choices, with parental encouragement and guidance, increased their consumption of fruits and vegetables and led to an increase in healthy food preferences. It may be informative to learn whether parents participating in the interview process of this study are practicing similar strategies to encourage healthy food preferences.

According to De Cosmi et al. (2017), young children's eating behaviors and food preferences are typically influenced by the food choices of their family. The home and community environment play a very important role in the earlier stages of a child's food acceptance and preference development (Smith et al., 2017). For example, it has become convenient sometimes for working families who just want to get something quick and appease their hungry children to begin to rely upon unhealthy fast food (Jia et al., 2019). Vollmer and Baietto (2017) concluded that some young children's food preferences can be developed by foods that parents give them to gain control, including using restricted unhealthy foods high in fat, salt, and sugar to regulate their child's emotions or as a reward, and when foods, especially unhealthy foods, are used as a reward or comfort food, it can become a negative influence for children and cause them to associate emotion regulation with unhealthy consumption. According to Jia et al. (2019), fast food restaurants have become more influential in the food choices of parents because of the convenient availability and relatively low price of fast food, which typically contains

high levels of calories, saturated fat, trans-fat, sugar, simple carbohydrates, and sodium, and can lead to their children developing unhealthy food preferences.

De Cosmi et al. (2017) stated that when children's early exposure to foods includes mostly non-nutritious snacks and fast food, young children tend to prefer high-energy, sugar, and salt foods, and reject trying new and more nutritious foods. Fast food is popular among many young children and their parents because of availability, taste, and marketing strategies, and children can be drawn to want fast food because of the colors they see, the toys, the idea of having something readily available, and not having to wait for the food to be prepared (Jia et al., 2019). Scaglioni et al. (2018) also found that media promotion aimed at young children sometimes resulted in low-nutrition food preferences rather than healthy food choices. De Cosmi et al. stated that exposure or lack of exposure to certain foods altered a young child's developing food preferences and willingness to accept or reject certain foods, which can lead to a diagnosis of food fussiness or food neophobia.

Scaglioni et al. (2018) suggested that parental feeding practices are important determinants of their young child's developing food preferences, and Nekitsing et al. (2018) proposed that young children who have early exposure to healthy food options develop healthy food preferences by direct contact, such as through tasting, feeling, seeing, and smelling, and also by observing their food environment and watching the eating behaviors of others, especially their parents. Vollmer and Baietto (2017) asserted that young children prefer high fat, salt, and sugary foods less if their parents make healthy food available at home, model healthy eating in front of them, create involvement

in meal preparation, and explain to their young children why healthy foods should be consumed. Srivastava et al. (2019) also concluded that the food environment, mealtime routines, and the role modeling of their parents were important considerations for a young child's food preference development. However, even when parents and their young children are prepared to make healthy food choices, their ability to act on these choices may be limited by food affordability. Food affordability concerns can also lead to food insecurity in young children.

Although many families in the United States have access to nutritious food in grocery stores, food markets, farmers markets, and health food chains, sometimes families experience a lack of food affordability (Daniel, 2020). According to Daniel (2020), many families struggle to afford the cost of groceries to sustain their family's eating practices consistently over time, or they do not have immediate access to nutritious food in their local communities. When parents of young children are challenged with food affordability concerns, it may be a result of not having the presence of a fullfunctioning, affordable, and nutritionally sufficient food store in the proximity of their neighborhood, resulting in a pattern of nutritious food scarcity (Bryant et al., 2020). Convenience stores may not have a similar selection compared to supermarkets or may not offer as many fruits and vegetables as supermarkets, and families may not be accustomed to obtaining their food from alternative food sources like home and community gardens or farmers markets (Bryant et al., 2020). Food environments, the availability, affordability, convenience, and quality of foods, are all vital to support a young child's health and nutrition (Downs & Demmler, 2020).

Keith-Jennings et al. (2019) recommended that since young children rely on their parents for food intake, it is crucial that parents are aware of their children's feelings of food security, or lack of food security, and seek out help through their local community for support and resources from local food banks, free meal programs, and county assistance when they experience food affordability concerns. Daniel (2020) suggested that food affordability can sometimes arise from various resource constraints throughout the month, such as unexpected expenses. Low-income families often experience a higher level of food insecurity because they simply cannot afford to buy the foods necessary to maintain a healthy diet for their young children on a regular basis (Farrell et al., 2018). According to Downs and Demmler (2020), food environments for young children can be influenced by food advertising or product promotion, making it even harder for families who have food affordability concerns to feed their children nutritious diets, because children see what they like in these advertisements and sometimes reject a healthier option which may be less expensive. Bryant et al. (2020) suggested that during the preschool years it is especially important that growth is supported through consumption of healthy foods, because a great deal of children's learning, growth, and development occur, and all are influenced by nutrition. Oliveira et al. (2020) suggested that food insecurity is a serious challenge that can dramatically affect young children's proper growth and development. When families experience food affordability challenges, it can affect their young children's healthy development and their sense of food security (Bryant et al., 2020).

Jackson et al. (2019) examined the connection between food affordability and food insecurity. Jackson et al. found that 4% of the families sometimes or often could not afford enough to eat and were designated as experiencing moderate-to-severe food insecurity. Twenty-one percent of the families could always afford enough to eat, but could not always afford to purchase nutritious foods, and they were designated as experiencing mild food insecurity (Jackson et al., 2019). Seventy-five percent of the families were consistently able to afford good, nutritious meals and were designated as being food-secure. Although 75% of the families surveyed by Jackson et al. were considered food-secure, as many as 25% of the families experienced some level of food insecurity based upon affordability concerns.

Mulik and Haynes-Maslow (2017) examined whether families were able to afford nutritious meals based upon the MyPlate guidelines and the Dietary Guidelines for Americans and found that food affordability concerns resulted in low-income families being less likely than higher income families to follow these nutritional guidelines.

Trauma-informed nutrition assistance programs, as well as early mental health assessments, have been designed to provide relief and support to families in an attempt to correct the negative behavior that children can develop from experiencing food insecurity (Jackson & Testa, 2020). When parents are challenged with food affordability, it can become a critical problem for their young children, because they depend on their parents to ensure that they receive proper nutrition on a regular basis, and young children may become unsure about their next meal, which can place them at risk for developing feelings of food insecurity (Bryant et al., 2020). When children are in preschool, they

have the option to eat at school, but sometimes that may be their only meal for the day (Shankar et al., 2017). According to Shankar et al. (2017), if a family is identified as food insecure in primary care settings, enhanced developmental behavioral assessment and possible intervention are often warranted.

Jackson et al. (2019) reported that a food insecure household on average remains food insecure for 7 months out of the year, and the stress and anxiety associated with food insecurity can characterize parent-child interactions beyond mealtime, because parents who are anxious, depressed, or stressed tend to be less responsive and more inclined to provide less than nutritious foods to satisfy their children. Oliveira et al. (2020) suggested that young children's diets, meal patterns, and response to household stress differ significantly by age, and that the experience of food insecurity may become more serious across early developmental stages. Food insecurity and the accompanying emotional stress have a strong correlation and can affect young children's ability to regulate their emotions and behavior (Shankar et al., 2017). Exposure to household food insecurity has been linked to many outcomes of mental and behavioral development and health concerns among young children, and parents who experience food insecurity often do not have the resources to ameliorate the effects that food insecurity can have on their children (Jackson & Testa, 2020). When young children are not being provided with proper nutrition for various reasons, they can go into a trauma response mode trying to cope with feelings of hunger, lack of energy, and lack of focus because they are not being nourished, and their behavior can decline due to a lack of energy, and they often cannot

express themselves enough to communicate how critically they need to eat (Shankar et al., 2017).

Jackson et al. (2019) stated that young children can develop food insecurity when there is a limited availability of nutritionally adequate foods because their parents experience an inability to acquire acceptable foods, and the child faces uncertainty of how frequent the foods will be available. Food insecurity is often unpredictable, and this food instability is a distinct aspect of food insecurity that underlies many of the coping strategies observed in food-insecure households (Drennen et al., 2019). The coping strategies sometimes relied upon by young children, such as seeking calorically dense and satiating foods that are often nutritionally inadequate, can limit dietary variety and promote overeating when food is available (Jackson et al., 2019).

Jackson et al. (2019) found that parents who had experienced a history of adverse childhood experiences themselves were at a significantly higher risk of developing a food insecure household, and when their children subsequently experienced food insecurity, it often affected their social skills, their ability to function properly in settings outside of their household, and their emotional well-being. Families that experience generational food insecurity may have a profound effect on children, because this form of food insecurity is a more severe form that directly impacts the availability of food to children (Jackson et al., 2019). According to Adams et al. (2020), parents should be aware of how their mental and emotional stress, as well as their nutrition education and meal-time practices, can affect their young children and lead to food insecurity, because parents who are frequently anxious, depressed, or stressed tend to be less responsive to their

children's dietary needs. Parental stress can result in their young children being at an increased risk for food insecurity and developmental problems, including their ability to achieve their full potential in school. Children who experience food insecurity early on often have a harder time focusing during school, and this experience can carry with them into primary-age school years (Jackson & Testa, 2020). Many early childhood educators are aware of this concern, and have developed nutritional education and support programs to help parents provide nutritious food choices for their young children.

Nutrition Support in Childcare Centers

In early childhood, children spend a significant amount of time at a childcare center where they are provided with meals at least three times a day, sometimes four (Dev et al., 2017). Positive mealtime experiences at their childcare center can help children shape healthy eating behaviors that continue later in life. For example, Wiseman et al. (2016) found exposure to a healthy nutritional lifestyle in a preschool setting influenced children's knowledge of healthy food choices, and increased children's ability to identify healthful foods. They concluded that when preschool children learn about nutrition at school, they become more familiar with healthful foods, and can make better food choice decisions based on the new information they have (Wiseman et al., 2016).

According to Dev et al. (2017), since some children spend more of their waking hours in childcare centers than at home, it is important for childcare centers to follow national, state, and organizational policies and regulations regarding nutrition for their children's health and well-being, as well as because it is a huge part of whether a facility can be considered in compliance with licensing requirements. Policies are set in place to

ensure children are receiving the appropriate nutrition while at school, away from their parents. The NAEYC (2022) follows standards that hold early childhood educators to the expectations that they are providing children with high-quality learning experiences as well as nutritious food choices in their preschool environments. Standard 5 of the NAEYC program promotes the nutrition and health of children, recommending that good nutrition in early childhood is key to ensure healthy growth and development.

Early childhood nutrition programs have been implemented at the preschool level with the intention of early introduction and interventions to target childhood nutrition (Contento & Koch, 2021). The MyPlate program (USDA, 2022b) is a nutrition education outreach program for children and their parents to provide recommendations for good nutrition. School food services like the CACFP provide childcare centers with nutrition guidance and resources to ensure they follow the nutritional guidelines recommended in the Dietary Guidelines for Americans (USDA, 2022a). The NAEYC nutritional standards follow the CACFP guidelines, and during program evaluations NAEYC checks the menus for nutritional content, portion sizes, recommended limits on juice, sugar, sodium, and saturated fats, food service operations, and special feeding needs to determine whether the recommended standards are being met by the childcare center (NAEYC, 2022).

Hasnin et al. (2020) conducted a study to assess whether childcare centers were meeting meal pattern requirements and nutrition recommendations based on the CACFP guidelines. The average amount of foods served from each food group were compared with age specific minimum CACFP serving size requirements (Hasnin et al., 2020). They

found that the majority the childcare centers participating in the study were meeting CACFP requirements regarding foods served, although they found that the overall average intake for grains, fruits, and vegetables was significantly lower than Dietary Guidelines of America recommendations, with approximately 25% of the children not consuming any vegetables during their meal, likely due to food preferences (Hasnin et al., 2020).

Hong et al. (2018) recommended that childcare providers can support parents in fulfilling their children's nutritional needs for healthy growth and development, of the responsibilities of parents to provide a healthy nutritional foundation for their children and found that most teachers felt that parents were aware of their responsibilities, but at least half were not compliant with fulfilling those duties. Dev et al. (2017) studied the perspectives of Head Start childcare providers concerning their communication with parents about nutrition education and found that there were some barriers that limited communication with families, often due to parents being too busy, providers being unsure of how to approach the conversation without offending parents, and feeling unsure if parents would be receptive of their concerns. Dev et al. (2017) suggested that childcare providers should be thoroughly trained in nutritional outreach in order to communicate effectively with parents about providing healthful food choices daily for their children. Childcare center professionals play an important role in children's nutritional development, and effective nutrition outreach and education opportunities for parents were a valuable support for children's healthy growth and development. It may be

instructive to explore the perceptions of parents participating in this study concerning whether they feel adequately supported by their children's childcare center.

