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EARLY CHILDHOOD HEALTH AND NUTRITION AS INFLUENCED BY FOOD COMPETENCE PRACTICES

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Abstract. The study unfolded the relationship between 120 kinder teachers and food competence practices in early childhood health and nutrition in Governor Generoso South District, Davao Oriental Schools Division. The study used a non-experimental descriptive-correlational research design, where it utilized an adapted survey instrument to gather responses. Data gathered were treated using Mean scores with descriptive interpretation, Pearson r, and Simple Linear Regression Analysis. Findings revealed that the extent of food competence practices in terms of nutrition knowledge and food safety and hygiene were oftentimes manifested; portion control and mindful eating, healthy food choices, and meal planning and preparation were moderately extensive, while the extent of early childhood health and nutrition in terms of allergen management, mealtime practices, and oral health were moderately extensive. Wellness education was sometimes manifested was extensive. There was a significant correlation between food competence practices and early childhood health and nutrition. Domains of food competence significantly influenced early childhood health and nutrition. Future research may explore the development of evidence-based guidelines and interventions for promoting food competence in early childhood education, considering variations in cultural contexts, socioeconomic factors, and educational approaches.

KEY WORDS

1. Early childhood health 2. nutrition 3. food competence practices

1. Introduction

The importance of food competence in schools cannot be overstated, as it plays a vital role in promoting early childhood health and nutrition on a global scale. This includes providing nourishing meals that align with cultural preferences, educating children on the value of healthy eating, and fostering their food-related skills. Many schools partner with local communities and governments to ensure children can access well-rounded and culturally diverse meals that meet their nutritional needs. This enhances physical well-being and contributes to cognitive development and academic success. Food competence practices in schools play a vital role in promoting early childhood health and nutrition on an international scale. These practices encompass a range of initiatives, including providing nutritious and culturally appropriate meals, educating children about the importance of healthy eating, and fostering food-related skills. Schools collaborate with local communities and governments in many international settings to ensure children can access balanced and diverse meals that meet their nutritional needs.

This supports physical health, cognitive development, and academic performance (Mediratta and Mathur, 2023). Furthermore, food competence programs often emphasize cultural diversity, teaching children about cuisines and food traditions, promoting tolerance and multicultural awareness. Overall, these practices create a holistic approach to early childhood health and nutrition, recognizing that a well-rounded education in food competence is essential for children's overall well-being and development in an increasingly globalized world (Inalsik and Angin, 2021). In the Philippine setting, food competence practices in schools play a crucial role in promoting early childhood health and nutrition. Recognizing the significance of a well-balanced diet for child development, schools collaborate with local government and community organizations to provide nutritious and culturally relevant meals to young learners. These practices not only address issues of food security but also contribute to improved cognitive function and overall well-being. Moreover, educational programs in Philippine schools often integrate lessons on traditional Filipino cuisine and the importance of locally sourced ingredients, fostering an appreciation for indigenous food culture and promoting sustainable food choices. By emphasizing food competence, schools in the Philippines empower children to make healthy dietary choices from an early age, setting the foundation for a lifetime of good nutrition and well-being (Lopez, et.al, 2022). Issues surrounding food competence practices in schools can encompass a range of challenges. One prevalent concern is the availability and affordability of nutritious meals for students, particularly in underserved communities. Limited budgets and resources may lead to the provision of processed and less nutritious food options in school cafeterias. Additionally, disparities in access to quality food can exacerbate health inequalities among students. Food safety and hygiene can also be problematic, as schools must ensure proper handling, storage, and preparation of meals to prevent foodborne illnesses. Furthermore, balancing the need for nutrition education with academic demands can be a challenge, as educators may struggle to find time and resources to incorporate comprehensive wellness programs into the curriculum. Addressing these issues requires collaboration among educational institutions, government agencies, and community stakeholders to prioritize children's health and well-being, providing them with the knowledge and access to make healthy food choices both in school and throughout their lives (Rosales et al., 2023). In Davao Oriental schools, as in many other regions, there are several issues related to food competence practices that need attention. One significant concern is the availability and sourcing of nutritious ingredients, given the region's diverse geography and sometimes remote locations. Ensuring that schools have consistent access to fresh, locally sourced produce and other nutritious staples can be challenging. Budget constraints may also limit the variety and quality of meals provided to students. Moreover, school staff need ongoing training and capacity-building regarding food safety and hygiene practices to prevent foodborne illnesses. Integrating comprehensive nutrition education into the curriculum can also be a logistical challenge, requiring dedicated time and resources (Eley et al., 2022). Addressing these issues in Davao Oriental schools necessitates collaboration between educational authorities, local farmers, and government agencies to prioritize early childhood health and nutrition. This ensures that students have access to nutritious meals and the knowledge to make healthy food choices in a region with its unique set of challenges and opportunities. The region's diverse geography and remote locations pose challenges for sourcing nutritious ingredients, a primary concern for schools in Davao Oriental. Partnerships with local farmers and suppliers can ensure a steady supply of fresh, locally

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sourced produce. Despite budget constraints, creative menu planning and efficient resource allocation enable schools to offer healthier options. Implementing comprehensive food safety and hygiene training programs is essential to prevent foodborne illnesses. Additionally, Integrating nutrition education into the curriculum and extracurricular activities is crucial, collaborating with schools, health authorities, and NGOs to develop engaging programs. Through these efforts, Davao Oriental schools can promote food competence practices, fostering early childhood health and nutrition despite unique challenges (Rosales et al., 2023). Schools play a pivotal role in influencing early childhood health and nutrition. Educational institutions can positively impact students' lifelong habits by creating an environment that prioritizes wellness and nutrition. Schools can offer nutritious meal programs that align with dietary guidelines, ensuring students can access balanced and wholesome food options. Furthermore, incorporating nutrition education into the curriculum can equip children with the knowledge and skills to make informed dietary choices. Physical education classes and extracurricular activities can promote physical activity and a healthy lifestyle. Additionally, schools can foster a culture of wellness by encouraging healthy eating practices, mindfulness, and social interactions during mealtimes. By cultivating an environment that values health and nutrition, schools can contribute significantly to the well-being of young children and empower them to lead healthier lives as they grow (Lopez, 2022). Indeed, this study was subsequently conducted to explain how food competence practices influence early childhood health and nutrition. It was vital for parents and teachers to understand how this is important to the development of children at the kinder level. Only a few studies dealt with childhood health and nutrition from primary to tertiary education.

1.1. Synthesis—This study focuses on food competence in schools, which is essential for promoting early childhood health and nutrition. It encompasses a range of practices, such as serving culturally appropriate meals, teaching healthy eating habits, and fostering food-related skills. However, there are significant challenges to achieving this goal, including affordability, availability of nutritious meals, and integrating nutrition education with academic curricula. In the Philippines, food competence practices emphasize balanced diets and cognitive function, with a focus on traditional cuisine and sustainability. In Davao Oriental, solutions involve collaboration between educational institutions, local farmers, and government agencies to ensure that all children have access to healthy and culturally appropriate meals.

1.2. Theoretical Framework—The study was anchored on Njura's theory of food competence (2020). Food competence theory represents a holistic approach to daily understanding and engaging with food. Rooted in the idea that individuals can develop a comprehensive set of food-related skills, knowledge, and attitudes, food competence goes beyond mere nutrition and cooking proficiency. It encompasses an individual's ability to make informed food choices, plan, prepare, and handle food safely, and understand food's social, cultural, and environmental dimensions. Food competence theory recognizes that food is not just fuel but also a vital aspect of culture, identity, and social interaction. It emphasizes the importance of fostering a positive relationship with food and developing lifelong food-related skills. Ultimately, this theory encourages individuals to engage with food mindfully and sustainably, promoting personal well-being and a more harmonious relationship with the food systems that sustain us. Early childhood was a developmentally critical period for building healthy eating habits for optimal growth and disease prevention in later years. Picky eating is a frequent problem among

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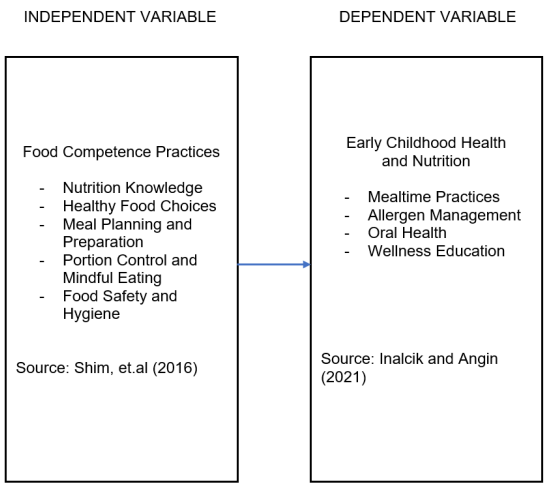

Fig. 1. Theoretical and Conceptual Framework of the Study

children. Food acceptance (e.g., acceptance of fruits and vegetables) may be determined by food preference, which is genetically predisposed but also shaped by food experiences during early life. Parents report controlling children's eating through availability and accessibility to healthy foods, modeling, monitoring, restriction, pressure to eat, encouragement, and nutrition education. Feeding practices can be differentiated by their association with the orientation of children's motivation. Motivation is a theoretical way to understand human behaviors. One motivation theory, the self-determination theory (SDT), addresses intrinsic and extrinsic motives and internalization through satisfying psychological needs inherent to humans. For children who dislike vegetables and have no intrinsic motives to eat, parents may attempt to offer rewards for eating vegetables. Extrinsically motivated actions may be performed with resistance and/or disinterest, whereas SDT suggests that even extrinsic motivation can be internalized. Figure 1 presents the relationship between the extent of food competence practices on Early Childhood Health and Nutrition in Governor Generoso South District, Davao Oriental Schools Division. The ancient theory of nutrition dates back to the time of Aristotle and Galen. They considered nutrition as a vital part of health, disease, performance, and healing. The power in each part of the body is believed to be dependent on the blood flowing to that part. Eating Competence (EC) is one behavioral perspective of eating practices that has been associated with a healthy lifestyle. It emphasizes eating pleasure, self-regulation of eating, body weight satisfaction, and regular meal frequency that includes food variety without focusing on dietary guidelines.