Summary and Conclusions

Although childcare centers, national programs, the health care community, and parents are all working together to support young children's nutritional development, there is currently a concern about young children receiving adequate nutrition to support their healthy growth and development. The health care and educational communities rely upon the Dietary Guidelines for Americans and the accompanying MyPlate nutritional outreach program to reference the recommended nutritional requirements for young children. A good nutritional foundation is necessary for young children to achieve healthy growth and development, as well as to prepare them to fulfill their potential in school.

A gap in practice was identified with relation to the way that parents are feeding their children, specifically not always providing the necessary nutritious food choices for their young children. The majority of the studies researched tended to be based upon secondhand information about the provision of nutritious meals for young children by their parents, the challenges parents face in providing healthy food choices, at the level of support they are receiving from their young children's childcare center. It can be difficult to find studies that explore the firsthand perceptions of parents concerning their decisions about the provision of their young children's food choices, the challenges they face in providing healthy and nutritious food choices, and the level of support their children's childcare center provides them in this endeavor.

I explored perspectives of parents regarding children's nutrition, which may have benefits for the health care and educational communities, as well as researchers and policymakers, and promote positive social change. Positive social change may result from this study when information garnered from parents' interviews is applied to increase awareness of children's nutrition among parents and practitioners, and supports are created to ameliorate challenges that emerged from the data.

Chapter 3: Research Method

The purpose of this qualitative study was to explore the perspectives of parents concerning the nutrition they provide for their preschool children, the challenges they confront, and the support they receive from their children's childcare center in providing the nutrition necessary to help their children achieve healthy growth and development. In this chapter, I describe the study design and rationale, my role as researcher, and my methodology for conducting the study. I also address issues of trustworthiness and ethical procedures.

Research Design and Rationale

The RQs for this study were as follows.

RQ1: What are the perspectives parents describe in providing the nutrition necessary to help their preschool children achieve their full potential in school?

RQ2: What challenges do parents describe in providing the nutrition necessary to help their preschool children achieve their full potential in school?

RQ3: How do parents describe the support they receive from their children's childcare provider in providing the nutrition necessary to help their preschool children achieve their full potential in school?

The phenomenon I addressed in this study is the perspectives of parents concerning the nutrition they provide for their preschool children to help them achieve their full potential in school. The research tradition I followed was a narrative inquiry. According to Ford (2020), the use of narrative inquiry in a qualitative study can elicit compelling human stories by examining human experience through life story interviews. Ford (2020) noted

that researchers who engage in narrative inquiry often explore contextual, emotional, and environmental issues. I used this design to more fully examine the perspectives of parents in their own words concerning how they provide daily nutrition for their preschool children, the challenges that they sometimes confront in doing so, and the level of support they receive from their children's childcare center.

Researcher conducting a narrative inquiry qualitative study often rely upon personal narratives. They often engage in an informal and interactive interview process to elicit a personal comprehensive description of a lived experience. This is primarily because researchers have found that it is often much easier to get a person to talk about an experience that they have lived through (Ford, 2020). By using this approach, I was able to obtain a firsthand account of how parents make decisions about their children's nutrition, what challenges they face, and what support they would appreciate from their children's childcare center.

A qualitative study featuring a narrative inquiry model based upon one-on-one, semistructured interviews may have provided deeper personal insights than a quantitative study or a survey would have, and gave me more flexibility to explore each participant's personal perspectives about their children's nutrition, their knowledge of the recommended nutritional requirements for young children, the challenges they face in providing good nutrition for their children, and the support they would appreciate from their children's childcare center. Observations would have primarily produced a snapshot of each participant's cooking and shopping expertise, as well as being open to interpretation. Therefore, I performed a narrative inquiry to understand more fully the

experiences, challenges, and desired areas of support for parents in providing daily nutrition necessary for the healthy growth and development of their preschool children.

Role of the Researcher

My role as the researcher in this study was as an observer-participant. According to Dreyer (1998), an engaged observer-participant is a researcher who enters the world of the researched. Participants are interviewed on their own terms, to allow the observerparticipant to immerse themselves in participants' environment by interacting with them, by learning as much as they can about them, such as their histories, and by being sensitive and non-judgmental about their life experiences (Dreyer, 1998). In the role of observer-participant, the researcher must respect participants, so rapport is built in the interviews, the way data are collected, the interpretations made, and the way the results are communicated (Dreyer, 1998). As the researcher, I used the information I learned through the interviews with the participants to gain a better understanding of their challenges in providing the nutrition necessary to help their preschool children achieve their full potential in school, as well as how supported they feel from their children's childcare provider. By interacting with the participants, asking open-ended questions, and inviting them to share their experiences and perspectives of early childhood nutrition, I may inform the gap in practice and provide this study to help early childhood educators and policymakers in developing programs and collaboration opportunities to support parents in providing daily adequate nutrition for their children.

My professional work role as a center director at a local childcare center helped prepare me to conduct this qualitative study. As the center director, I supervise 14

teachers, and I have a total of 80 children currently enrolled at full-time status. Before transitioning to a center director, I worked as an assistant director, and I was a preschool teacher for 10 of my 14 years in the early childhood education field. Specifically, through my professional experience as a preschool teacher, assistant director, and director I have become highly skilled in listening to the perspectives of parents, and I have additionally received professional in-service training in listening carefully in a non-judgmental manner during parental interviews to develop a nonbiased rapport, where parents could express their perspectives freely. This should serve as essential preparation for my role of observer-participant.

Early childhood nutrition is a significant component in the healthy growth and development of young children (DiGirolamo et al., 2020). As an early childhood educator, I see children come into the center on a regular basis with various types of foods that do not follow the guidelines of what is recommended by the Dietary Guidelines for Americans (2022) for healthy eating for young children. I have often wondered how and why their parents made the food choices for them, or what challenges they may face to get their children to eat healthier food options. I decided to conduct a study where I could get answers from the perspectives of parents that could possibly provide insight to how they feel about healthy nutrition for their young children, what challenges they face, and how well they feel supported by their child's childcare center. To guard against the influence of my own existing opinions and any potential bias concerning early childhood nutrition and its connection to early childhood education, I relied upon a reflexivity approach when conducting interviews with parents in an open

dialogue conversation without sharing my own experiences and opinions (Reid et al., 2018).

Methodology

The methodology for this qualitative study was based upon a purposeful sampling procedure targeting parents of preschool children to explore their perspectives on their children's nutritional lifestyle. A relatively small number of participants was selected to accommodate individual in-depth interviews following a narrative inquiry model. The small number of participants provided each parent the opportunity to share their experiences and personal story about how they provide their preschool children with the necessary nutrition to be successful in preschool, as well as to ensure healthy development. The interviews were coded into themes to obtain an overall picture of the perspectives of parents regarding their children's nutritional lifestyle.

Participant Selection

The population of interest in this study was parents with one or more children, aged 2 to 5, enrolled in preschool in a suburban area of the western United States. This population was sampled by applying purposeful sampling, utilizing the criterion that participants have a child currently enrolled in preschool. To identify parents who might inform this study, I contacted center directors of my acquaintance who work in preschools located in the target region. They were invited to assist me in identifying prospective parent participants, and were asked to confirm that their center Matt the criteria of using the recommended CACFP meal plan and following NAEYC nutrition guidelines. I confirmed with the center directors that their center enrolls at least 25

preschool children aged 2 to 5. The first centers that met these criteria and whose directors agreed to assist me in identifying prospective parent participants were selected. I requested their written agreement before beginning the recruiting process. This ensured a minimum sampling pool of up to 100 potential parent participants.

I recruited prospective participants who met the criterion described as parents of a child aged 2 to 5 who was enrolled in preschool by posting a flyer on their child's childcare center community app, as well as providing fliers for center staff to post on their parent information boards. The childcare center community app is a communication-based forum that many centers offer. Each center director was asked to give a flyer to each of the parents of preschool children. My email address and phone number is included on the flyer for parents to volunteer to participate or to get more information. When a parent volunteer for participation, a consent form was emailed to them. Participants indicated consent by replying to the email with the words "I consent." When I received consent, I scheduled an interview with each participant.

The sample was comprised of 10 parents. I invited the first 10 participants who returned a consent form. Ten participants is appropriate for a narrative inquiry that involves many follow-up questions to fully explore each participant's unique perspectives (see Ford, 2020). According to Ravitch and Carl (2016), this sample size is typical of an interview-based study and can be expected to provide data saturation.

Instrumentation

I developed the interview questions myself to provide participants the opportunity to thoroughly explain their unique individual perspectives, their stories according to the

narrative inquiry model (Ford, 2020), about how they manage their preschool children's nutritional lifestyle. The 10 open-ended interview questions (see Appendix) were designed to allow an observer-participant interviewer the flexibility to explore each participant's unique perspectives, as suggested by Dreyer (1998).

Interview Questions 1, 2,3, 7, and 9 address the first RQ concerning the decision-making process parents use to plan their children's nutritional lifestyle, as well as their perspectives on good nutrition. Question 1 is as follows:

Tell me about a typical family dinner time. Does everyone eat together and does everyone eat the same things? Who fixes dinner at your house? How does that person decide what to serve? How often do the children get different food than the adults, and if so, why is that?

Interview Question 6 addresses the second RQ regarding the challenges parents face in providing healthy food choices for their children:

What sorts of things get in the way of feeding your child nutritious foods? Some parents have told me that nutritious food is too expensive. Is that something you think about? Some parents have told me that their child won't eat many nutritious foods and they don't want their child to go hungry. Is that something you think about? Some parents have told me they just don't have time to think very much about nutrition, so they send what is easiest. Is that something you think about? Interview Questions 4, 5, and 8 concern the third RQ regarding the support provided by their children's childcare center. Question 8 is as follows:

How does the childcare center support you in providing nutritious foods for your child? What things do you wish the center did that would help you feed your child more nutritious food? What help do you need in making sure your child eats nutritious food?

Some interview questions relate to multiple RQs, such as Question 5, and some are general questions, such as Question 10. All the questions allowed me the flexibility to explore each participant's unique perspectives in depth through follow-up questions based upon the participant's developing narrative. The interview questions were intended to thoroughly examine the perspectives of the parents concerning their children's nutritional lifestyle and encourage parents to explain how they support nutrition for their children.

I established content validity by having the interview questions reviewed by two career educators: one a doctor of education, who speaks at colleges and universities throughout the United States, and one a doctor of philosophy, who was a public and private school teacher for many years and who is also highly qualified in nutrition. They concurred that the interview questions accurately and sufficiently provide participants the opportunity to thoroughly express their perspectives regarding the RQs. Both determined the interview questions were complete; therefore, I plan to use them in their current format. One educator expressed admiration for the thoroughness of the follow-up questions.

Procedures for Recruitment, Participation, and Data Collection

The data for this qualitative study were collected from parents with children attending a preschool in the western United States. I was an observer-participant conducting one-on-one interviews with 10 participating parents selected from a pool of up to 100 potential participants. I utilized the interview questions as a data collection instrument for all three RQs to understand more fully how parents make decisions concerning their preschool children's nutritional lifestyle.

I contacted the directors of local childcare centers to request their written permission and support in inviting parents of children enrolled in preschool to participate in my study. Upon receiving their approval, I posted a flyer inviting parents to participate in my study (see Appendix) in their center's community app, and I gave each director enough fliers containing the same invitation to display and to give to the parents of preschool age children informing them of the purpose of my study and to inviting them to participate in my study. An email address and a phone number was provided for interested parents to contact me.

I responded to each interested parent who contacts me to explain the study in detail and answer any questions they might have. If they wished to participate, I emailed them the consent form. If they consented, they replied in an email simply stating "I consent." I scheduled an interview with the first 10 parents who consented to participate. At that time, I explained how to download the WebEx app in preparation for the interview if they did not already have it. We then agreed upon a time and date for their virtual WebEx interview, and I answered any further questions each parent had.

On the day before each interview, I emailed each participant a reminder about their upcoming interview. Each participant was interviewed one time on WebEx for an approximate duration of 20 min, although the time varied based upon their responses. The interviews were recorded on WebEx as both audio and video, but I downloaded and used only the audio portion. At the conclusion of the interview, I learned each parent knew that I would email them a transcript of their WebEx interview for them to review so they could confirm its accuracy or notify me of any updates or clarifications they would like to make. I then transcribed each WebEx audio file using Otter.ai, a real-time transcription tool.

Data Analysis Plan

I began this qualitative data analysis process by carefully reading over each transcript while listening to the corresponding WebEx audio file, and corrected any errors in the transcription. After this process was complete, I emailed the transcript to each participant for their review, to ensure that their thoughts were expressed accurately and completely. When they did not respond within one week, I sent a follow up email request. When they did not respond within two weeks of the original email, I assumed that they felt the transcription sufficiently expressed their thoughts concerning the interview questions.

I then removed any of my own questions and comments from the transcripts, as well as any conversational items that jihad not apply to the interview questions. I made clarification of any items when necessary in brackets, and I also removed any names from the transcript that might have been mentioned during the interview to preserve

anonymity. I replaced participant names with a code (P1, P2, and so on) and used these codes to refer to each participant in all files.

Next, I examined each transcript one by one and identify key sentences. phrases, thought units, or codes that expressed each participant's thoughts in response to my questions (see Saldana, 2016). According to Saldana (2016), the next step is to organize these codes so that similar codes are grouped together. These groups of codes illustrate categories of data. Continuing to follow the advice of Saldana, similar categories can then be grouped together to form themes. These themes I applied to the RQs based upon connections, relationships, and trends (see Bree & Gallagher, 2016). The themes associated with each RQs provided insight into parents' perspectives concerning the nutrition they provide for their preschool children, the challenges they confront, and the support they receive from their children's childcare center in providing the nutrition necessary to help their children achieve healthy growth and development.

Trustworthiness

Credibility

Credibility in qualitative research requires the study to be believable to other researchers and critical readers, and to accurately reflect the contributions of each participant (Williams, 2018). Credibility in this qualitative study was established through an individual semistructured interview process involving 10 participating parents with at least one child enrolled in preschool (see DiCicco-Bloom & Crabtree, 2006). Eliciting the unique perspectives of numerous parents helped to ensure triangulation (see Williams, 2018). Trust and rapport were enhanced by utilizing a participant—observer role based

upon my years of experience as an educator and administrator in a childcare center and preschool, which helped establish an atmosphere of prolonged contact during the interviews (see Noble & Smith, 2015). However, parents were invited only from childcare centers where I am not employed to minimize any potential bias on the part of myself or the participants, and age, gender, culture, and personal income will not be considered as criteria for selection of participants.

Credibility was enhanced by the fact that the interview questions were independently reviewed by two highly qualified educators who confirmed that they sufficiently provided parents the opportunity to express their perspectives in relationship to the three RQs. Respondent validation was exercised as part of a member checking process by providing participants the opportunity to review the transcript of their interview and provide additional comments and clarification to ensure an accurate description and interpretation of their responses, further supporting credibility (see Noble & Smith, 2015).

Transferability

According to Korstjens and Moser (2018), transferability refers to the degree to which the results of a qualitative study can be applied in different contexts and settings, and with different participants. In a qualitative study, transferability is determined by each person who reads the study, because each situation, including that of the study itself, is unique (Korstjens & Moser, 2018). To support the favorable transferability of this qualitative study, I provided thick description of the setting and participant selection, so

that a reader can determine the extent to which study results may be relevant to their own context.

According to Ford (2020), utilizing the narrative inquiry model with the researcher in a participant—observer role can result in richly detailed personal accounts of experiences and perspectives. As a participant—observer, I was able to record extensive details of the interviews, including contextual and societal aspects, as well as my interpretations of the purpose and intentions of the participants, providing thick description, which will help to ensure similar findings could be duplicated by researchers and educators worldwide, taking into account consideration for variations in cultural and societal contexts (Ponterotto, 2006). In this qualitative study, I utilized purposeful sampling requiring only one criterion, that participants needed to have at least one child enrolled in preschool. This method of participant selection allowed for a natural variation in perspectives and experiences obtained through subsequent individual in-depth interviews, which will help to establish transferability for future researchers and educators (Patinkas et al., 2015).

Dependability

Dependability in qualitative research can be defined as the consistency and reliability of the research findings, and the degree to which the research findings are sufficiently documented, to enable other researchers to understand, audit, and critique the research (Sandelowski, 1985). I supported the dependability in this qualitative study by thoroughly documenting my research design, methodology, and data collection process in detail, as suggested by Moon et al. (2016). This will allow researchers and educators to

closely examine my audit trail, and to review and analyze my interpretations and findings based on the individual in-depth interviews I conducted with participants (see Ponterotto, 2006). I also asked participants to review their transcripts for accuracy, which supported the dependability of the study.

Confirmability

Confirmability refers to the degree to which the findings of the research study can be validated by other researchers (Korstjens & Moser, 1986). I established confirmability in this qualitative study through a combination of an audit trail and a reflexivity process (see Hamberg et al., 1994). I provided an audit trail by documenting in detail the decisions I make concerning my methodology and research design, and I relied upon reflexivity throughout my ongoing peer review process and triangulation to consider any potential biases based upon my personal and professional experiences with preschool nutrition, as suggested by Williams (2018). As a director of a preschool, I have had the opportunity for many years to observe the nutritional lifestyle of preschool children and to meet on a regular basis with their parents. I made a concerted effort as a participant—observer to explore the perspectives of the parents of preschool children concerning their children's nutritional lifestyle with complete objectivity (see Hamberg et al., 1994)

Ethical Procedures

I submitted a proposal for the study to the Walden University Institutional Review Board) for its approval, which I obtained (no. 03-01-23-0979285). I then commenced the data collection process. Parents who expressed interest in being participants were sent a consent form to review. The consent form provided details of the study and confirmed to

the participants that they may withdraw from the study at any time or decide not to answer any question during the interview. Participants who wished to participate replied via email with the words, "I consent." When consent was received from a participant, I scheduled an interview with them. Any parents who volunteered as participants after I have reached my target maximum of 10 participants were sent an email thanking them for their interest and notifying them that the participants had already been chosen.

Participants were identified by P1, P2, and so on to ensure confidentiality, and these codes were used to identify them in all study materials. The list of participants with their names and the code assigned to them were kept as a separate file. I conducted interviews using the WebEx teleconferencing platform.

The WebEx interview process ensured that the participants were able to choose a comfortable, private, and safe place to answer the questions. I interviewed the participants from a place where the interview couldn't be overheard. The WebEx software was used to provide a transcript of the audio portion of the interview for data analysis purposes. I did not use any video recordings from the interviews. The WebEx audio recordings and transcripts and all other study materials will be saved for 5 years in a safe location in my home or on my password-protected digital devices. After that they will be shredded or deleted with software such as Eraser. At all times the participants were treated with respect, and their perspectives in response to the RQs covered in the interviews were accepted in a completely non-judgmental manner.

Summary

In this chapter, I discussed the methodology for this qualitative study of parents' perspectives concerning the nutrition of their young children and the challenges and support they encounter. I described the processes I used to (a) recruit 10 parents of preschool children for individual interviews and (b) conduct those interviews and analyze the resulting data. I described the foundation of trustworthiness underlying this study to ensure reliability and validity, as well as the ethical procedures designed to protect the privacy of participants. In Chapter 4, I will present the results of my study.

Chapter 4: Results

The purpose of this study was to explore the perspectives of parents concerning the nutrition they provide for their preschool children, the challenges they confront, and the support they receive from their children's childcare center in providing the nutrition necessary to help their children achieve healthy growth and development. Three RQs underpinned an exploration of interview responses of participating parents whose children were enrolled in an early childhood education center-based environment. I begin this section by explaining the setting and the time of the study and providing details about the participants who are significant to the study, and who will enhance an understanding of the study's results. Next, I describe in detail the data collection process, and how I analyzed data from the interviews. I end this section by discussing the evidence of trustworthiness that I used to guide the credibility, transferability, dependability, and confirmability of this study.

Setting

The interviews were conducted during the COVID-19 pandemic, so to honor any potential concerns of the participants, interviews were conducted remotely via WebEx. I had originally planned to use the Zoom platform, however some participants mentioned that they did not have access to Zoom, and there were concerns about downloading the transcripts from Zoom. Following the recommendations of participants, the interviews were conducted on WebEx.

Data Collection

The interview data for this qualitative research study was collected from 10 parents who had at least one child enrolled in preschool. All of the participants were mothers. I conducted all 10 interviews using WebEx. Each participant was given the opportunity to select their own location, and in order to respect their confidentiality, I did not question them as to where they were during the interview. All of the participants had been advised to choose a quiet and secure place where they felt comfortable and would probably not be interrupted during the interview. To help them feel comfortable and to honor their confidentiality concerns. I had my own camera turned on for all of the interviews, so the participants were able to view the interviewer during the interviews. I conducted the interviews in a quiet and private location at home. Each interview lasted approximately 20 min. The interviews were conducted over 6 weeks based upon the dates that participants selected when the conversations were scheduled. One participant contacted me to reschedule.

After each interview, I uploaded the interview to an automated transcription tool. I then edited each transcribed interview to remove any nonessential words, and any names or other information necessary to protect the confidentiality of the participants. I then emailed a copy of each transcribed interview to the participant, with a follow-up email that asked them to review the transcript for any errors and to report any changes or updates to me. The participants were notified that if they were satisfied with the transcription of their interview, no action was required on their part. I also took the

opportunity to thank them again for their participation. To date no participants have requested any changes or updates to their interview transcript.

Data Analysis

For this qualitative research study, I relied upon a framework suggested by Saldana (2016) in order to explore, more fully understand, and analyze the data. After downloading the transcriptions of 10 interviews with participants, I began by reviewing and editing each transcription carefully to remove any superfluous words, such as umm or okay, as well as any potentially identifying information of the participants in order to respect their confidentiality.

I then went through each edited interview transcription and identified the thought ideas expressed in the responses by each participant to the interview questions. As I went through the 10 transcriptions, I began to see potential categories developing from similar ideas expressed in each participant's responses. When this process was completed, 20 categories were developed that were each based upon similar ideas from participants. The categories in order of the percentage of participants whose responses expressed one or more thoughts relevant to that category were child preferences and pickiness; fruits and vegetables; meal preparation; nutritional confidence; eating together; nutrition and school success; nutritional concerns; bringing food from home to childcare center; importance of breakfast; sugar, candy, and sodas; rushing to get to work; children, spouse, and/or grandparents helping; vitamins and supplements; childcare center menu and food are good convenience; food cost; junk food and fast food; more childcare center options;

parent/teacher communication; and food allergies. These categories are presented in Table 1.

These categories were grouped into five themes to illustrate more fully the perspectives of how parents felt about their children's nutrition. The themes and their associated categories included meals at home (meal preparation, family eating together, convenience, children, spouse, and/or grandparents helping), challenges (food cost, children's food preferences and pickiness, food allergies, rushing to get to work or coming home late), healthy eating (fruits and vegetables, vitamins and supplements, sugar, candy, and sodas, junk food and fast food), nutrition and school success (nutrition and school success, importance of breakfast, nutritional concerns, nutritional confidence), and childcare center meals (childcare center menu and food are good, more childcare center menu options, bringing food from home to childcare center, parent/teacher communication). Themes of meals at home and healthy eating were associated with RQ1; themes of challenges and nutrition and school success were associated with RQ2; and themes of childcare center meals were associated with RQ3. The relationships among categories, themes, and RQs are illustrated in Figure 1.

The data indicated that the parents were most concerned about meal preparation and what their children were eating in terms of nutritional quality. They were also very concerned about the importance of good nutrition, especially as it related to their children's ability to successfully develop their full potential in school. Surprisingly, all of the parents expressed that they were aware of what good nutrition was when it came to their children. Only one participant was concerned about their child's food allergies,

Table 1Data Categories and Percentage of Participant Mentions

Category	% of participant mentions
Child preferences and pickiness	100
Fruits and vegetables	100
Meal preparation	100
Nutritional confidence	100
Eating together	90
Nutrition and school success	90
Nutritional concerns	90
Bringing food from home to childcare center	80
Importance of breakfast	I80
Sugar, candy, and sodas	80
Rushing to get to work	70
Children, spouse, and/or grandparents helping	60
Vitamins and supplements	60
Childcare center menu and food are good	60
Convenience	60
Food cost	50
Junk food and fast food	40
More childcare center options	40
Parent/teacher communication	20
Food allergies	10

Figure 1

Themes and Categories Associated With Each Research Question

RQ1: What are the perspectives parents describe concerning the nutrition they provide for their preschool children?

- Meal Preparation 100%
- Family Eating Together 90%
- Convenience 60%
- Children, Spouse and/or Grandparents Helping 80%

Healthy Eating

Meals at Home

- Fruits and Vegetables 100%
- Vitamins, Calories, Supplements 60%
- Sugar, Candy, Sodas 70%
- Junk Food, Fast Food 40%

RQ2: What challenges do parents describe in providing the nutrition necessary to support their preschool children's healthy growth and development and to achieve their full potential in school?

Challenges

- Food Cost 50%
- Children's Food Preferences and Pickiness 100%
- Food Allergies 10%
- Rushing to Get to Work or Coming Home Late 70%

Nutrition and School Success

- Nutrition and School Success 90%
- Importance of Breakfast 90%
- Nutritional Concerns 100%
- Nutritional Confidence 100%

RQ3: How do parents describe the support they receive from their children's childcare center in delivering the nutrition necessary to support their preschool children's healthy growth and development and to achieve their full potential in school?