1.3. Statement of the Problem—The study was purposely conducted to determine the relationship between food competence practices on the early childhood health and nutrition in Governor Generoso South District, Davao Oriental Schools Division. This, specifically sought to answer the following statement of the problem:

(1) What is the extent of food competence practices in terms of:
    (1) nutrition knowledge;
    (2) healthy food choices;
    (3) meal planning and preparation;

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(4) portion control and mindful eating; and
(5) food safety and hygiene?

(2) What is the extent of early childhood health and nutrition in terms of:
(1) mealtime practices;
(2) allergen management;
(3) oral health; and
(4) wellness education?

(3) Is there a significant relationship between food competence practices and early childhood health and nutrition?

(4) Which among the food competence practices significantly influence early childhood health and nutrition?

1.4. Hypothesis—To provide empirical evidence given the posed theoretical and conceptual frameworks as claim by the study, null hypotheses were tested at 0.05 alpha level of significance, stating: Ho 1: There is no significant relationship between food competence practices and early childhood health and nutrition; and, Ho 2: None from among the food competence practices significantly influence early childhood health and nutrition. This proposed study entitled the relationship between food competence practices and early childhood health and nutrition in Governor Generoso South District is beneficial to various stakeholders. Results will be of significance to the following: School Principal and Administrators. School administrators can use the study's findings to assess the effectiveness of current health and nutrition programs in their schools and make informed decisions about resource allocation and curriculum development. It can help identify areas for improvement in meal planning, food safety, nutrition education, and overall wellness practices within the school environment. The study can inform the development of policies and guidelines that promote a healthier and more food-competent school environment. Teachers. Teachers can benefit from the study's insights by integrating nutrition education into their curriculum, creating more engaging and impactful lessons. They can adapt their teaching methods to foster food competence skills, such as meal planning, cooking, and mindful eating, among their students. The study can also help teachers recognize signs of food insecurity or poor nutrition among their students and collaborate with parents and school administrators to address these issues. Parents. Parents can gain valuable information from the study to support their children's nutrition and food competence at home. It can help parents make informed choices about their children's meals, snacks, and overall dietary habits. Parents can also use the study's findings to engage in discussions with teachers and school administrators about improvements in school nutrition and wellness programs. Future Researchers. Future researchers can build upon the study's findings to delve deeper into specific aspects of early childhood health, nutrition, and food competence. The study can serve as a foundation for more extensive research projects, helping to expand the body of knowledge in this critical field. It can also inspire researchers to explore innovative interventions and strategies for improving early childhood health and nutrition practices. In summary, a study on early childhood health, nutrition, and food competence practices can provide valuable insights and recommendations that benefit school administrators, teachers, parents, and future researchers alike. It contributes to creating healthier, more informed, and food-competent environments for young children, promoting their overall well-being and development. This

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study laid out the terms that is conceptually and operationally defined to set up better understanding and reference when discussions of results will be taken up in the preceding chapters of the study. Food Competence Practices. Food competence practices encompass a range of knowledge, skills, and attitudes related to food and nutrition. These practices involve the ability to make informed and healthy food choices, plan and prepare balanced meals, handle food safely, and understand the broader cultural, social, and environmental aspects of food. Food competence goes beyond basic nutrition knowledge and cooking skills; it includes the capacity to navigate food environments, interpret food labels, practice portion control, and engage in mindful eating. Food competence practices aim to promote not only individual well-being but also sustainable and culturally respectful relationships with food, fostering a holistic and responsible approach to food consumption and preparation. In this study, this measures indicators nutrition knowledge, healthy food choices, meal planning and preparation, portion control and mindful eating and food safety and hygiene. Nutrition Knowledge: This indicator refers to an individual's understanding and awareness of various aspects of nutrition, including the nutritional value of different foods, dietary guidelines, food groups, and the role of nutrients in maintaining health. Operationally, nutritional knowledge can be assessed through measures such as nutrition quizzes, surveys, or tests that evaluate an individual's knowledge of basic nutrition concepts and principles. Healthy Food Choices. Healthy food choices entail selecting foods that are nutritious and contribute to overall health and well-being. Operationally, this indicator can be measured by assessing the frequency and variety of healthy foods consumed by individuals, as well as their adherence to dietary guidelines or recommendations, such as consuming fruits, vegetables, whole grains, lean proteins, and limiting processed foods, sugary beverages, and high-fat foods. Meal Planning and Preparation. This indicator involves the ability to plan and prepare balanced and nutritious meals that meet dietary needs and preferences. Operationally, meal planning, and preparation skills can be evaluated through observations or self-reports of individuals' meal planning habits, grocery shopping behaviors, cooking techniques, and meal organization practices. Portion Control and Mindful Eating. Portion control and mindful eating refer to the practice of being aware of portion sizes and eating mindfully to regulate food intake and promote healthier eating habits. Operationally, this indicator can be assessed by observing or self-reporting individuals' portion sizes during meals, their ability to recognize appropriate serving sizes, and their mindful eating practices, such as paying attention to hunger and fullness cues, savoring food, and avoiding overeating or eating in response to emotions. Food Safety and Hygiene. Food safety and hygiene involve the knowledge and behaviors necessary to prevent foodborne illnesses and maintain safe food handling practices. Operationally, this indicator can be evaluated through observations or self-reports of individuals' food safety practices, such as proper handwashing techniques, storage and handling of perishable foods, cooking temperatures, and sanitation practices in the kitchen and food preparation areas. Early Childhood Health and Nutrition. Early childhood health and nutrition refer to the well-being and dietary needs of young children, typically ranging from infancy to around eight years of age. It encompasses the physical, mental, and social dimensions of health during this critical developmental period. Early childhood health emphasizes the importance of regular check-ups, vaccinations, and disease prevention to ensure children's physical growth and overall health. Nutrition in early childhood is vital, as it lays the foundation for a lifetime of healthy eating habits. Adequate nutrition during this phase is essential for healthy

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growth and development, including cognitive, motor, and social skills. It involves providing children with a balanced diet that meets their energy and nutrient requirements, fostering a positive relationship with food, and educating them about making healthy food choices. Early childhood health and nutrition are closely interconnected, as proper nutrition is a key factor in promoting overall health and well-being during these formative years. In this study, this measures indicators in terms of mealtime practices, allergen management, oral health, and wellness education. Mealtime Practices. Mealtime practices refer to the behaviors and routines surrounding meal preparation, serving, and consumption within a household or community. Operationally, this indicator can be assessed through observations or self-reports of specific mealtime behaviors, such as frequency of family meals, meal planning habits, cooking methods used, use of processed foods versus homemade meals, and cultural or social customs related to mealtime. Allergen Management. Allergen management involves strategies and practices aimed at preventing exposure to allergens that may trigger allergic reactions in individuals with food allergies or sensitivities. Operationally, this indicator can be evaluated by examining the presence of allergen-free options in food preparation and serving, labeling of allergens on packaged foods, awareness of common allergens among food handlers and caregivers, and implementation of precautions to avoid cross-contamination in food handling and storage. Oral Health. Oral health encompasses the condition and care of the teeth, gums, and mouth to maintain optimal hygiene and prevent dental problems. Operationally, this indicator can be measured through assessments of oral hygiene practices, such as frequency of brushing and flossing, use of fluoride products, attendance at dental check-ups, prevalence of dental caries or cavities, and overall oral health status as indicated by visual inspection or self-reported measures of oral discomfort or pain. Wellness Education. Wellness education involves the provision of information and resources to promote holistic well-being, encompassing physical, mental, emotional, and social health aspects. Operationally, this indicator can be assessed by evaluating the content and delivery of wellness education programs or interventions, including topics covered (e.g., nutrition, physical activity, stress management, mental health), modes of delivery (e.g., workshops, classes, online resources), participant engagement and satisfaction, and changes in knowledge, attitudes, and behaviors related to wellness practices.

2. Methodology

This chapter contains the processes and steps in the conduct of the study. This includes the selection of the design of the study, the respondents and its sampling method, the research instruments to be used in data gathering, the procedure, and the ethical consideration and lastly, the data analysis. These steps are considered essentials to assume appropriateness and correctness to produce sound data process collection, analysis, and interpretation. In the preparation of this paper, the researcher employed artificial intelligence tools for proofreading. Specifically, AI was utilized to enhance the accuracy, coherence, and overall quality of the manuscript. This practice is being explicitly stated to maintain transparency and adhere to ethical standards in research. The usage of AI for proofreading reflects a commitment to leveraging advanced technologies responsibly and acknowledges the increasing prevalence and capability of AI in academic and professional writing.