Childcare Center Meals

- Childcare Center Menu and Food Are Good 60%
- More Childcare Center Menu Options 40%
- Bringing Food from Home to Childcare Center 90%
- Parent-Teacher Communication 20%

however it was included as a category because of the importance, as well as parent/teacher communication with the children's childcare center.

The participating parents who met the criteria were all mothers with at least one child in preschool from the same geographic area. They were generally consistent concerning their perspectives about providing nutritious meals for their preschool children, the challenges they faced in doing so, and how they felt about the nutritional support their children's preschool/childcare center provided. There were no discrepant cases found (Hackett, 2015). The next section discusses the results with reference to the RQs, including verbatim quotations to more fully illustrate the perspectives of the parents concerning the nutritional foundation their preschool children need to support their healthy growth and development and achieve their full potential in school.

Results

The themes naturally aligned with the RQs because the interview questions were developed to fully explore the RQs. As the participants moved through the interview questions, they provided extensive insight into the RQs.

Results for Research Question 1

RQ1 asked, What are the perspectives parents describe concerning the nutrition they provide for their preschool children? Themes associated with this RQ were meals at home and healthy eating. Participants named several factors, including meal preparation; the importance of their family eating together; convenience; children, spouse, and grandparents helping prepare their meals; including fruits and vegetables in the meals;

adding vitamins and supplements; and helping their child avoid sugar, candy, sodas, junk food, and fast food.

Many of the parents mentioned that it was important to them that the family eat together whenever they could. Almost every parent mentioned that their family ate dinner together whenever possible. For example, P2 explained:

A typical family dinner, it really depends on the day and what we are doing. But no matter what, if I'm at home on the weekend, I get to add more nutrition and really cook a bigger meal. But we do all sit down together. And we all eat the same thing. And I encourage them to eat everything on their plate if they want. So it's pretty much depending on what day it is what we eat, but we all we eat together at the table.

P6 stated, "Yeah, we eat together and we eat the same things." P7 also explained, "We all eat together, and we all sit at the table and eat together as well. And we all eat the same thing."

Convenience was also a big factor for many of the families, because sometimes it was challenging to have everybody at the same time in the evenings. Usually work was the most important consideration for families. P4 mentioned, "Yes, we usually eat dinner together, because I leave for work in the morning. So we need dinner around like, seven o'clock, sometimes eight o'clock, depending on what I'm cooking." Children's extracurricular activities, such as sports participation, were also a factor for determining how the family had meals together. P2 went on to say:

So I have five kids, and I have three kids in sports. So during the weekday, we usually don't get home until late. So those days that I get home late, and I don't have anything prepared, I usually make quick ready meals, like instant mashed potatoes, or instant macaroni and cheese.

Most often the mother prepared the meals, although sometimes the children or their dad or even grandparents also helped. For example, in P5's family:

Well, dinner time varies in my household, because currently, we live with my mom, and I work night shift. So I try to have dinner with my daughter when she gets out of school. But a lot of the times I'm sleeping, because I'm preparing for nights. So my mom ends up helping out and making dinner for her, and then I end up waking up to dinner. But on my days off, I tend to be able to prepare dinner for all of us. And we usually eat around six o'clock or so.

P10 noted that she is usually the one to cook the meals, but sometimes her husband helped her, "Me, but when my husband gets off from work early, he starts it, or he finishes it, but it's usually me."

Another very important concern of all of the parents was that the meals they prepared were healthy and nutritious. For example, all of the parents mentioned that including fruits and vegetables in their child's meals was something they did on a regular basis. P9 explained:

They are obsessed with broccoli. I tried, but I can't stand it every night. But I try to at least do it once or twice a week, because I know they're gonna eat it. But

also I give them corn, green beans, cabbage, they'll do cabbage sometimes. But yeah, I do try to make sure I do enough vegetables for them.

P1 added, "I try to make sure that I incorporate fruits with vegetables." P2 related how her children loved vegetables:

Definitely, vegetables for sure...They love broccoli. So I give them broccoli.

They love carrots. I make sure I either [give them] roasted carrots or, you know, boiled carrots, they like that. They love celery. They love peas, they love corn.

P10 had a similar approach, "Okay, he has a veggie, and since he's a little younger, I'm like, okay, maybe I might add a fruit with his, as well."

More than half of the parents mentioned that they made a point to include vitamins and supplements to help their child maintain good health. For example, P5 said:

Well, I want to make sure she's getting all of her nutrients, I would like for her to get all of her vitamins. So [I include] things that come in the form of color veggies, like Vitamin K in the carrots and Vitamin C in the spinach...Well, that would be what I would like the most because as she's growing, those are essential nutrients for her.

P1 described a similar approach:

I give him an iron supplement. Because I know that the iron is important as well, as well as a multivitamin...I know that a lot of behavior issues can be linked to nutritional deficiencies, so I've learned that now with this go round that nutrition is very key because if they're low on iron, if they're low on Vitamin C, or

Vitamin D, that can affect their attention span, and that can affect their motor skills, or just behavior in general.

Even more parents commented that they watched their child's sugar, candy, and soda intake, all because they felt it was important to monitor their child's daily sugar consumption. P1 was concerned about this and commented, "I believe that certain foods like sugar may have the ability to affect their mood. So I try to stay away from a lot of sugar." P7 agreed and explained, "I try not to give him too much candy and soda, stuff like that. He already has like natural energy. So if I give him candy, it just like goes even more. His energy goes up even more." P8 commented:

I don't cut out sugar all together, but definitely try to cut back. There's no sodas, things like that. No, no sodas. I don't bring any sodas in the house. I rarely buy juice. I just do it occasionally. But because you know that sugar content in juice as well. So I just try to stay away from a lot of sugary drinks.

Fast food and junk food were also things that several parents commented that they tried to avoid whenever possible, although they often found it difficult to do so because of the cost and convenience of fast food, and because many of their children preferred fast food compared to healthy and nutritious food choices. P7 was concerned about her child's intake of fast food, but also considered convenience because of her work schedule and commute:

I try to avoid doing fast food sometimes. I have a long drive home from work. So sometimes I'm like, am I gonna make it home, and I don't have time to cook, or maybe I should just stop and grab McDonald's, but I really try to not do it. There

have been times where I slipped up, I won't name it, but for the most part, I try to avoid giving him like burgers, and I like really don't like the chicken nuggets, because I feel like, okay, if I'm gonna buy chicken nuggets, why can't I just give him like grilled chicken?

P2 was very concerned that children were able to eat nutritious food, rather than what she called junk food, because she believes that helps them do better in school:

And so it's important for them to eat that [nutritious meals] and then not just anything. Like if a junk food is yummy, like chips and soda and all that, but it doesn't have much of a positive effect. Like I've noticed when I work with kids, I noticed that the kids that come in on doughnuts and fruit snacks and, you know, chocolate milk and just apple juice and all the sweet stuff, I noticed it's like different, they're happy for the moment, but then they get really tired, really tired. They're really fussy...So I think a balanced meal with a mixture of everything is good for the children.

P9 felt the same way, knowing that fast food and junk food were not highly nutritious, although they were often more affordable and convenient. "I'm not perfect. I know they're not perfect. So, yeah, it'd be so easy [to buy fast food or junk food]. I still buy junk food stuff, but I try to eliminate as much as I can."

The most important overall response to RQ1 seemed to be that all parents were very concerned about providing nutritious meals for their children to the best of their ability. They made an effort to provide nutritious meals at home and eat together with their children whenever possible. They didn't hesitate to add vitamins and supplements

when they felt it would be in the best interest of their children. Even though many of them were, they were very creative in finding a way to provide the most nutritious meals they could for their children. However, they explained how many of the challenges they faced on a daily basis made it difficult to do this in RQ2.

Results for Research Ouestion 2

RQ2 asked, What challenges do parents describe in providing the nutrition necessary to support their preschool children's healthy growth and development and to achieve their full potential in school? Themes associated with this RQ were challenges and nutrition and school success. Participants named several factors, including the cost of food, children's food preferences and pickiness, food allergies, coming home late from work, the relationship between nutrition and school success, the importance of breakfast, general concerns about their children's nutrition, and the level of confidence they had in their own knowledge about good nutrition for their children.

Although all of the parents expressed the motivation to provide the most nutritious meals they could for their preschool children, they all faced challenges in doing so. Some of the parents were concerned about the cost of food, while some of the parents recognized that although healthy food might be important, their main consideration was buying the best food that they could afford. For example, P2 believed that healthy food was actually more expensive:

Yes, when I do grocery shop, I do have to weigh that [the cost of food] in, like I said, instant food is the way to go, but also it's cheaper to buy it in bulk, and then when they're trying to get a, you know, big bag of grapes or just a big old thing of

spinach or salad or a lot of fruit, it costs a lot of money. So I have to kind of revert to getting like the fruit cups, the mixed fruit cups, which I know it's not that healthy because it has all that juice in it, but yes, it's definitely more expensive to eat healthy, so I kind of have to do alternatives more times than not.

P6 was very concerned about the cost of food. "Yeah, the price is so expensive right now. It was already so expensive before, but now it's so expensive. Because we don't have a lot of money." P9 also considered healthier food to be more expensive, but she found a way to accommodate selecting nutritious food for her child:

Yeah, I'm sure healthier food, organic food, is more expensive, but I do still get WIC from my youngest child, so that's like \$25-\$30 a month in fruits and vegetables, which helps me a lot. Then I'll get like the milk and everything else from the WIC program. So like finding programs to help helps with the cost of stuff.

P5 did not worry about the cost of healthy food:

No, the expense of food isn't what really worries me. It's more of the time that it takes to put into something that she'll actually eat, because I'd have to, like I said, I have to figure, I can't just put some broccoli on a plate, and you know, a piece of meat and another starch and she'll eat it, like I have to puree it or trick her into eating it, put it in some type of lasagna. And that's just more time consuming. And I have such a busy schedule that my time goes to other things with her over preparing her foods in that way.

All of the parents mentioned the challenge of providing nutritious meals for their children in compliance with each child's food preferences and pickiness. P3 explained how her child's preferences were important to her when she prepared his meals:

I just go based off what I know that he will like, and what we all will like, and if I know what he likes... [It all] depends on what I made for the night. Like he eats rice. Like I use rice a lot, so he likes rice, but it just depends on the night. For the most part he eats like maybe twice a week the same thing that I [do].

P2 related how she considered the food preferences of all of her children when preparing meals:

I try to make things that I know everyone will eat. So yes, something that everybody will eat. Like some of my kids like spicy food and others don't. So sometimes I'll make like a main dish like mashed potatoes and macaroni. I know everyone will eat macaroni and mashed potatoes. But I know my 11-year-old loves seafood, so I make a side of shrimp with his. My oldest does not like seafood. So maybe for him, I'll make like chicken tenders. Just stuff like that.

P1 faced the same challenge, "I'll cook things for me and my 8-year-old and, then, something separate for my 3-year-old, because sometimes he's not on board to eat everything that we eat." P10 adjusted her routine to deal with what she considered to be her daughter's pickiness. "Usually, like two, three times a week [my daughter gets different foods from what my husband and I eat] because my daughter is so picky." P2 brought up the point that some children may need to eat different foods because of food allergies, and she was thankful that the childcare center was aware of potential food

allergies that some of the children may have, like her daughter who was lactose intolerant:

If there is ever a question about what was served or if my daughter ate any of it, I'm able to ask if they asked, you know, their family to bring a substitute depending on, like if you want to provide a non-dairy beverage, you know, like a soy option, and if your child is allergic to anything, I like how they will always provide something else for that child.

One of the challenges mentioned by many of the parents was trying to prepare the nutritious meals they wanted and still being to work on time or coming home in time to prepare dinner. For example, P2 described how she depended upon instant foods or foods that she had stored in the freezer because she often came home late from work. She also mentioned that the cost of food was a concern for her:

So it all rolls back to just the time of the day, the day of the week. But honestly, mostly it's instant food. I mean, there are some, you know, freezer foods I make that they like. And again, it's mainly because I came home late, and there's just not enough time. By the time I'm done cooking a big meal, it's basically time for bed. But like on the weekends, I try to put meat into everything, whether it's chicken or steak or shrimp, and my kids will eat that. But what they like I don't get often because it's costly and it's time consuming.

One of the biggest concerns of almost every parent was making sure that they provided the nutritional foundation for their preschool child's success in school. P1 was

aware that the nutritional support she provided her child at home would help him do well in school.

I know that a lot of behavior issues can be linked to nutritional deficiencies, so

I've learned that now with this go round that nutrition is very key, because if
they're low on iron, if they're low on Vitamin C or Vitamin D, that can affect
their attention span, that can affect their motor skills, or just behavior in general.

P10 was also concerned that too much sugar might affect her daughter's ability to focus
and do well in school.

Like I say, I don't think it's [sugar] like healthy. And I feel like if they're gonna eat that and they're going to school, like it's not a good thing to have it like before school, like probably after, but not before, because it gives them more energy or makes them like more hyper.

Almost every parent mentioned the importance of a healthy breakfast to prepare their child for a successful day at school. P2 definitely recognize the connection between a healthy breakfast and how children performed in school that day:

You know, sometimes they'll grab a banana to go, but most days, they have to wait until we get to where we're going for them to eat. And there's times where we might miss that breakfast. And I noticed my 3-year-old is very cranky, she's very upset because she's hungry and she wants to eat. And even though she's eaten dinner before, you know...all her food from the night before, it's gone. And she's just really unhappy. I noticed when I'm able to wake up early enough to give them, you know, a full meal, they're happier, they come home, they tell me

they weren't tired. My oldest son, if he doesn't eat, he tells me how he was falling asleep during first period or second period.

P9 felt the same way:

Okay. I think children who don't get up and eat in the morning, even me as a child, similar to read something if I didn't eat in the morning, I was sluggish school the first couple of hours. I wouldn't want to do anything. I would just be there. I think making sure kids get up and eat something, even if it's a piece of toast, to have something helps them focus in school.

Many of the parents were concerned that their children eat nutritious food for their healthy growth and development, as well as to fulfill their potential in school. P6 had definitely thought about this quite a bit:

On a scale of one to 10 it would be a nine. Why would it be a nine? Because it's really important. You know, nutrition is like, like, the gut-brain connection, right? There's a gut-brain connection, if they don't have like a healthy microbiome in their gut, and they're not getting like enough nutrients there, it could really cause like hormonal disruptions and, like, can cause symptoms that look like other conditions, like ADHD. There's big talk about like red dyes and all the colorful dyes that might cause all the side effects that, you know, look like or mimic all these disorders. And I feel like that's another reason why you see these disorders on the rise. It's because of all those dyes and different chemicals and processed things that are in the kids, in all of our food, honestly, but, and then like, so now they're being diagnosed with all these things. And I just, I don't want that for my

child. And it's kind of hard to, it's kind of hard to get around. Especially because the USDA, you know, the government is approving all these things to be put in our foods. So what can we do. Like, versus Europe that makes Cinnamon Toast Crunch? Just like we have Cinnamon Toast Crunch, but they make it without all the poison, because they began it, but the United States doesn't, it's because they want the money. So we're all stuck. Right? Poisoned. Okay. Don't get me started.

It was encouraging to know that every parent believed that they were doing their best to provide the nutrition necessary for their child's success in school, although because of the challenges they faced, they found it difficult to do so at times. This became clear with their responses to the interview question which asked how confident they were that they were providing the healthy and nutritious meal choices their children needed on a daily basis. Their answers varied and expressed different levels of confidence. For example, P4 was very confident. "I'm very confident because I work with kids. So, I know what foods are nutritious, and I know what foods are like, you know, processed and such, but they get their fair, you know, their fair share." P7 believed she had learned a lot about good nutrition from her own experiences that she could pass on to her children:

I'm pretty comfortable knowing like, what they should eat and not eat, because I've got drilled about it with me having high blood pressure. I've like it's been drilled into my brain do's and don'ts. So, it's easier for me to pass it on to my child.

However, P2 was not quite as confident, explaining "I'm fairly confident" and P5 responded simply, "Not very." Many parents cited challenges such as food affordability, finding the time and having the energy to prepare nutritious meals after a long work day and commute, and accommodating their children's food preferences, to explain why they sometimes found it difficult to provide the nutritious meal choices they were aware that their children needed on a daily basis.

While the nutritional foundation each child received at home was important, all of the children also received meals and snacks at their preschool/childcare center. RQ3 explored how the parents felt about the meals that were being provided by their child's childcare center, whether they thought there should be any additions to the monthly menu, how often they sent food from home with their children, and how receptive the childcare center staff was to their concerns.

Results for Research Question 3

RQ3 asked, How do parents describe the support they receive from their children's children's children center in delivering the nutrition necessary to support their preschool children's healthy growth and development and to achieve their full potential in school? The theme associated with this RQ was childcare center meals, including whether parents thought the childcare center menu and food were good, whether parents wanted more childcare center menu options, how many parents sent food from home with their child to the childcare center, and how parents felt about parent/teacher communication.

Most parents believed that the food served at their children's childcare center was very good. This was important to them because they saw it as part of their child's

nutritional foundation. For example, P5 thought the food at her child's center was excellent, saying, "I honestly don't think that I see any changes right now that I would make. They seem to have a better variety, unfortunately than I do at home." P4 agreed, especially because their child really enjoyed the food: "I think the food is always good. It's always like a vegetable a fruit. And then like a main course, I think it's always balanced. My baby always enjoys it." P2 explained how she liked the variety, and the nutritional value including fruits and vegetables. Her child also told her that he really enjoyed the food. P2 said:

I think it's great. There's a lot of variety of food, it's fruits and vegetables and then it's the main course which has, you know, everything they need, the protein and the vegetables and fruit. So, all that's good and my child is always Tapi coming home telling me the different things that you've eaten all day. So, I'm very happy about that.

Most of the parents were very happy with the menu at their children's childcare center. For example, P2 went on to say:

I don't think I would [make any changes to the menu] like I said, it's a it's a good variety. They don't eat the same things over and over. And there's always a fruit or the vegetable, there's always the main course and my daughter loves it. There's always water provided milk provided. So, I think I think they're doing a really good job.

P5 was very happy with the menu and believe that it helped her provide more nutritious meals for her child. "I honestly don't think that I see any changes right now that I would

make. They seem to have a better variety, unfortunately, than I do at home." Some of the parents expressed ways the menu could be improved. For example, P7 suggested "I want it to be able to open the kids' minds to also being more healthier and finding more healthier options, and also being able for them to try more new things."

The childcare centers normally provide the menu to the parents for the upcoming month. Sometimes the parents explained that they would send food or snacks with their child because even though the meal might be nutritious, they considered their child's food preferences. P4 mentioned how she used to send food with their child, but the childcare center her child goes to now serves food that she feels is good for her child, and even helped her child overcome a tendency to be picky:

I actually used to, I don't do that anymore. But I used to, but I feel like the childcare center my baby goes to serves good, like good enough food for her to be able to go there and just eat that, you know? And they actually stopped her from being so picky about certain foods. Just because I was overthinking it. It wasn't necessarily the food options at the daycare. It was just me feeling like I knew she likes this specific food item. So, let me bring this for her. [Now I feel like] just let her try whatever they were having.

P2 sends food with her daughter sometimes for a different reason:

I'm just [sending food sometimes] because my daughter talks about everybody's lunches. Some kids bring their lunch from home, and she wants to feel included with her friends. So, sometimes I may pack her a little, that's where I pack a snack for her. So, she can, you know, sit down with her friends and say, "Look, I

brought this from home." But that would be the only reason, just because she wants to be able to eat, you know, bring stuff from home and show her friends.

P3 explained she tries to accommodate her son's food preferences.

I always send him like with something, because I know how he is. I know he won't eat certain things. I will send him something like at least three times a week. Maybe fruit and stuff like that. Nothing like a grilled cheese or pizza of some type, but a healthy snack. Like he likes nutrition bars, he likes granola. Stuff like that. Like he's pretty healthy for a 3-year-old. My school-aged children, I do. Sometimes my children get free food as part of the food program at school. So, I usually let them get that. But sometimes, you know, as kids are older, they just want something different. And at school, meals are more nutritional. And sometimes, you know, they just want just something different. Maybe they want to hold on to those things called Lunchables, or just something different. So, it's not often, but sometimes I do. [For my preschooler] not a lunch, just a snack, maybe they want something for snack. So, maybe a chip here or there, not often either, maybe once a week.

Several parents commented on the level of communication they experienced with their child's preschool teachers or the staff at the childcare center. For example, P9 explained:

And she, like I said, she could tell the cook or her teacher that she wants more fruit or she wants more vegetables, stuff that she likes. They always give her more, then I can talk to the teacher and stuff, and they help support. Even if I just

want her to try something, they'd be on the same page. Let's just try it [they might say to my daughter]. Your mom just wants you to try it. They were on the same page. So, it helps me to introduce her to more foods and different foods. I think our cook is very on top of it and told her teachers, so I'm dealing with all that.

P2 was happy with the communication she experienced with her child's childcare center:

Well, the center asks the parents what they feel about anything. For one, they put the meals that the children eat, my child, they put it in, you know, a tablet that I can look at the record of her breakfast, snacks, and lunch. So, if there's ever a question about what was served or if my daughter ate any of it, I'm able to ask.

They asked, you know, their family to bring a substitute depending on like, if you don't want a kid out there, if you want to provide a non-dairy beverage, you know, like a soy option for your child. And if your child is allergic to anything, I like how they will always provide something else for that child. I think communication is a big thing, and the communication at my daughter's center is well conveyed. And then there's different options too. So, I'm happy.

Overall, the parents seemed very pleased with the support their childcare centers provided for the nutritional growth and development of their children. They liked the way that the childcare center staff were open to their comments and suggestions about the food they would like their child to receive. They also liked being able to send food from home for their child's lunch or snacks when they felt it was important.

Summary of Results

The results established key findings based upon the RQs with relation to the topic of this qualitative research study, which was to explore and more fully understand the perspectives of parents concerning the nutrition they provide for their preschool children's healthy growth and development and to help them achieve their full potential in school. A key finding was that the participating parents depended upon the meals they provided at home to support their children's healthy nutrition. They made every attempt on a daily basis for the family to eat together when possible, although many of them worked, which made it difficult at times. Sometimes their spouse, the children themselves, or the children's grandparents helped prepare the meals. They were very conscious of the value of healthy eating, making every effort to include fruits and vegetables in their children's meals, adding vitamins and supplements when necessary, and trying to avoid foods with high sugar content. A few parents mention that they tried to limit their child's fast food, however many of them mentioned that sometimes due to the challenges of the cost of daily nutritious meals, finding the time to prepare daily nutritious food choices, and accommodating their children's food preferences made fast food an available option.

A second key finding was that, while all of the participants were aware of the rising cost of nutritious food, they all found ways to cope with this challenge, believing that their children's healthy nutrition came first. They did their best to accommodate their children's food preferences and occasional pickiness. A third key finding was that participants worked so strongly to provide healthy nutrition for their children on a daily

basis because they realized how important it was, not only for their children's healthy growth and development, but also for their success in school. They were especially aware of the importance of a good breakfast to help their children do their best throughout a long school day and afterschool activities at times. Their level of confidence in their ability to provide daily nutritious meals and snacks their children needed ranged from very confident to fairly confident to not very confident, due to the challenges they faced.

A fourth key finding was that participants were pleased with the nutritious meals their children's childcare center provided. When a menu item was something that their children might not prefer, they provided food from home for their children to bring to school. Overall, the participating parents were very aware of the importance of a healthy nutritional foundation for their preschool children and did their best to provide this on a daily basis even though the challenges they faced made it difficult to do so at times. The following section will examine the evidence of trustworthiness for this qualitative research study.

Evidence of Trustworthiness

The trustworthiness of this qualitative research study was established through ensuring the credibility, transferability, dependability, and confirmability of the data collection process. The credibility in this qualitative research study was based upon individual semistructured interviews of 10 participating parents with at least one child currently enrolled in preschool (see DiCicco-Bloom & Crabtree, 2006). The interview questions were peer reviewed by two highly qualified educators to make sure they were sufficient to elicit the genuine perspectives of the participating parents (see Williams,

2018). Trust and rapport were enhanced by utilizing a participant—observer role based upon my years of experience as an educator and administrator in a childcare center and preschool, and none of the participants were selected from the childcare center where I am currently employed (see Noble & Smith, 2015).

To support the favorable transferability of this qualitative study, I provided a thick description of the setting and participant selection, so that a reader can determine the extent to which study results may be relevant to their own context. As a participant—observer, I was able to record extensive details of the interviews, including contextual and societal aspects, as well as my interpretations of the purpose and intentions of the participants, which will help to ensure similar findings could be duplicated by researchers and educators worldwide, taking into account consideration for variations in cultural and societal contexts (see Ponterotto, 2006).