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2.1. Research Design—The study used the non-experimental, descriptive - correlational research design which was a non-experimental design that investigates the degree to which two or more variables are related. It does not involve the manipulation of any variables, but rather measures and analyses the existing relationship between them (Creswell, 2014). In this study, correlational research design can be used to examine the relationship between the extent of School Heads' role on authentic leadership and Teachers' organizational commitment. According to Creswell (2014), descriptive-correlational research design was used to describe and explain the relationship between two or more variables. The main goal of this type of research design was to identify the relationship between variables, and it could be used to make predictions about future events. Descriptive-correlational research designs were used to describe the relationships between variables. Researchers collect data on two or more variables and then analyze the data to determine if there is a relationship between them. This type of research was used to generate hypotheses for future studies Campbell Stanley (1963) as cited by Abid et al., (2023). The descriptive-correlational research design could be valuable when experimental manipulation of variables was not possible or ethical. For example, manipulating variables such as age, gender, or medical condition to examine their effects on other variables may be unethical. In such cases, a descriptive-correlational design can provide a valuable alternative for investigating the relationships between variables of interest without requiring manipulation or control of those variables. In this study, the relationship between food competence practices in early childhood health and nutrition in Governor Generoso South District is assumed to have association, thus, the measure of the research design is appropriate for this study.

2.2. Research Respondents—Respondents of the study were the Kinder Teachers and Elementary School Teachers of Governor Generoso South District, Davao Oriental Schools Division. The teachers used a Rao soft sample size calculator, where 120 respondents were taken randomly from each respective School within the Governor Generoso South District Elementary school. Once randomly determined, the respondents were informed through online platform and face to face considering the availability of the Wi-Fi Connections, they were likewise oriented about the purpose and importance of the study and its contribution to their professional development status. These teacher-respondents were the kinder and elementary teachers who were actively and directly involved in most of the health and nutrition programs of the early childhood learners' performance, most especially in Kinder and or Key Stage 1 and other related activities to support the learners and likewise, the implementation of programs, projects, and activities in line with the implementation plan as directed by DepEd mandates under MATATAG Agenda. Moreover, teachers were qualified for the role, and they are expected to have performed and contributed to improving the schools and the parents' participation, given the new normal learning system during SY 2023-2024. Further, they have frequently engaged in various seminars and trainings in the school management and curriculum development delivery system. Moreover, assumptions in the respective schedule of classes during data collection were explicitly discussed with the respondents, and even observance of health protocol was strictly implemented based on Executive Order 31 S 2020 to avoid possible and lower the risk of contamination.

2.3. Research Instrument—This research study used the adapted instrument taken from reviewed literature and related studies. The researcher took time in gathering and reading reviews of related literature to come up with

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concepts for the content and that supports the instrument and its corresponding strands in articulating the set of question-items, reducing threats to validity. Items were adapted from the contents of the reviewed literatures as argued by the authors. There were two parts of the survey questionnaire which consists of food competence practices in terms of nutrition knowledge, healthy food choices, meal planning and preparation, portion control and mindful eating, and food safety and hygiene. Likewise, the second part of the survey measured the extent of early childhood health and nutrition in terms of mealtime practices, allergen management, oral health, and wellness education. Further, the survey statements were subjected to a test-retest or validity and reliability testing using Cronbach Alpha at a .05 confidence level. They generated an alpha Cronbach of 0.876, which means 87.6 percent confidence in the validity and reliability of the constructs of the survey statement (Shreshtha, 2021). The questionnaire used a 5-point Likert scale to determine the extent of food competence practices; the scale, descriptive rating, and interpretation are provided below:

Scale	**Descriptive Rating**	**Interpretation**
4.20 – 5.00	Very Extensive	The food competence practices is always manifested
3.40 – 4.19	Extensive	The food competence practices is oftentimes manifested
2.60 – 3.39	Moderately Extensive	The food competence practices is sometimes manifested
1.80 – 2.59	Less Extensive	The food competence practices is rarely manifested
1.00 – 1.79	Not Extensive	The food competence practices is not manifested

Meanwhile, to determine the extent of early childhood health and nutrition, a 5-point Likert scale was used in this study, as presented below;

Scale	**Descriptive Rating**	**Interpretation**
4.20 – 5.00	Very Extensive	The early childhood health and nutrition is always manifested.
3.40 – 4.19	Extensive	The early childhood health and nutrition is oftentimes manifested.
2.60 – 3.39	Moderately Extensive	The early childhood health and nutrition is sometimes manifested.
1.80 – 2.59	Less Extensive	The early childhood health and nutrition is rarely manifested.
1.00 – 1.79	Not Extensive	The early childhood health and nutrition is not manifested.

2.4. Data Gathering Procedure—

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The data-gathering procedure within a research project involves a series of critical steps, and among them is the ethical process of obtaining permission to conduct the study. This step is integral to upholding core principles of respect, transparency, and responsible research conduct. The statements were based on the policies and guidelines of the College where the researcher is studying ; as part of the request, researchers articulated their intentions for data collection, analysis, and dissemination, illustrating how these align with the overall research goals. This correspondence should address any concerns or questions anticipated from recipients, alongside assurances regarding ethical safeguards, confidentiality measures, and the study's potential benefits. The formal permission request is then made, explicitly seeking authorization to proceed and emphasizing the significance of their support for the research's success. Permission to conduct the study. The researcher must obtain permission from the appropriate authorities, such as the research adviser, the Dean of the College where the researcher is studying , and the top management of DepEd Davao Oriental Schools Division, before collecting data through the channel. This permission-seeking process typically involves submitting a research proposal with information about the study design, procedures, and potential risks and benefits. The researcher provided information about the purpose and goals of the study and how the data will be collected, analyzed, and reported. In addition, in January 2024, the researcher ensured that all participants were fully informed about the study and their rights and that they provided informed consent before participating. Distribution and retrieval of the questionnaire. In the first week of March 2024, the researcher ensured the accuracy and completeness of data, and the distribution and retrieval of questionnaires were conducted in a standardized and systematic manner. She went into considering the following conditions: Identifying the target population: The researcher identified the appropriate study target population and ensured that the questionnaire was distributed only to individuals who met the inclusion criteria. Collation and statistical treatment of data. The following are the general conditions that should be followed for the collation and statistical treatment of data as part of the data-gathering procedure:

2.5. Ethical Considerations—Ethical considerations were pivotal in ensuring the integrity and respect for individuals' rights within research and educational endeavors. In the context of voluntary participation, ethics underscore the principle that individuals should willingly and without coercion choose to participate in any activity or study. This ethical guideline emphasizes informed consent, which involves providing participants with comprehensive information about the activity or research's nature, purpose, risks, and benefits. Voluntary Participation. Ensures that individuals have the autonomy to make decisions based on their values, beliefs, and interests. This approach safeguards against undue influence, manipulation, or pressure that might compromise the validity and ethical foundation of the endeavor. This further fosters a sense of ownership and engagement among respondents, allowing them to actively contribute to their experience. It also upholds the principles of respect and human dignity by recognizing that each individual's consent is paramount. By adhering to ethical considerations regarding voluntary participation, the researcher cultivated an environment that was built on trust, transparency, and the fundamental values of ethical conduct. Privacy and Confidentiality. In this study, upholding privacy means respecting individuals' boundaries and ensuring that their personal data is collected, stored, and used only for the intended purpose with their informed consent. Confidentiality, on the other hand, dictates that any information shared in trust remains secure and undisclosed to unauthorized parties. This involves

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implementing secure data storage, anonymizing information whenever possible, and obtaining explicit consent for any information shared publicly. Informed Consent Process. All participants in this study will be provided with a clear explanation of the research procedures and goals, and any potential risks or benefits associated with participation. Informed consent involves providing individuals with comprehensive and understandable information about the nature, purpose, procedures, risks, benefits, and potential outcomes of an activity or study. This empowers individuals to make informed decisions based on their own values and preferences. Within the informed consent process, individuals should receive ample opportunity to ask questions and seek clarification before voluntarily agreeing to participate. The information needed to be presented in a language and format that is accessible and comprehensible to the participants, ensuring they fully grasp the implications of their involvement. Adhering to the informed consent process ensures that individuals are treated ethically, their rights are respected, and their participation is entirely voluntary, without any form of coercion or pressure. Risks. In research, ethical guidelines dictate that researchers must carefully evaluate any risks that participants might encounter during their involvement. This includes physical, psychological, emotional, and social risks. The principle of beneficence guides researchers to minimize these risks to the greatest extent possible while maximizing potential benefits. Ethical considerations mandate that participants are fully informed about identified risks, enabling them to make informed decisions about their involvement. Researchers, educators, and professionals were responsible for mitigating risks through careful planning, clear communication, and implementing safeguards to protect participants' well-being. Benefits. Ethical considerations regarding benefits are integral to ensuring the well-being and integrity of individuals engaged in research, education, or professional interactions. Ethical practice entailed transparently communicating potential benefits to participants so they could make informed decisions about their involvement. Furthermore, researchers, educators, and professionals are responsible for upholding these benefits while ensuring that they outweigh any potential risks. In research, identifying potential benefits for participants is crucial. These benefits might encompass gaining new knowledge, contributing to advancements in a field, receiving access to valuable resources, or receiving personalized feedback that promotes personal growth. Plagiarism. Ethical considerations surrounding plagiarism are vital in upholding academic and professional work's integrity, honesty, and originality. Plagiarism involves presenting someone else's ideas, words, or work as one's own without proper attribution. In research endeavors, plagiarism compromises the reliability and credibility of findings, which can have far-reaching consequences for scientific progress and public trust. Proper attribution of sources is essential to maintain the accuracy and originality of ideas. Plagiarism detection tools are also commonly used to ensure the authenticity of written work. By addressing plagiarism ethically, I uphold the values of respect for intellectual property, honesty, and integrity. This approach not only preserves the credibility of academic and professional work but also fosters a culture of learning, collaboration, and originality within our educational and research communities. Fabrication. Fabrication involves the deliberate creation or alteration of data, information, or findings with the intent to deceive or mislead others. This practice undermines the foundations of honesty, transparency, and authenticity that were vital to the pursuit of knowledge and ethical conduct. In research, fabrication erodes the credibility of scientific inquiry and compromises the reliability of findings. Fabricated data can lead to incorrect conclusions, wasted resources, and the misdirection

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of future research efforts, ultimately hindering the advancement of knowledge. By addressing fabrication ethically, The researcher upholds values such as truthfulness, accountability, and responsibility. This approach not only preserves the integrity of academic and professional endeavors but also promotes a culture of authenticity, respect for facts, and advancing knowledge based on accurate information. Falsification. Ethical considerations concerning falsification are essential for maintaining the credibility, honesty, and reliability of research, education, and professional interactions. Falsification involves manipulating, altering, or distorting data, results, or information with the intention to deceive or misrepresent the truth. This practice undermines the core principles of transparency, accuracy, and intellectual integrity that underpin ethical conduct. In research, falsification undermines the foundation of scientific inquiry by distorting the truth and compromising the validity of findings. Falsified data can lead to incorrect conclusions, skewed interpretations, and a distortion of the knowledge-building process, ultimately undermining the trustworthiness of research outcomes. Addressing falsification ethically upholds values such as honesty, transparency, and accountability. This approach not only preserves the integrity of academic and professional endeavors but also cultivates a culture of integrity, accuracy, and commitment to pursuing genuine knowledge and understanding. Conflict of Interest. In research, identifying and addressing conflicts of interest is essential to ensure the credibility and impartiality of study outcomes. Transparent disclosure of potential conflicts helps maintain the objectivity of research findings and the trust of the broader scientific community. Ethical practice demands proactively identifying and managing conflicts of interest to prevent undue influence, bias, or compromise in decision-making processes. Individuals must take steps to disclose potential conflicts openly and make choices that prioritize the welfare of all stakeholders involved. By addressing conflicts of interest ethically, The researcher upholds values such as transparency, fairness, and impartiality. This approach not only safeguards the integrity of professional interactions but also fosters an environment of trust, accountability, and the responsible stewardship of information, resources, and decisions. Deceit. Ethical considerations regarding deceit are crucial for upholding honesty, integrity, and trust in various contexts, including research, education, and professional interactions. Deceit involves intentionally misleading or withholding information to manipulate perceptions, decisions, or actions, undermining the principles of transparency and respect fundamental to ethical conduct. In research, deceit undermines the credibility of findings and the trustworthiness of the scientific process. Falsifying or concealing data, methods, or results can lead to inaccurate conclusions, damaging the progress of knowledge and eroding the public's trust in research outcomes. Addressing deceit ethically upholds values such as truthfulness, integrity, and accountability. This approach not only preserves the integrity of academic and professional endeavors but also nurtures a culture of respect, transparency, and the responsible dissemination of accurate and reliable information. Permission from the Organization/Location. Obtaining permission from the organization or location where research, education, or activities take place was a fundamental ethical consideration that ensured respect, transparency, and responsible conduct. Seeking permission is essential when engaging in activities that might impact the organization's resources, reputation, or individuals associated with it. In research, gaining permission from relevant institutions or organizations is crucial for conducting studies that involve data collection, observations, or interactions with participants. This demonstrates a commitment to ethical research practices, informed consent, and respect for individuals' rights. By ethically ad-

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dressing permission from the organization or location, The researcher upholds values such as respect, responsibility, and transparency. This approach not only safeguards the reputation and rights of organizations but also fosters an environment of collaboration, trust, and ethical conduct that benefits all stakeholders. Authorship. To maintain fairness, accountability, and transparency in research, publication, and collaborative endeavors, the researcher adheres to the intellectual contributions of individuals, ensuring proper recognition for their efforts. In research, ethical authorship entails accurately attributing donations based on the project's substantial intellectual and practical involvement. Proper credit reflects the principles of honesty, integrity, and respect for the work of others. Addressing authorship ethically upholds values such as accountability, fairness, and integrity. By adhering to guidelines that ensure accurate representation of contributions, They maintain the integrity of scholarly work, foster a culture of equitable collaboration, and uphold the trust of the academic and research community.

2.6. Data Analysis—Mean scores and standard deviation were used to address statement problems posed in number one, the extent of food competence practices, and statement problem number two, the extent of early childhood health and nutrition. Pearson Product Moment Correlation Coefficient or Pearson-r was used to determine its strength/direction significant relationship between food competence practices and early childhood health and nutrition. A simple linear regression analysis addressed problem number 4: the indicators of food competence practices that significantly influence early childhood health and nutrition. (Pallant, 2000) and (Gujarati, 2000) as cited by (Montgomery et al., 2021). All data processing and analysis were performed using Jeffrey's Statistics Amazing Program (JASP) version 0.12.20. Discussions and interpretations followed when results yielded.

3. Results and Discussion

In this chapter, the researcher addresses the collection of data and its subsequent presentation, analysis, and interpretation. Both tabular and textual formats are employed to enhance the depth of analysis and facilitate the extraction of meaningful implications. Additionally, these presentations serve as supporting evidence for the hypothesis put forth.

3.1. Extent of Food Competence Practices in terms of Nutrition Knowledge—Table 1 presents the extent of food competence practices in terms of nutrition knowledge. The result is focused on the highest and lowest mean ratings of indicators which are as follows: these learners can distinguish between healthy and unhealthy food choices, recognizing that fruits and vegetables are healthier options compared to sugary snacks or fast food (4.30) is always manifested; learners are aware of the importance of eating a variety of foods from different food groups to stay healthy and strong, showing an early grasp of the concept of balanced nutrition (4.15), and they can name key nutrients found in different foods, such as calcium in dairy products, fiber in whole grains, and vitamins in fruits and vegetables, demonstrating an awareness of the nutritional content of foods (4.00) are oftentimes manifested; while, kindergarten learners with nutrition knowledge understand the concept of portion sizes and can identify appropriate serving sizes for different foods, helping them practice portion control (3.00) is sometimes manifested; and kindergarten learners can identify and name basic food groups, such as fruits, vegetables, grains, proteins, and dairy, demonstrating an understanding of the different

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types of foods (2.40) is rarely manifested. The overall mean rating of 3.57 denotes that the extent of food competence practices in terms of nutrition knowledge is oftentimes manifested, thus, extensive.

Table 1. Extent of Food Competence Practices in Terms of Nutrition Knowledge

No.	Nutrition Knowledge	Mean	Descriptive Equivalent
1	Kindergarten learners can identify and name basic food groups, such as fruits, vegetables, grains, proteins, and dairy, demonstrating an understanding of the different types of foods.	2.40	Less Extensive
2	These learners can distinguish between healthy and unhealthy food choices, recognizing that fruits and vegetables are healthier options compared to sugary snacks or fast food.	4.30	Very Extensive
3	Kindergarten learners with nutrition knowledge understand the concept of portion sizes and can identify appropriate serving sizes for different foods, helping them practice portion control.	3.00	Moderately Extensive
4	They can name key nutrients found in different foods, such as calcium in dairy products, fiber in whole grains, and vitamins in fruits and vegetables, demonstrating an awareness of the nutritional content of foods.	4.00	Extensive
5	Learners are aware of the importance of eating a variety of foods from different food groups to stay healthy and strong, showing an early grasp of the concept of balanced nutrition.	4.15	Extensive
Overall Mean		3.57	Extensive

Nutrition knowledge serves as a fundamental indicator of food competence practices in schools for early-grade schoolers. It reflects the extent to which young children understand the essential principles of nutrition, such as the roles of different food groups and the importance of balanced eating. Nutrition knowledge encompasses identifying healthy food choices, distinguishing between nutrient-rich and less nutritious options, and comprehending the impact of food on overall health and growth. Nutrition knowledge is a critical building block for devel-

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oping food competence in early grade school settings. It equips children with the foundational understanding needed to make informed dietary choices, setting them on a path toward a lifetime of healthy eating habits. Schools that prioritize nutrition education not only empower their students to make healthier food choices but also contribute to the overall well-being and nutritional literacy of the community. The increase in childhood obesity requires the incorporation of nutritional competence into school programs through appropriate activities, starting in the early years. In addition, it is important to promote scientific and cognitive skills during childhood education. Lopez, et.al. (2022) explored the implementation of an instructional sequence focused on the learning of skills such as observation, measurement, or interpretation of data related to plants, their germination, and their growth, as well as its relationship with the development of food competence. Meanwhile, pandemic intensified disparities for underserved populations as accessing resources became more difficult. Dairy Council of California launched the Let's Eat Healthy initiative to address nutrition security through collaborative solutions in the school environment. To ensure nutrition security for children and families, nutritious food and nutrition education must go hand-in-hand. Improving access to high quality food can help address the health disparities that exist for people who are at increased risk for food insecurity. Nutrition education supports students' holistic learning and social and emotional learning skills. Nutrition education models must be increasingly flexible in the face of ongoing challenges. Collaborative efforts to connect food access hubs, such as schools, with support and resources to provide evidence-based nutrition education and agricultural literacy can equip individuals and communities with the knowledge, skills, and ability to make nutrient-rich food choices. The results of this indicator supported by Inalcik and Angin, (2021) by integrating these practices into the curriculum and the school environment, educators empower early-grade schoolers to become informed not only consumers but also responsible contributors to their own health and the health of their communities. This holistic approach to food competence sets a foundation for lifelong wellness and ensures that children develop a positive relationship with food from an early age.