I supported dependability in this qualitative study by documenting my research design, methodology, and data collection process in detail, as suggested by Moon et al. (2016). Respondent validation was provided by giving the participants a chance to review the transcript of their interview and suggest any updates or revisions (see Noble & Smith, 2015). I established confirmability in this qualitative study through a reflexivity process (see Hamberg et al., 1994). I relied upon reflexivity throughout my ongoing peer review process and triangulation to consider any potential biases based upon my personal and professional experiences with preschool nutrition, as suggested by Williams (2018).

Summary

The protocols detailed in Chapter 3 were followed with one notable modification. The interviews were recorded on WebEx rather than Zoom based on the request of some of the participants. The interviews were then transcribed on Otter.ai. The participants' responses to the interview questions provided a rich variety of perspectives concerning the RQs. Results indicated that parents in this study were well aware of the importance of supporting childhood nutrition, did their best to provide good nutrition to their children despite various obstacles, and were satisfied with the meals and nutrition offered by their child's childcare program. Chapter 5 will present the key findings with relation to the peer-reviewed literature, suggest further research that could be done, and discuss the implications of this study for positive social change.

Chapter 5: Discussion, Conclusions, and Recommendations

In this chapter, I will examine the key findings regarding the perspectives of parents of preschool children concerning the nutritional foundation they provide on a daily basis to support their children's healthy growth and development. This topic was prompted by the concern that some children were attending preschool without the proper nutrition to support their healthy growth and development and to fully achieve their potential in school. The results gathered from interviews of the participating parents indicated that they were well aware of the importance of supporting their children's nutrition, they did their best to provide a healthy nutritional foundation for their children despite the challenges that they encountered, they understood the importance of good nutrition for children's lives and their academic success, and they were satisfied with the meals and nutrition their children's childcare center provided. These key findings will be carefully interpreted and analyzed in the context of peer-reviewed literature and research. This study will be evaluated for any potential limitations, recommendations for further research will be suggested, and implications for positive social change will be offered.

Interpretation of the Findings

Key findings in this qualitative research study confirm many findings from peerreviewed literature, research, and the framework based on the work of Contento (2008).

One of the hallmarks of Contento's work was the focus on the perspectives of the parents
regarding their children's nutrition. The key findings in this study also explored the
perspectives of the participating parents concerning their preschool children's nutrition.

One of the key findings indicated that the participating parents were very concerned about providing good nutrition for their preschool children, and felt that they were well aware of the value of good nutrition for their children's healthy growth and development, as well as their achievement in school. Contento (2008) suggested that a parent's awareness of good nutrition was a foundation for their children's healthy growth and development. A parent's awareness of good nutrition was also considered to be very important by Black et al. (2020). The concern of the parents that their children received healthy and nutritious meals was found by Yen (2020); however, when asked how confident they were that the meals and snacks they provided their children were healthy and nutritious, the answers ranged from very confident to fairly confident to not very confident. This suggested that although they felt they were well aware of the value of good nutrition, they sometimes found it difficult to provide healthy and nutritious meals and snacks for their children on a daily basis.

Many of the parents in this study also expressed a desire to prepare healthy and nutritious meals for their children whenever possible, and made a point to include fruits and vegetables. This confirms what the Dietary Guidelines for Americans (2022) recommended for young children's healthy growth and development. This was also promoted by Blackstone et al. (2018) and Ramsay et al. (2017). The parents reported that they included vitamins and supplements when they felt it was necessary, which was encouraged by the Dietary Guidelines for Americans (2022). According to their responses, the way the parents balanced their children's meals generally followed the framework suggested by MyPlate (USDA, 2022b). Many of the parents helped their

children avoid too much sugar in their daily food choices. They felt that too much sugar could easily result in a sugar crash later on in the day. Some of the parents recalled times when their children had high sugar breakfasts and then had difficulty maintaining their focus and energy throughout the school day. Limiting sugar consumption is a well-known nutritional recommendation, and is noted in the Dietary Guidelines for Americans (2022). Vollmer and Baietto (2017) stated that when parents helped their children select food choices other than fast food, it helped their children develop a healthy nutritional lifestyle. The Dietary Guidelines for Americans (2022) recommended that parents provide healthy food choices rather than relying upon fast food, which they explained was often too high in trans-fat, sugar, and salt.

Only a few of the parents said they helped their children avoid fast food as much as possible, because they did not believe fast food is as healthy as the food they prepared at home. This might indicate the presence of challenges they faced in providing a healthy nutritional foundation for their young children often made it difficult. For example, one participant explained that although she was aware of the value of healthy and nutritious meals, sometimes her daughter was cranky, so she provided her daughter with some meals and snacks that she knew were not healthy and nutritious choices to accommodate her daughter's food preferences. This confirms the findings of Jia et al. (2019), who stated that many children preferred fast food compared to highly nutritious meal choices because of the taste, the convenience and not having to wait, and the marketing of fast food that is often aimed at young children. This may also help explain my observations as director of a childcare center of children sometimes arriving in the morning with only fast

food or high sugar foods such as donuts for their breakfast when the parents and children were aware that our center provided daily low sugar nutritious breakfasts for the children.

A key finding indicated that the parents faced many challenges in providing daily nutritious meals for their children. Contento (2008) reported that many parents faced challenges with food affordability, convenience, and their children's food preferences and pickiness. The participating parents responded in the interviews that they agreed that nutritious food for their children was very expensive at times, although they all explained the different ways they tried to overcome this challenge, some of them explaining because they felt that nutritious food was very important. This may have led to their choosing fast food as the least expensive option at times. They also explained that sometimes the convenience to provide healthy and nutritious meals became a challenge because of their work and commute times, and sometimes because of their children's extracurricular activities. This may have led to choosing fast food for their young children when they simply felt that they did not have the time to prepare a healthy and nutritious meal. However, to mitigate this challenge, they often relied upon other family members, even the children sometimes, to help them prepare meals so that the family could eat together, and the children were provided with healthy and nutritious meals. Wiseman et al. (2018) and Smith et al. (2017) recommended that involving children in the food preparation and eating together with parents could help the children learn to make healthy food choices. Many of the parents in this study felt it was very important for the family to eat together whenever possible. Scaglioni et al. (2018) suggested that parents eating together with their children helped the children establish long-term

nutritional understanding, and added that eating together made the parents become role models for their young children, which was considered good for the children's nutritional development. Many of the parents reported that accommodating their children's food preferences and occasional pickiness was a challenge at times. Kwon et al. (2017) suggested that food fussiness was very common at this age among young children. This may have led to allowing their children to choose fast food as an alternative to a nutritious meal including fruits and vegetables. Sometimes a well-meaning family member helping provide a meal for the children may not have been aware that fast food was not considered a healthy and nutritious option.

A key finding indicated that the parents were very concerned about providing good nutrition for their children on a daily basis to support their healthy growth and development, as well as helping them achieve their full potential in school. Many of the parents mentioned that they believed that healthy food choices and a good nutritional lifestyle were very important for their children's success in school. This confirms the findings of DiGirolamo et al. (2020), who stated that in addition to supporting healthy growth and development, a nutritious lifestyle provided the foundation for children to fulfill their potential in school. Wiseman et al. (2018) noted that healthy food choices supported healthy physical development as well as cognitive development, which is important for school success. The CDC (n.d.) reported that a healthy nutritional lifestyle improved cognitive development and resulted in reduced absenteeism in school for children. The parents strongly agreed that one of the most important meals of the day to support their children's success in school was a healthy breakfast. Some of the parents

explained in their responses that they learned this through trial and error. They explained that on the days their children had a less nutritious breakfast, often with a high sugar content, they returned home after a long day at preschool and their childcare center feeling exhausted. Hong et al. (2018) and Jakobovich et al. (2019) suggested the children need healthy food choices to maintain the energy to fully participate throughout a demanding school day. Contento (2008) emphasized the importance of parental knowledge of good nutrition for their children's healthy growth and development, as well as their success in school.

All of the parents felt that they were well aware of the importance of good nutrition for their children, and especially providing well-balanced and healthy meals for their children, although they all faced similar challenges in doing so. Due to the affordability of nutritious food, the convenience of having the time and the energy to prepare daily nutritious meals after work, and their children's food preferences and pickiness, they were not always able to do so, and fast food sometimes seemed like the best available option. Fortunately, most of the parents were satisfied with the nutritious breakfast, lunches, and snacks that their children were provided at their childcare center.

Another key finding indicated that the participating parents overall were pleased with the meals their children received at their childcare center. Dev et al. (2017) noted that many children are provided with meals several times every day at their childcare center. Most of the parents considered the meals and snacks their children were provided very nutritious and well-balanced. Dev et al. (2017) explained that because many children are provided with. Meals on a daily basis at the childcare centers, it was very important

for the meals to be highly nutritious. The NAEYC (2022) conducts audits at childcare centers based upon the nutritional standards for young children promoted by the Dietary Guidelines for Americans (2022) and the CACFP (2022). The parents appreciated the opportunity to send nutritious food from home with their children when they believed it was necessary, for example, to accommodate their child's food preferences or food allergies. Hong et al. (2018) suggested that when the parents prepared food for their children to take to school, and especially when the children were included in the preparation, it could help the children understand how to make healthy and nutritional food choices. This was the ideal solution, however, my observation as the director of a childcare center revealed that sometimes the parents relied upon the affordability and convenience of fast food. Their children's food preferences often included fast food, which also could lead to a less productive day at school. The parents were positive about the opportunity to communicate with the teachers and staff at their children's childcare center. This was important to help the parents understand the value of daily nutritional meals as part of the nutritional education outreach programs offered at many childcare centers.

The findings in this qualitative research study were confirmed by peer-reviewed research. The participating parents in this study were very concerned about providing healthy and nutritious meals for their children on a daily basis to the best of their ability. They also felt that they were well aware of the importance of a strong nutritional foundation to support their children's healthy growth and development and to help them achieve their full potential in school. This aligns with the motivation behind many

nutrition education outreach programs, such as the Dietary Guidelines for Americans (2022) and MyPlate (USDA, 2022b) and the findings of Contento (2008), who wrote that parents' knowledge of good nutrition for their young children was an important part of ensuring their healthy growth and development and success in school. As the director of a childcare center and preschool, I have sometimes observed children enrolled in our center coming to school with only fast food or higher sugar foods for breakfast, and preferring this to the nutritious breakfast our center provides. I was concerned that they would not have the nutritional support they needed to do their best throughout a long school day. I was also concerned about their long-term healthy growth and development. The findings indicated that although the parents overwhelmingly were well aware of the value of healthy nutritional food choices, sometimes due to the challenges of affordability, convenience, and their children's food preferences, they found it difficult to do so on a daily basis. This confirms the findings of Contento (2008), who also found that these challenges were one of the main reasons young children sometimes lacked the proper nutritional foundation to support their healthy growth and development and their success in school.

Limitations of the Study

One limitation that was anticipated but did not occur was that the participating parents could feel reluctant to answer the questions, thinking I might be judgmental concerning their knowledge and practice of good nutrition. After I assured the parents that their responses would be completely confidential, they were very open and comfortable in responding to the interview questions. Another limitation that was

anticipated was my inability to observe their body language since the interviews were being conducted remotely. This did occur, although it did not seem to influence their responses in any notable way. Another limitation that was anticipated was the concern that I may let my own knowledge and experience with early childhood nutrition limit my objectivity. I made it a point to remain completely open, supportive, and objective throughout the interviews, so this did not seem to be a problem.

One limitation that was not anticipated was that the selection of participants based upon the criterion that all participating parents have at least one child in preschool might not represent all children everywhere. A similar qualitative study that examined all children, whether they attended preschool or not, might yield different results. The demographics and socioeconomic status of the participants and their children, from a suburban middle-class environment, might also affect the transferability of this study. These variables need to be considered for the transferability of any qualitative research study. None of these limitations affected the credibility, dependability, or confirmability of this study, and no other events occurred that might have posed any limitation to recruitment, data collection, or data analysis.

Recommendations

One recommendation for a future qualitative research study would be to select a different sample of participants and follow the same methodology described in this study. For example, different demographics and socioeconomic status might result in different responses from the participating parents to the same interview questions. This study was based upon the responses from parents in a specific geographic location and from a

suburban middle-class socioeconomic environment. Another recommendation for a future qualitative research study is a change in the criteria for participation in this study from parents with at least one child attending preschool to simply parents with at least one child of preschool age. A qualitative study with an additional RQ exploring how and when the participating parents obtained their nutritional knowledge might provide insights into the efficacy of nutrition education outreach programs. A qualitative study exploring whether participating parents considered fast food to be an acceptable part of a healthy and nutritious lifestyle for their children might further provide insights into the level of understanding of good nutrition of the parents.

One recommendation for a future quantitative research study would be to use a survey questionnaire that addressed the same RQs. This would result in a much larger sample of participating parents and might yield different results. This study could be replicated with the expanded criteria and might result in different data.