3.2. Extent of Food Competence Practices in terms of Healthy Food Choices—Table 2 presents the extent of food competence practices in terms of healthy food choices. The result is focused on the highest and lowest mean ratings of indicators which are as follows: they demonstrate a preference for healthy snacks like fruits, yogurt, and nuts over sugary or high-fat snacks, indicating a tendency to choose nutritious options even when given choices (4.00) is oftentimes manifested; kindergarten learners with food competence are more likely to resist the temptation of unhealthy treats when offered, demonstrating self-control and the ability to make thoughtful food decisions (3.15), learners are capable of selecting a balanced combination of foods for their meals, such as including vegetables, protein, and grains in their lunch or dinner choices (3.00) and they exhibit awareness of the importance of drinking water or milk as primary beverage choices, reducing consumption of sugary drinks like soda or excessive fruit juices (3.00) are sometimes manifested; while, kindergarten learners who make healthy food choices can identify and name a variety of healthy foods, including fruits, vegetables, whole grains, and lean proteins, showing an understanding of nutritious options (2.40) are rarely manifested. The overall mean rating of 3.11 denotes that the extent of food competence practices in terms of healthy food choices is sometimes manifested, thus, moderately extensive.

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Table 2. Extent of Food Competence Practices in Terms of Healthy Food Choices

No.	Healthy Food Choices	Mean	Descriptive Equivalent
1	Kindergarten learners who make healthy food choices can identify and name a variety of healthy foods, including fruits, vegetables, whole grains, and lean proteins, showing an understanding of nutritious options.	2.40	Less Extensive
2	They demonstrate a preference for healthy snacks like fruits, yogurt, and nuts over sugary or high-fat snacks, indicating a tendency to choose nutritious options even when given choices.	4.00	Extensive
3	Learners are capable of selecting a balanced combination of foods for their meals, such as including vegetables, protein, and grains in their lunch or dinner choices.	3.00	Moderately Extensive
4	They exhibit awareness of the importance of drinking water or milk as primary beverage choices, reducing consumption of sugary drinks like soda or excessive fruit juices.	3.00	Moderately Extensive
5	Kindergarten learners with food competence are more likely to resist the temptation of unhealthy treats when offered, demonstrating self-control and the ability to make thoughtful food decisions.	3.15	Moderately Extensive
Overall Mean		3.11	Extensive

The concept of healthy food choices is a pivotal indicator of food competence practices in schools for early-grade schoolers. It encompasses the ability of young children to select nutritious foods over less healthy alternatives and to understand the importance of a balanced diet. Healthy food choices go beyond merely recognizing fruits and vegetables; they involve making mindful decisions about meals and snacks that contribute to overall well-being. Schools play a vital role in shaping these choices by providing access to wholesome meals, educating students about the nutritional value of different foods, and creating a supportive environment that encourages healthy eating. By nurturing the skill of making healthy food choices from an early age, schools lay the foundation for a lifetime of good nutrition and instill the knowledge and habits needed for children to thrive physically, academically, and socially. This results supported by Inalcik and Angin, (2021) with their statement about concept of competence practices in schools for early-grade schoolers represents a holistic approach to nurturing lifelong healthy eating habits and overall well-being. It extends beyond basic nutrition knowledge to encompass a comprehensive set of food-related skills and attitudes. In this context, schools are crucial in equipping young children with the tools to make informed, nutritious choices. Food competence practices include teaching children how to plan and prepare balanced meals, promoting food safety and hygiene, fostering an understanding of cultural and environmental aspects of food, and encouraging mindful eating habits. This result also collaborates with the study of Devine et al. (2023), who explained that the Australian Dietary Guidelines support good health and disease prevention. Children with healthy eating habits established early in life have been shown to continue these habits into adulthood compared with those children who have poor eating habits in their younger years. The nutritional intake of many Australian children is not in accordance with the national guidelines. The reasons children make the food choices they do are unclear from the literature. The paper aims

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to discuss these issues. Children's food preferences were mostly for unhealthy foods, and these were readily available in the canteen.

3.3. Extent of Food Competence Practices in terms of Meal Planning and Preparation— Table 3 presents the extent of food competence practices in terms of meal planning and preparation. The result is focused on the highest and lowest mean ratings of indicators which are as follows: kindergarten learners often engage in pretend play or imitate adults while preparing play food, demonstrating their interest in and early understanding of meal preparation processes (3.15), they are capable of participating in simple meal planning activities, such as selecting items for a balanced lunch or snack, demonstrating early planning skills (3.00), learners exhibit safety awareness in the kitchen, understanding the importance of washing hands before handling food and knowing how to use basic kitchen tools safely (3.00) and they make age-appropriate decisions about healthy snacks, choosing options like fruits, vegetables, or dairy products over less nutritious alternatives (3.00) are sometimes manifested; kindergarten learners with food competence can name and identify different food groups, showing an understanding of the categories of foods they need to include in a balanced meal (2.00) is rarely manifested. The overall mean rating of 3.11 denotes that the extent of food competence practices in terms of meal planning and preparation is sometimes manifested, thus, moderately extensive.

Table 3. Extent of Food Competence Practices in Terms of Meal Planning and Preparation

No.	Meal Planning and Preparation	Mean (Descriptive Equivalent)
1	Kindergarten learners with food competence can name and identify different food groups, showing an understanding of the categories of foods they need to include in a balanced meal.	2.00 (Less Extensive)
2	They are capable of participating in simple meal planning activities, such as selecting items for a balanced lunch or snack, demonstrating early planning skills.	3.00 (Moderately Extensive)
3	Learners exhibit safety awareness in the kitchen, understanding the importance of washing hands before handling food and knowing how to use basic kitchen tools safely.	3.00 (Moderately Extensive)
4	They make age-appropriate decisions about healthy snacks, choosing options like fruits, vegetables, or dairy products over less nutritious alternatives.	3.00 (Moderately Extensive)
5	Kindergarten learners often engage in pretend play or imitate adults while preparing play food, demonstrating their interest in and early understanding of meal preparation processes.	3.15 (Moderately Extensive)
Overall Mean		3.11 (Extensive)

This result is congruent to the study by Kouser and Popat (2022), who stressed that early childhood care and development programs are considered very useful for children. It is an umbrella term that denotes providing a variety of interventions for young children and their families, which includes childcare, education, health, and nutrition, as well as the parents' support. The first goal of education is to promote early childhood development for vulnerable children. Early childhood care and development was provided by the World Health Or-

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ganization, UNICEF, and UNESCO to improve the physical and psychosocial well-being of children and to develop cognitive skills among learners to eradicate poverty. According to Gularso and Okti Purwaningsih (2023) the concept of meal planning, and preparation serves as a significant indicator of food competence practices in schools for early-grade schoolers. It signifies a child's ability to not only understand the importance of balanced meals but also to engage in the process of planning and preparing them actively. This skill involves selecting a variety of foods from different food groups, considering nutritional needs, and understanding the steps required to create a meal. Early-grade schoolers who demonstrate proficiency in meal planning and preparation are not only equipped with practical life skills but are also more likely to make nutritious food choices. Schools that incorporate these practices into their curriculum not only nurture self-sufficiency in children but also foster a deeper connection to the food they consume, promoting overall health and well-being from an early age. Additionally, Kouser and Popat, 2022) reported that In India, the early childhood care and development programs are school-based nursery programs for the age group of 3 to 6, through community groups or play schools where the learners learn through the play way method. In India, the institutions were basically designed on the grounds of British Infant Schools and Froebellian kindergartens and served the requirements of British rulers and Indian elites. For a normal child, the childcare facility was mainly informal and was provided within the family system or in extended kinships. The current study focusses on the early childhood care and development from an Indian perspective. It analyses various initiatives taken by the government of India for girl childcare. Moreover, the author gives some measures through which the childcare can be improved in India.

3.4. Extent of Food Competence Practices in terms of Portion Control and Mindful Eating—Table 4 presents the extent of food competence practices in terms of portion control and mindful eating. The result is focused on the highest and lowest mean ratings of indicators which are as follows: they are attentive to their hunger and fullness cues, stopping eating when they feel satisfied rather than overeating (4.00) is oftentimes manifested; kindergarten learners associate mealtimes with positive experiences, such as sharing meals with family or friends, fostering a healthy attitude towards food and eating (3.15), they eat at a moderate and consistent pace, rather than rushing through meals, indicating an early understanding of mindful eating (3.10), kindergarten learners with food competence can recognize appropriate portion sizes for different foods, demonstrating an understanding of moderation in eating (3.00) and learners show an interest in exploring the sensory aspects of food, such as texture, taste, and smell, demonstrating engagement with the eating experience (3.00) are sometimes manifested. The overall mean rating of 3.25 denotes that the extent of food competence practices regarding portion control and mindful eating is sometimes manifested, thus moderately extensive. The moderately extensive results explain that portion control and mindful eating are critical indicators of school food competence practices for early-grade schoolers. It signifies a child's ability to recognize appropriate portion sizes and to consume food with awareness, savoring flavors and recognizing hunger and fullness cues. Likewise, in teaching early-grade schoolers about portion control and mindful eating helps instill lifelong habits that promote healthy eating patterns.

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Table 4. Extent of Extent of Food Competence Practices in Terms of Portion Control and Mindful Eating

No.	Portion Control and Mindful Eating	Mean (Descriptive Equivalent)
1	Kindergarten learners with food competence can recognize appropriate portion sizes for different foods, demonstrating an understanding of moderation in eating.	3.00 (Moderately Extensive)
2	They eat at a moderate and consistent pace, rather than rushing through meals, indicating an early understanding of mindful eating.	3.10 (Moderately Extensive)
3	Learners show an interest in exploring the sensory aspects of food, such as texture, taste, and smell, demonstrating engagement with the eating experience.	3.00 (Moderately Extensive)
4	They are attentive to their hunger and fullness cues, stopping eating when they feel satisfied rather than overeating.	4.00 (Extensive)
5	Kindergarten learners associate mealtimes with positive experiences, such as sharing meals with family or friends, fostering a healthy attitude towards food and eating.	3.15 (Moderately Extensive)
Overall Mean		3.25 (Moderately Extensive)

This result was supported by Tapper and Seguias (2020) explained that portion control and mindful eating are critical indicators of food competence practices in schools for early-grade schoolers. It signifies a child's ability to recognize appropriate portion sizes and to consume food with awareness, savoring flavors and recognizing hunger and fullness cues. Teaching early-grade schoolers about portion control and mindful eating helps instill lifelong habits that promote healthy eating patterns. These practices not only prevent overeating but also foster a positive relationship with food and encourage children to be attuned to their bodies' signals. Schools that incorporate portion control and mindful eating into their educational programs empower young children to make conscious and balanced food choices, ultimately contributing to their overall health and well-being as they grow and develop. The idea was similar to the study of Descartes Goldman (2022) pointed out that books communicate information to children about social norms, including those associated with eating and foods. This, combined with concern about high rates of child obesity, was the impetus for this study. Information is presented on the food messages in a sample of contemporary popular books written for young children Highly sweetened products such as candy and sweetened drinks appeared frequently and often were depicted positively. The results point to a need for awareness of food messages in young children's books and ongoing conversations about healthy food choices among parents, family and consumer sciences professionals, educators, healthcare providers, and children (Descartes and Goldman, 2022). Meanwhile, factors contributing to the obesity epidemic have powerful effects on people who are frequently exposed to the extensive advertisement of unhealthy foods. Pan et al., (2022) aimed to examine how consumers' attitudes towards health and nutrition related (HNR) claims in food advertisements affected their healthy food choice (HFC) and how online searching for nutrition information (OSNI) about food products mediated the impact of obesity knowledge on HFC. Method: An online survey was conducted using Amazon Mechanical Turk. A total of 897 participants were recruited, with 484 women and 380 men. A moderated mediation analysis using PROCESS was conducted. OSNI was found to mediate the impact of obesity knowledge on HFC. The extent to which

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consumers' obesity knowledge influenced their HFC depended on consumers' attitudes towards HNR claims in food advertisements. The direct effect of consumers' obesity knowledge on their HFC was moderated by their attitudes towards HNR claims in food advertisements.

3.5. Extent of Food Competence Practices in terms of Food Safety and Hygiene—Table 5 presents the extent of food competence practices in terms of food safety and hygiene. The result is focused on the highest and lowest mean ratings of indicators which are as follows: kindergarten learners are aware of common food allergens and can identify potential allergens in the foods they or their peers are consuming, showing consideration for food allergies and dietary restrictions (4.15) and they demonstrate knowledge of proper food storage practices, such as keeping perishable items refrigerated and securely sealed to maintain food safety (4.10) are oftentimes manifested; they exhibit safe food handling practices, such as not touching their face while cooking or eating, and using utensils or napkins when necessary (3.20), kindergarten learners with food competence can effectively wash their hands before handling food, demonstrating awareness of the importance of cleanliness in food preparation (3.10) and learners understand the concept of cross-contamination and know to separate raw foods from ready-to-eat foods to prevent foodborne illnesses (3.00) are sometimes manifested. The overall mean rating of 3.51 denotes that the extent of food competence practices in terms of food safety and hygiene is oftentimes manifested, thus, extensive.

The concept of food safety and hygiene stands as a crucial indicator of food competence practices in schools for early-grade schoolers. It encompasses a child's understanding of safe food handling practices, including handwashing, proper storage, and the prevention of cross-contamination. Early-grade schoolers who demonstrate proficiency in food safety and hygiene not only protect themselves and others from foodborne illnesses but also develop responsible habits that will serve them well throughout their lives. Schools that prioritize teaching these practices provide a safe and supportive environment for children to explore their relationship with food. By imparting food safety knowledge, schools equip young learners with essential skills that not only contribute to their own health but also encourage them to become responsible and informed consumers in an increasingly complex food landscape. This idea was discussed by Pedraza (2023), who wrote about The Expanded Food and Nutrition Education Program (EFNEP), which is the nation's first federal nutrition education program for low-income populations. Without question, accelerating equity in programming has long been a priority of EFNEP. Historically underserved populations with limited financial resources are often people of color and at increased risk for diet-related diseases. EFNEP contributes to nutrition security as program families and youths gain knowledge and skills for healthier food and physical activity choices, increased food resource management (shopping and food preparation), food safety, and improved food security practices to keep healthy in challenging times.

3.6. Summary of the Extent of Food Competence Practices—Table 6 shows the summary of the extent of food competence practices. The result is focused on the highest and lowest mean ratings of indicators which are as follows: nutrition knowledge (3.57) and food safety and hygiene (3.51) are oftentimes manifested; portion control and mindful eating (3.25), healthy food choices (3.11) and meal planning, and preparation (2.83) are sometimes manifested. The overall mean rating of 3.25 denotes the extent of food competence practices is sometimes man-

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Table 5. Extent of Food Competence Practices in terms of Food Safety and Hygiene

No.	Food Safety and Hygiene	Mean (Descriptive Equivalent)
1	Kindergarten learners with food competence can effectively wash their hands before handling food, demonstrating awareness of the importance of cleanliness in food preparation.	3.10 (Moderately Extensive)
2	They exhibit safe food handling practices, such as not touching their face while cooking or eating, and using utensils or napkins when necessary.	3.20 (Moderately Extensive)
3	Learners understand the concept of cross-contamination and know to separate raw foods from ready-to-eat foods to prevent foodborne illnesses.	3.00 (Moderately Extensive)
4	They demonstrate knowledge of proper food storage practices, such as keeping perishable items refrigerated and securely sealed to maintain food safety.	4.10 (Extensive)
5	Kindergarten learners are aware of common food allergens and can identify potential allergens in the foods they or their peers are consuming, showing consideration for food allergies and dietary restrictions.	4.15 (Extensive)
Overall Mean		**3.51 (Extensive)**

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ifested, thus, moderately extensive. The moderately extensive result of food competence of practices would suggest that Food competence practices encompass a range of skills and knowledge related to nutrition, healthy food choices, meal planning and preparation, portion control, mindful eating, and food safety and hygiene. Nutrition knowledge is fundamental, involving an understanding of essential nutrients, their sources, and their impact on overall health.