Implications

The key findings in this qualitative research study confirmed the understanding that a primary step in supporting the healthy growth and development of young children is to ensure the knowledge of good nutrition guides the decision-making process of parents in providing healthy and nutritious food choices for their young children. This might lead to the expansion of successful nutrition outreach programs such as the Dietary Guidelines for Americans (2022) and MyPlate (USDA, 2022b). It would be encouraging if these organizations received the funding necessary to provide copies of their information to every family in America.

It would also be helpful for teachers at all grade levels to be well trained in nutrition education. School boards and state legislatures might be encouraged to require teachers of all levels from preschool to high school to receive nutrition education as part of their licensing requirements. They might also include nutrition education mandatory teaching standards for teachers to include in their required curriculum. Childcare center directors could require their preschool teachers to receive nutrition education as part of their on-boarding program. They could also be required to attend quarterly workshops about early childhood nutrition. All of their teaching units could include some ageappropriate lessons for children about healthy meal choices and good nutrition. Teachers and staff could be encouraged to develop a good rapport with the children so that if they observed a child seeming to lack the necessary energy to do their best throughout the day, they could speak with the child to ascertain if they were getting the nutritional requirements they needed. They could then report their observations to the center director for further intervention.

The findings in this study indicated that despite the willingness of parents to provide daily nutritious meals for their children, the challenges they encountered often made it difficult to do so. This sometimes led them to rely upon the cost, convenience, and the preferences of their children for less nutritious meal choices, including fast food and high sugar food and beverages. These insights may encourage governmental organizations to provide solutions to accommodate parents in overcoming these challenges. Financial assistance which is now available to some parents might be increased, and employers might be encouraged to support families in finding the time to

prepare nutritious meals on a daily basis for their children. Childcare center directors might conduct workshops for parents suggesting ways to apply for financial assistance when they felt it was necessary. They could invite guest speakers who work with families, such as county social workers and representatives of organizations like Head Start and CACFP (USDA, 2022a), to offer resources for families with young children.

Childcare center directors may be encouraged to provide more comprehensive nutrition education outreach programs for their parents and children. They could offer workshops at their childcare center for parents focusing on practical solutions by suggesting healthy alternatives when faced with challenges. Workshops on meal prepping might help the parents plan ahead for those days when they might not have the time to buy or prepare daily nutritious meals. Parents could be given a packet with kid-friendly recipes that were easy to prepare ahead of time. Information about the way that many fast food establishments target children in their advertisements might help families look for more healthy alternatives. When they decide to rely upon fast food, selecting healthier fast food alternatives would be the preferred option. For example, taking their children to a healthy smoothie restaurant would be preferable to buying them a high sugar milkshake. A serving of fruit juice would be a healthier alternative than a supersized high sugar soda. Childcare center directors could make sure that all of the meals and snacks served to the children had been approved by a nutritionist. Regular audits by qualified organizations such as the CACFP (USDA, 2022a) and NAEYC (2022) would help ensure the children at their center were receiving nutritious meals and snacks.

The findings in this study made it clear that nutrition education in itself is not enough. Parents of young children often need additional assistance to overcome the challenges in providing the best possible nutritional foundation for their children.

Conclusions

This qualitative research study was prompted by a concern that some children attending preschool without a healthy nutritional foundation and seeming to lack the energy to do their best throughout the day. The findings in this study led to the conclusion that the participating parents were well aware of the benefits of good nutrition for their children's healthy growth and development, as well as the importance of good nutrition to help their children do their best in school. The outreach programs the parents were familiar with are working. Parents mentioned that the main reason they were not able to provide the nutritional meals and snacks they wanted to on a daily basis was because of the challenges they faced. The cost of nutritious food, finding the time to prepare nutritious meals, and accommodating their children's preferences were the primary challenges they often faced.

These challenges need to be addressed on every level from the federal government to state governments to school districts to nonprofit organizations and childcare centers and preschools. Childcare center directors and teachers have an opportunity to support parents by providing nutritious meals and snacks on a daily basis as well as workshops designed to suggest practical solutions to the challenges parents faced. Positive social change will result from supporting parents in providing daily

nutritious meals for their children and lead to healthier young children fully equipped to do their best every day in school.

References

- Adams, E. L., Caccavale, L. J., Smith, D., & Bean, M. K. (2020). Food insecurity, the home food environment, and parent feeding practices in the era of COVID-19.

 Obesity, 28(11), 2056–2063. https://www.doi.org/10.1002/oby.22996
- Alchemer. (2010, March 17). *Qualitative and quantitative research: Which to use*. https://www.alchemer.com/resources/blog/quantitative-qualitative-research/
- American Academy of Pediatrics. (2020, August 20). *Childhood nutrition*. https://www.healthychildren.org/English/healthy-living/nutrition/Pages/Childhood-Nutrition.aspx
- Baroni, L., Goggi, S., Battaglino, R., Berveglieri, M., Fasan, I., Filippin, D., Griffith, P., Rizzo, G., Tomasini, C., Tosatti, M. A., & Battino, M. A. (2018). Vegan nutrition for mothers and children: Practical tools for healthcare providers. *Nutrients*, 11(1), Article 5. https://doi.org/10.3390/nu11010005
- Black, M. M., Trude, A. C. B., & Lutter, C. K. (2020). All children thrive: Integration of nutrition and early childhood development. *Annual Review of Nutrition*, 40, 375– 406. https://doi.org/10.1146/annurev-nutr-120219-023757
- Blackstone, N. T., El-Abbadi, N. H., McCabe, M. S., Griffin, T. S., & Nelson, M. E. (2018). Linking sustainability to the healthy eating patterns of the Dietary Guidelines for Americans: A modelling study. *The Lancet Planetary Health*, 2(8), e344–e352. https://doi.org/10.1016/S2542-5196(18)30167-0
- Boundy, E. O., Fisher Boyd, A., Hamner, H. C., Belay, B., Liebhart, J. L., Lindros, J., Hassink, S., & Frintner, M. P. (2020). US pediatrician practices on early nutrition,

- feeding, and growth. *Journal of Nutrition Education & Behavior*, 52(1), 31–38. https://doi.org/10.1016/j.jneb.2019.10.006
- Bree, R. T., & Gallagher, G. (2016). Using Microsoft Excel to code and thematically analyse qualitative data: A simple, cost-effective approach. *All Ireland Journal of Higher Education*, 8(2), Article 281. https://ojs.aishe.org/index.php/aishe-j/article/view/281
- Bryant, L. M., Eicher-Miller, H. A., Korucu, I., & Schmitt, S. A. (2020). Associations between subjective and objective measures of the community food environment and executive function in early childhood. *Nutrients*, *12*(7), Article 1944. https://doi.org/10.3390/nu12071944
- Centers for Disease Control and Prevention. (n.d.). *Childhood nutrition facts*. U.S.

 Department of Health and Human Services.

 https://www.cdc.gov/healthyschools/nutrition/facts.htm
- Contento, I. R. (2008). Nutrition education: Linking research, theory, and practice. *Asia Pacific Journal of Clinical Nutrition*, 17(Suppl. 1) 176–179. https://apjcn.nhri.org.tw/server/APJCN/17%20Suppl%201//176.pdf
- Contento, I., & Koch, P. (2021). *Nutrition education: Linking research, theory, and practice* (4th ed.). Jones and Bartlett Learning.
- Cusick, S. E., & Georgieff, M. K. (2017). The role of nutrition in brain development: The golden opportunity of the "first 1000 days." *The Journal of Pediatrics*, *175*, 16–21. https://doi.org/10.1016/j.jpeds.2016.05.013
- Dahlsgaard, K. & Bodie, J. (2019). The (extremely) picky eaters clinic: A pilot trial of a

- seven -session group behavioral intervention for parents of children with avoidant restrictive food intake disorder. *Cognitive and Behavioral Practice*, 26(3), 492–505. https://doi.org/10.1016/j.cbpra.2018.11.001
- Daniel, C. (2020). Is healthy eating too expensive? How low-income parents evaluate the cost of food. *Social Science & Medicine*, 248, Article 112823.

 https://www.sciencedirect.com/science/article/abs/pii/S0277953620300423
- De Cosmi, V., Scaglioni, S., & Agostoni, C. (2017). Early taste experiences and later food choices. *Nutrients*, 9(2), Article 107. https://doi.org/10.3390/nu9020107
- Dev, D. A., Byrd-Williams, C., Ramsay, S., McBride, B., Srivastava, D., Murriel, A., Arcan, C., & Adachi-Mejia, A. M. (2017). Engaging parents to promote children's nutrition and health: Providers' barriers and strategies in Head Start and child care centers. *American Journal of Health Promotion*, 31(2), 153–162. https://doi.org/10.1177/0890117116685426
- DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview.

 *Medical Education, 40(4), 314–321. https://doi.org/10.1111/j.1365-2929.2006.02418.x
- DiGirolamo, A. M., Ochaeta, L., & Flores, R. M. M. (2020). Early childhood nutrition and cognitive functioning in childhood and adolescence. *Food and Nutrition Bulletin*, 41(1), 31–40. https://doi.org/10.1177/0379572120907763
- Downs, S., & Demmler, K. M. (2020). Food environment interventions targeting children and adolescents: A scoping review. *Global Food Security*, 27. https://doi.org/10.1016/j.gfs.2020.100403

- Drennen, C. R., Coleman, S. M., de Cuba, S. E., Frank, D. A., Chilton, M., Cook, J. T., & Black, M. M. (2019). Food insecurity, health, and development in children under age four years. *Pediatrics*, *144*(4). https://doi.org/10.1542/peds.2019-0824
- Dreyer, J. S. (1998). The researcher: Engaged participant or detached observer? *Journal of Empirical Theology*, 11(2), 5-22. https://doi.org/10.1163/157092598X00103
- Farrell, J. A., Cordeiro, L. S., Qian, J., Sullivan-Werner, L., & Nelson-Peterman, J. L. (2018). Food affordability, food security, and the Expanded Food and Nutrition Education Program. *Journal of Hunger & Environmental Nutrition*, 13(2), 180-191. https://doi.org/10.1080/19320248.2017.1315326
- Ferreira, M., & Butler, M. (2020). Six essential nutrients and why your body needs them.

 Healthline. https://www.healthline.com/health/food-nutrition/six-essential-nutrients*
- Ford, E. (2020). Tell me your story: Narrative inquiry in LIS research. *PDXSchlor*. https://pdxscholar.library.pdx.edu/ulib_fac/292/
- Forward, A. (2017). Examining child sedentary behaviour in the context of children's current multimedia environment. *Canadian Journal of Public Health*, 108(1). https://dx.doi.org/10.17269/CJPH.108.6015
- Gammelgaard, B. (2017). Editorial: The qualitative case study. *The International Journal of Logistics Management*, 28(4). 910-913. https://doi.org/10.1108/IJLM-09-2017-023
- Given, L. (2008). Thematic coding and analysis. *The SAGE Encyclopedia of Qualitative Research Methods*. https://dx.doi.org/10.4135/9781412963909.n451

- Hackett, P. (Ed.). (2015). Qualitative research methods in consumer psychology:

 Ethnography and culture (1st ed.). *Psychology Press*.

 https://doi.org/10.4324/9781315776378
- Halder, S. & Kejriwal, S. (2016). Nutritional awareness of mothers in relation to nutritional status of the preschool children. *Early Childhood Development and Care*, 186(9), 1366-1377. https://eric.ed.gov/?id=EJ1109880
- Hamberg, K., Johansson, E., Lindgren, G., & Westman, G. (1994). Scientific rigor in qualitative research Examples from a study in Women's Health in Family
 Practice. Family Practice, 11(2), 176-181. https://doi.org10.1093/fampra/11.2.176
- Harris, H. A., Staton, S., Morawska, A., Gallegos, D., Oakes, C., & Thorpe, K. (2019). A comparison of maternal feeding responses to child fussy eating in low-income food secure and food insecure households. *Appetite*, 137, 259-266. https://doi.org/10.1016/j.appet.2019.03.005
- Hasnin, S., Dipti, A., & Alison, T. (2020). Participation in the CACFP ensures availability but not intake of nutritious foods at lunch in preschool children in childcare centers. *Journal of the Academy of Nutrition and Dietetics*, 120(10), 1722-1729.
 - https://www.sciencedirect.com/science/article/abs/pii/S2212267220302999
- Holben, D. H., & Marshall, M. B. (2017). Position of the Academy of Nutrition and Dietetics: Food insecurity in the United States. *Journal of the Academy of Nutrition and Dietetics*, 117(12), 1991-2002. https://doi.org/10.1016/j.jand.2017.09.02

- Hong, J., Bales, D. W., & Wallinga, C. R. (2018). Using family backpacks as a tool to involve in teaching young children about healthy eating. *Early Childhood Education Journal*, 46(2), 209–221. http://dx.doi.org/10.1007/s10643-017-0848-8
- Jackson, D. B., Chilton, M., Johnson, K. R., & Vaughn, M. G. (2019). Adverse childhood experiences and household food insecurity: Findings from the 2016 National Survey of Children's Health. *American Journal of Preventive Medicine*, 57(5), 667-674. https://doi.org/10.1016/j.amepre.2019.06.004
- Jackson, D. B., & Testa, A. (2020). Household food insecurity and preschool suspension/expulsion in the United States. *Preventive Medicine*, 141, https://doi.org/10.1016/j.ypmed.2020.106283
- Jakobovich, R., Shoval, E., Berry, E. M., & Shulruf, B. (2019). Supporting children to act as change agents for parents in preparing their lunch box. *Australasian Journal of Early Childhood*, 44(2), 153-165. https://doi.org/10.1177/1836939119831887
- Jia, P., Luo, M., Li, Y., Zheng, J. S., Xiao, Q., & Luo, J. (2019). Fast-food restaurant, unhealthy eating, and childhood obesity: a systematic review and meta-analysis.