Table 6. Summary on the Extent of Food Competence Practices

No.	Extent of Food Competence Practices	Mean (Descriptive Equivalent)
1	Nutrition Knowledge	3.57 (Extensive)
2	Healthy Food Choices	3.11 (Moderately Extensive)
3	Meal Planning and Preparation	2.83 (Moderately Extensive)
4	Portion Control and Mindful Eating	3.25 (Moderately Extensive)
5	Food Safety and Hygiene	3.51 (Extensive)
Overall Mean		**3.25 (Moderately Extensive)**

This result was similar to the study of Inalcik and Angin(2023) who posited that competence of practices would suggest that Food competence practices encompass a range of skills and knowledge related to nutrition, healthy food choices, meal planning and preparation, portion control, mindful eating, and food safety and hygiene. Making healthy food choices requires discerning between nutritious and less nutritious options, considering factors such as dietary requirements and individual preferences. Meal planning and preparation involve organizational skills, creativity in designing balanced meals, and culinary proficiency. Lopez et al. (2022) explored portion control and mindful eating, emphasizing awareness of serving sizes and cultivating a mindful approach to consumption, promoting a balanced relationship with food. Additionally, food safety and hygiene practices are crucial to prevent foodborne illnesses, encompassing proper storage, cooking, and handling of food to ensure its safety for consumption. Collectively, these food competence practices contribute to fostering a healthy and informed approach to nutrition and well-being. Healthy food choices extend beyond basic nutrition knowledge to include the ability to navigate food labels, understand ingredient lists, and identify nutrient-dense options. It involves recognizing the importance of incorporating a variety of fruits, vegetables, whole grains, and lean proteins into one's diet (Mahmood et al., 2021). Meal planning and preparation skills are integral components of food competence. This includes the ability to organize meals that are balanced and satisfying, considering nutritional requirements and personal preferences. Effective meal planning also contributes to time management and cost efficiency, making it a valuable skill for maintaining a healthy lifestyle (Elnakib, 2021). Portion control and mindful eating emphasize the quality and quantity of food consumed. Portion control involves understanding appropriate serving sizes to prevent overeating, while mindful eating encourages a thoughtful and present approach to meals. This involves paying attention to hunger and fullness cues, savoring flavors, and cultivating a positive and intentional relationship with food (Ciren, 2021). Food safety and hygiene prac-

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tices are paramount to prevent foodborne illnesses. This includes proper storage of perishable items, thorough cooking of meats, and meticulous handwashing to minimize the risk of contamination. Understanding and implementing these practices are crucial for maintaining the safety and integrity of the food supply (Descartes Goldman, 2022). In summary, Pan et al., (2022) said that food competence practices encompass a holistic set of skills and knowledge that empower individuals to make informed, healthy choices. From understanding the nutritional value of foods to planning and preparing well-balanced meals, controlling portions mindfully, and ensuring food safety, these practices collectively contribute to fostering a lifestyle that supports optimal health and well-being.

3.7. Early Childhood Health and Nutrition in terms of Mealtime Practices—Table 7 presents the extent of early childhood health and nutrition in terms of mealtime practices. The result is focused on the highest and lowest mean ratings of indicators which are as follows: adequate portion sizes are provided, tailored to the age and nutritional needs of the children, ensuring they receive proper nourishment without overeating (4.15), adults and caregivers model healthy eating behaviors by consuming a variety of nutritious foods, encouraging children to follow suit and explore new foods (4.00) and mealtime is a positive and calm environment where children are encouraged to enjoy their meals without distractions or stress, fostering a healthy relationship with food (3.40) are oftentimes manifested, The overall mean rating of 3.53 denotes that the extent of early childhood health and nutrition in terms of mealtime practices is , extensive, thus oftentimes manifested,. The result of extensive would describe that their mealtime practices in Davao Oriental go beyond mere eating and encompass the broader context of how children interact with food. They believed healthy mealtime practices include regular and structured meal routines, creating a positive and relaxed atmosphere, and promoting social interactions during meals. When children are exposed to these practices, they are more likely to develop a healthy relationship with food. Additionally, mealtime practices can influence the types of foods children consume, their portion sizes, and their overall eating habits.

This was supported by Sharma (2023) justified that mealtime practices are a vital indicator of early childhood health and nutrition. It goes beyond the mere act of eating and encompasses the broader context of how children interact with food. Healthy mealtime practices include regular and structured meal routines, creating a positive and relaxed atmosphere, and promoting social interactions during meals. When children are exposed to these practices, they are more likely to develop a healthy relationship with food. Additionally, mealtime practices can influence the types of foods children consume, their portion sizes, and their overall eating habits. A nurturing mealtime environment not only supports proper nutrition but also contributes to a child's emotional and social development. Therefore, recognizing and fostering positive mealtime practices is essential for ensuring that young children not only receive the right nutrients but also establish healthy eating patterns that will benefit them throughout their lives. Mahmood et al., (2021) present results from a study that investigated food practices in Norwegian and French kindergartens, focusing on constructions of 'risk'. The results show that 'risk' can be seen in light of 'risk' discourses in society. We identified both health-related and pedagogical 'risks'. Food practices in early childhood education and care become a sociopolitical tool to either support or avoid and work against the experiences and food customs the

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Table 7. Extent of Early Childhood Health and Nutrition in Terms of Mealtime Practices

No.	Mealtime Practices	Mean (Descriptive Equivalent)
1	A structured mealtime routine is established, with consistent meal and snack times, promoting regular eating patterns and preventing excessive grazing or snacking.	3.00 (Moderately Extensive)
2	Mealtime is a positive and calm environment where children are encouraged to enjoy their meals without distractions or stress, fostering a healthy relationship with food.	3.40 (Extensive)
3	Adults and caregivers model healthy eating behaviors by consuming a variety of nutritious foods, encouraging children to follow suit and explore new foods.	4.00 (Extensive)
4	Mealtime is an opportunity for social interaction, with children engaging in conversations and interactions with peers and adults, promoting social development.	3.10 (Moderately Extensive)
5	Adequate portion sizes are provided, tailored to the age and nutritional needs of the children, ensuring they receive proper nourishment without overeating.	4.15 (Extensive)
Overall Mean		**3.53 (Extensive)**

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children bring from home. The study can contribute to reflections on the taken-for-granted – on both a practical and a political level. Kindergarten has the potential to influence children's food choices and habits at an early age and prevent nutrition-related diseases later in life. This paper comparatively analyzed the goals and requirements for kindergarten food and meal policies and guidelines in Norway and China based on the author's self-constructed 'NES' analytical framework, including nutritional, educational, and social aspects. The findings suggest that while Norway and China both acknowledge the importance of nutritional importance of food and meals in kindergartens, Norway has paid significant attention to the social aspects of meals. There were also a number of differences between Norway and China in terms of specific educational goals related to food and meals. This analysis aimed to inform future policy direction across the fields of public health and educational policy and practice in Norway, China, and beyond (Ciren, 2021).

3.8. Extent of Early Childhood Health and Nutrition In terms of Allergen Management— Table 8 presents the extent of early childhood health and nutrition in terms of allergen management. The result is focused on the highest and lowest mean ratings of indicators which are as follows: early childhood settings have emergency action plans in place, including the availability of epinephrine auto-injectors and staff training on their use, in case of accidental exposure to allergens (4.15), staff and caregivers possess the ability to read food labels to identify potential allergens, helping ensure that allergenic foods are avoided in meals and snacks (4.10), parents and caregivers are regularly educated about the presence of allergens in food items, and open communication is maintained between parents, caregivers, and staff regarding dietary restrictions (4.10) and strict protocols are in place to prevent cross-contamination, including separate storage, preparation, and serving of allergen-free foods for children with allergies (3.45) are oftentimes manifested; while, early childhood settings have clear processes for identifying and documenting children with food allergies, ensuring that staff are aware of specific allergens that need to be avoided (3.10) is sometimes manifested. The overall mean rating of 3.78 denotes that the extent of early childhood health and nutrition in terms of allergen management is oftentimes manifested, thus, extensive.

The result of extensive allergen management was a critical for them or vital they understand importance of these to the health of their learners. The indicator of early childhood health and nutrition. It revolves around the safe handling, labeling, and prevention of allergenic foods for children who have food allergies or sensitivities. Proper allergen management practices in schools and childcare settings are essential to safeguarding the health and well-being of children with allergies. Brough et al., (2022) described the concept of allergen management is a critical indicator of early childhood health and nutrition. It revolves around the safe handling, labeling, and prevention of allergenic foods for children who have food allergies or sensitivities. Proper allergen management practices in schools and childcare settings are essential to safeguarding the health and well-being of children with allergies. This includes rigorous identification and documentation of allergies, clear communication between parents, caregivers, and staff, as well as stringent measures to prevent cross-contamination during food preparation and serving. The successful management of allergens not only ensures the physical safety of children but also promotes their emotional and social well-being

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Table 8. Extent of Early Childhood Health and Nutrition in Terms of Allergen Management

No.	Allergen Management	Mean (Descriptive Equivalent)
1	Early childhood settings have clear processes for identifying and documenting children with food allergies, ensuring that staff are aware of specific allergens that need to be avoided.	3.10 (Moderately Extensive)
2	Strict protocols are in place to prevent cross-contamination, including separate storage, preparation, and serving of allergen-free foods for children with allergies.	3.45 (Extensive)
3	Staff and caregivers possess the ability to read food labels to identify potential allergens, helping ensure that allergenic foods are avoided in meals and snacks.	4.10 (Extensive)
4	Parents and caregivers are regularly educated about the presence of allergens in food items, and open communication is maintained between parents, caregivers, and staff regarding dietary restrictions.	4.10 (Extensive)
5	Early childhood settings have emergency action plans in place, including the availability of epinephrine auto-injectors and staff training on their use, in case of accidental exposure to allergens.	4.15 (Extensive)
Overall Mean		**3.78 (Extensive)**