 Obesity Reviews. https://doi.org/10.1111/obr.12944
- Keith-Jennings, B., Llobrera, J., & Dean, S. (2019). Links of the Supplemental Nutrition

 Assistance Program with food insecurity, poverty, and health: Evidence and
 potential. *American Journal of Public Health*, 1631-1677.

 https://doi.org/10.2105/AJPH.2019.305325
- Kiral, B. (2019). The rights and responsibilities of parents according to the views of teachers. *Asian Journal of Education and Training*, *5*(1), 121–133.

- https://doi.org/10.20448/journal.522.2019.51.121.133
- Kopkin, N., Martin, M. L., & Hollar, D. (2018). Improvements in standardized test scores from a multi-component nutrition and healthy living intervention in a U.S, elementary-school setting. *Health Education Journal*, 77(5), 527–541. https://doi.org/10.1177/0017896917741510
- Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, (24)1, 120-124. https://doi.org/10.1080/13814788.2017.1375092
- Kurtulmus, Z. (2016). Analyzing parental involvement dimensions in early childhood education. *Educational Research and Reviews*, 11(12), 1149–1153. https://doi.org/10.5897/ERR2016.2757
- Kwon, K. M., Shim, J. E., Kang, M., & Paik, H. Y. (2017). Association between picky eating behaviors and nutritional status in early childhood: Performance of a picky eating behavior questionnaire. *Nutrients*, *9*(5), 463. https://www.mdpi.com/2072-6643/9/5/463
- Loth, K. A., Uy, M., Neumark-Sztainer, D., Fisher, J. O., & Berge, J. M. (2018). A qualitative exploration into momentary impacts on food parenting practices among parents of pre-school aged children. *Appetite*, *130*, 35–44. https://doi.org/10.1016/j.appet.2018.07.027
- Mayo Foundation for Medical Education and Research. (2021). *Nutrition for kids: Guidelines for a healthy diet.* https://www.mayoclinic.org/healthy-lifestyle/childrens-health/in-depth/nutrition-for-kids/art-20049335

- McDougall, J. (2013). The starch solution. Royale Books, Inc.
- Moon, K., Brewer, T., Januchowski-Hartley, S., Adams, V., & Blackman, D. (2016). A guideline to improve qualitative social science publishing in ecology and conservation journals. *Ecology and Society*, 21(3), 17. http://dx.doi.org/10.5751/ES-08663-210317
- Mulik, K., & Haynes-Maslow, L. (2017). The affordability of MyPlate: An analysis of SNAP benefits and the actual cost of eating according to the dietary guidelines. *Journal of Nutrition Education and Behavior*, 49(8), 623-631. https://doi.org/10.1016/j.jneb.2017.06.005
- National Association for the Education of Young Children. (2022). *Early learning* program accreditation. https://www.naeyc.org
- National Center for Health Statistics. (2020, August). Fast food intake among children and adolescents in the United States, 2015–2018 (Data Brief No. 375). Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. https://www.cdc.gov/nchs/products/databriefs/db375.htm
- Nekitsing, C., Hetherington, M. M., & Blundell-Birtill, P. (2018). Developing healthy food preferences in preschool children through taste exposure, sensory learning, and nutrition education. *Current Obesity Reports*, 7, 60-67. https://doi.org/10.1007/s13679-018-0297-8
- Nepper, M., & Chai, W. (2016). Parents barriers and strategies to promote healthy eating among school age children. *Appetite*, 103. 157-164. https://www.sciencedirect.com/science/article/abs/pii/S0195666316301337

- Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research.

 Evidence Based Nursing (18)2. http://dx.doi.org/10.1136/eb-2015-102054
- Oliveira, K., Almeida, G. M., Gubert, M. B., Moura, A. S., Spaniol, A. M., Hernandez, D. C., Pérez-Escamilla, R., & Buccini, G. (2020). Household food insecurity and early childhood development: Systematic review and meta-analysis. *Maternal & Child Nutrition*, 16(3), e12967. https://doi.org/10.1111/mcn.12967
- Patinkas, L., Horwitz, S., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research.

 Administration and Policy in Mental Health, 42(5), 533-544.

 https://doi.org/10.1007/s10488-013-0528-y
- Pomeranz, J., Mozaffarian, D., & Micha, R. (2020). Sugar-sweetened beverage warning policies in the broader legal context: Health and safety warning laws and the First Amendment. *American Journal of Preventive Medicine*.

 https://www.ajpmonline.org/article/S0749-3797(20)30055-6/fulltext
- Ponterotto, J. G. (2006). Brief note on the origins, evolution, and meaning of the qualitative research concept thick description. *The Qualitative Report*, 11(3), 538-549. https://doi.org/10.46743/2160-3715/2006.1666
- Ramsay, S., Shriver, L., & Taylor, C. (2017). Variety of fruit and vegetables is related to preschoolers' overall diet quality. *Preventive Medicine Reports*, 5, 112–117. https://doi.org/10.1016/j.pmedr.2016.12.003
- Ravitch, S., & Carl, N. (2016). Qualitative research: Bridging the conceptual, theoretical, and methodological. Sage Publications.

- Reid, A., Brown, J., & Smith, J. (2018). Ethical dilemmas and reflexivity in qualitative research. *Perspectives of Medical Education*, 7, 69-75. https://doi.org/10.1007/s40037-018-0412-2
- Root, N. (2021). Scope and delimitations in research Explained and example.

 Education. https://ukwritingexperts.co.uk/blog/scope—and-delimitations-in-research-explained—example/
- Saldana, J. (2016). *The coding manual for qualitative researchers*. Sage Publications, Ltd.
- Scaglioni, S., De Cosmi, V., Ciappolino, V., Parazzini, F., Brambilla, P., & Agostoni, C. (2018). Factors influencing children's eating behaviors. *Nutrients*, 10(706), 1-17. https://doi.org/10.3390/nu10060706
- Schuster, R., Szpak, M., Klein, E., Sklar, K., & Dickin, K. (2019). "I try, I do": Child feeding practices of motivated, low-income parents reflect trade-offs between psychosocial and nutrition goals. *Science Direct*, *136*(1), 114–123. https://www.sciencedirect.com/science/article/pii/S0195666318301284
- Schwarzenberg, S., & Georgieff, M. (2018). Advocacy for improving nutrition in the first 1000 days to support childhood development and adult health. *Pediatrics*, 141(2). https://doi.org/10.1542/peds.2017-3716
- Shankar, P., Chung, R., & Frank, D. A. (2017). Association of food insecurity with children's behavioral, emotional, and academic outcomes: A systematic review. *Journal of Developmental & Behavioral Pediatrics*, *38*(2), 135-150. https://doi.org/10.1097/DBP.0000000000000383

- Simon, M., & Goes, J. (2013). *Dissertations and scholarly research: Recipes for success*.

 Createspace independent publishing platform.
- Smith, A. D., Herle, M., Fildes, A., Cooke, L., Steinsbekk, S., & Llewellym, C. H. (2017). Food fussiness and food neophobia share a common etiology in early childhood. *Journal of Child Psychology and Psychiatry*, 58(2) 189-196. https://doi.org/10.1111/jcpp.12647
- Srivastava, D., Torquati, J., de Guzman, M., & Dev, D. (2019). Understanding parental ethnotheories and practices about healthy eating: Exploring the developmental niche of preschoolers. *American Journal of Health Promotion*, *33*(5), 727–735. https://doi.org/10.1177/0890117118810247
- Stage, V. C., Wilkerson, K., Hegde, A., Lisson, S., Babatunde, O. T., & Goodell, L. S. (2018). Head Start administrator and teacher perceptions of parental influence on preschool children's nutrition education. *Journal of Early Childhood Research*, 16(2), 160–175. https://doi.org/10.1177/1476718X17705415
- Truman, E., Lane, D., & Elliott, C. (2017). Defining food literacy: A scoping review. *Appetite*, *116*, 365-371. https://pubmed.ncbi.nlm.nih.gov/28487244/
- United States Census Bureau. (2021). *Quick facts Solano County California*https://www.census.gov/quickfacts/fact/table/solanocountycalifornia/PST045222
- United States Department of Agriculture. (2022a). *Child and adult care food program*. https://www.fns.usda.gov/cacfp
- United States Department of Agriculture. (2022b). *MyPlate*. https://www.myplate.gov United States Department of Agriculture. (2022c). *USDA food patterns*.

- https://www.fns.usda.gov/usda-food-patterns
- U. S. Department of Agriculture. (2022d). *Dietary guidelines for Americans*. https://www.dietaryguidelines.gov/
- Vollmer, R. L., & Baietto, J. (2017). Practices and preferences: Exploring the relationships between food-related parenting practices and child food preferences for high fat and/or sugar foods, fruits, and vegetables. *Appetite*, 113, 134-140. https://doi.org/10.1016/j.appet.2017.02.019
- Williams, D. (2018). *Qualitative inquiry in daily life. (1st ed.)*. EdTech Books. https://edtechbooks.org/qualitativeinquiry
- Wiseman, N., Harris, N., & Lee, P. (2016). Lifestyle knowledge and preferences in preschool children: Evaluation of the Get up and grow healthy lifestyle education program. *Health Education Journal*, 75(8), 1012–1024.
 https://doi.org/10.1177/0017896916648726
- Wiseman, N., Harris, N., & Lee, P. (2018). Listening to pre-school children speak about health and health-promoting behaviors. *Health Education Journal*, 77(3), 312–321. https://doi.org/10.1177/0017896917746430
- World Health Organization. (2022). Child growth standards. https://www.who.int/tools/child-growth-standards/standards
- Yen, C. E. (2020). Food and nutrient provision in preschools: Comparison of public and private preschools. *Nutrition and Health*, 27(1). https://doi.org/10.1177/0260106020942430

Appendix: Interview Questions

- 1. Tell me about a typical family dinner time. Does everyone eat together and does everyone eat the same things?
 - a. Who fixes dinner at your house?
 - b. How do you [How does that person] decide what to serve?
 - c. How often do the children get different food than the adults, and if so, why is that?
- 2. How much does the nutritional value of foods factor in to what is served at dinner time?
 - a. Tell me about what nutrients you want to be sure your children get enough of.
 - b. Tell me about any foods you try to avoid feeding your child. Why?
- 3. How much do you think the foods you feed your child affect their energy and their ability to focus and learn at school? Do you think nutrition matters at all in children's school success?
- 4. Speaking of school, what do you think about the food the center serves your child for lunch?
- 5. What changes would you make to the center's meal program, if you could?
 - a. How often do you send a lunch from home, so your child can eat something different from the food the center serves?
 - b. If you ever send a lunch from home, what makes you decide to do that?
 - Some parents have told me they read the menu and just know their child won't like the lunch that day.

- ii. Some parents tell me their child just asks for a lunch from home.
- c. If you ever send a lunch from home, what sorts of foods do you usually include in that?
- 6. What sorts of things get in the way of feeding your child nutritious foods?
 - a. Some parents have told me that nutritious food is too expensive. Is that something you think about?
 - b. Some parents have told me that their child won't eat many nutritious foods and they don't want their child to go hungry. Is that something you think about?
 - c. Some parents have told me they just don't have time to think very much about nutrition, so they send what is easiest. Is that something you think about?
- 7. How important is it to you that your child eat nutritious food?
- 8. How does the childcare center support you in providing nutritious foods for your child?
 - a. What things do you wish the center did that would help you feed your child more nutritious food?
 - b. What help do you need in making sure your child eats nutritious food?
- 9. How confident are you that you know what foods are nutritious for children?
- 10. What else can you tell me about how you feed your child and the support you get from the center?