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by creating inclusive environments where all children can participate in mealtime activities without fear. It underscores the integral role allergen management plays in supporting early childhood health and nutrition, emphasizing the importance of safe and inclusive dietary practices (Pedraza, 2023). People often engage in unhealthy eating despite having an explicit goal to follow a healthy diet, especially under certain conditions such as a lack of time. A promising explanation from the value accumulation account is that food choices are based on the sequential consideration of the values of multiple outcomes, such as health and taste outcomes. Unhealthy choices may result if taste is considered before health. Köster et al., (2023) examined whether making a health outcome more salient could alter this order, thereby leading to more healthy choices even under time pressure. Results showed that the values of health and taste outcomes influenced choices and that priming led to more choices in line with the primed outcomes even when time was scarce. We did not obtain support for the prediction that the priming effect is time-dependent in the sense that primed outcomes are considered before non-primed outcomes. Together, these findings suggest that increasing the value and salience of a health outcome may be effective ways to increase healthy choices, even under poor conditions such as time pressure. Ragelienė and Grønhøj (2020) stated that prior studies have demonstrated that social norms or cues of others' eating behaviors serve as powerful guides for one's own eating behaviors. Yet it remains underexplored whether young children are susceptible to social pressure by remote peers when faced with a conflict between what they prefer and the healthy choices of a group majority. Here we examined whether preschool-aged children conformed to healthy food choices of remote peers. Results showed a significant level of conformity, such that participants altered their initially unhealthy food choices to match the healthy choices of remote peers for 29 percen of trials. Age and BMI z-scores were also associated with rates of food choice conformity. The finding that young children may conform to food-related behaviors of remote peers offers the potential promise of interventions involving remote peers in promoting healthier dietary choices of young children.

3.9. Extent of Early Childhood Health and Nutrition In terms of Oral Health—Table 9 presents the extent of early childhood health and nutrition in terms of oral health. The result is focused on the highest and lowest mean ratings of indicators which are as follows: a balanced diet rich in essential nutrients, such as calcium and vitamin d, is provided to support strong teeth and gums (4.00) and educational programs and activities are implemented to teach children about the importance of oral health and encourage healthy eating habits that support dental well-being (4.00) are oftentimes manifested; caregivers and educators emphasize and model proper oral hygiene practices, including brushing teeth twice daily, using fluoride toothpaste, and flossing, promoting good dental health habits (3.15), sugary snacks and drinks, which can contribute to tooth decay, are limited or avoided in early childhood settings (3.10) and children in early childhood receive regular dental check-ups and preventive care, promoting oral health and identifying potential issues early (3.00) are sometimes manifested. The overall mean rating of 3.45 denotes that the extent of early childhood health and nutrition in terms of oral health is oftentimes manifested, thus, extensive.

This finding parallels the idea of Sadida et al. (2022), who rationalized that oral health is a significant indicator of early childhood health and nutrition. Healthy teeth and gums are essential

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Table 9. Extent of Early Childhood Health and Nutrition in Terms of Oral Health

No.	Oral Health	Mean (Descriptive Equivalent)
1	Children in early childhood receive regular dental check-ups and preventive care, promoting oral health and identifying potential issues early.	3.00 (Moderately Extensive)
2	Caregivers and educators emphasize and model proper oral hygiene practices, including brushing teeth twice daily, using fluoride toothpaste, and flossing, promoting good dental health habits.	3.15 (Moderately Extensive)
3	A balanced diet rich in essential nutrients, such as calcium and vitamin D, is provided to support strong teeth and gums.	4.00 (Extensive)
4	Sugary snacks and drinks, which can contribute to tooth decay, are limited or avoided in early childhood settings.	3.10 (Moderately Extensive)
5	Educational programs and activities are implemented to teach children about the importance of oral health and encourage healthy eating habits that support dental well-being.	4.00 (Extensive)
Overall Mean		**3.45 (Extensive)**

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for a child's ability to eat and speak comfortably and directly linked to their overall well-being. Proper oral health practices include regular dental check-ups, consistent brushing and flossing routines, and limiting sugary snacks and beverages. The condition of a child's oral health can reflect their dietary habits, especially the consumption of sugary and acidic foods that contribute to tooth decay. Additionally, oral health is intertwined with nutrition, as dental issues can hinder a child's ability to eat a balanced diet, potentially leading to nutritional deficiencies. Therefore, promoting good oral health in early childhood is integral to ensuring that children not only enjoy physical health but also establish a strong foundation for lifelong nutrition and overall well-being. According to Ubbes and Whitesel (2022) an eBook for Oral Health Literacy curriculum was used as a brief intervention to help school-aged children use their functional health literacy skills of reading, writing, and speaking to learn about oral health hygiene and the importance of choosing healthy food and beverages for their teeth. Moore et al. (2022) stated that dental neglect results in dental caries and gum disease and contributes to chronic diseases such as heart disease, stroke, diabetes, and cancers. Poor oral health habits developed in childhood persist into adulthood and can contribute to chronic diseases. School settings are a practical platform for teaching oral health skills. The purpose was to assess the effectiveness of school-based, primary prevention oral health interventions for children and adolescents and to examine these programs for health behavior theory applications. Eight interventions satisfied the inclusion criteria. Each study utilized oral health knowledge as an outcome variable. Two of the eight interventions stated that they utilized a specific health behavior theoretical framework. Each study applied health behavior concepts. Interventions were efficacious for improving oral health knowledge. Oral health education interventions in schools appear to be effective in providing dental skills and oral health knowledge.

3.10. Extent of Early Childhood Health and Nutrition In terms of Wellness, Education— Table 10 presents the extent of early childhood health and nutrition in terms of wellness education. The result is focused on the highest and lowest mean ratings of indicators which are as follows: children are taught the basics of nutrition, including the importance of eating a variety of foods, the role of different food groups, and the benefits of making healthy food choices (4.00) is oftentimes manifested; wellness education engages children in interactive and hands-on learning experiences, such as cooking activities, gardening, and physical play, to promote understanding and application of healthy practices (3.15), early childhood education programs incorporate age-appropriate wellness education into the curriculum, including topics related to nutrition, physical activity, and emotional well-being (3.10), wellness education emphasizes the importance of physical activity and provides opportunities for children to engage in age-appropriate exercise and play (3.10) and children are educated about emotional well-being, including topics like stress management, mindfulness, and positive social interactions, to support their overall health and development (3.00) are sometimes manifested. The overall mean rating of 3.27 denotes that the extent of early childhood health and nutrition in terms of wellness education is oftentimes manifested, thus, extensive.

This was supported by Inalcik and Angin (2021) carried out to evaluate the activities in the Ministry of National Education Preschool Education Program Activity Book and Digital Education Platform Educational Information Network Teachers' Preschool Activity Book in

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Table 10. Extent of Early Childhood Health and Nutrition in Terms of Wellness Education

No.	Wellness Education	Mean (Descriptive Equivalent)
1	Early childhood education programs incorporate age-appropriate wellness education into the curriculum, including topics related to nutrition, physical activity, and emotional well-being.	3.10 (Moderately Extensive)
2	Wellness education engages children in interactive and hands-on learning experiences, such as cooking activities, gardening, and physical play, to promote understanding and application of healthy practices.	3.15 (Moderately Extensive)
3	Children are taught the basics of nutrition, including the importance of eating a variety of foods, the role of different food groups, and the benefits of making healthy food choices.	4.00 (Extensive)
4	Wellness education emphasizes the importance of physical activity and provides opportunities for children to engage in age-appropriate exercise and play.	3.10 (Moderately Extensive)
5	Children are educated about emotional well-being, including topics like stress management, mindfulness, and positive social interactions, to support their overall health and development.	3.00 (Moderately Extensive)
Overall Mean		**3.27 (Extensive)**

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terms of outcomes, indicators, and learning processes related to food and nutrition. In this research, the document review method, one of the qualitative research methods, was utilized. The resources on which the study will be carried out were determined by one of the purposeful sampling methods, the criterion sampling method. The data were analyzed using the descriptive analysis method. The documents discussed in the research have been scanned for learning outcomes related to food and nutrition and healthy nutrition with its indicators, nutrients, food groups, where food comes from, the importance of eating various foods, and the benefits of foods. As a result of the research, it has been determined that there are no learning outcomes related to food and nutrition concepts in the activities. No references have been made to food and nutrition concepts in learning processes in the Preschool Education Program Activity Book. However, in the activities included in the Digital Education Platform Educational Information Network Teachers' Preschool Activity Book, learning outcomes related to food and nutrition were discussed, and food and nutrition concepts were addressed in the learning processes. The results are presented in tables, and suggestions were made at the end of the paper (Jakstas et al., 2023). Likewise, Rodriguez et al., (2022) justified the concept of wellness education is a vital indicator of early childhood health and nutrition. It extends beyond simply teaching children about food and exercise; it encompasses a holistic approach to well-being that includes physical, emotional, and social dimensions. Wellness education programs in early childhood settings aim to empower children with the knowledge and skills they need to make informed and healthy choices. This includes understanding the importance of balanced nutrition, engaging in regular physical activity, managing stress, and fostering positive social interactions. Wellness education not only provides children with the tools to make healthier choices but also promotes a positive attitude toward their own health. By prioritizing wellness education in early childhood, we set the stage for children to grow into healthier and happier individuals, equipping them with the knowledge and habits needed for a lifetime of well-being and good nutrition. On the other hand, Ferrer-Estévez and Chalmeta (2021) claimed that Linking Education and Farming (LEAF) Education uses food, farming and nature to reach out to children in new and imaginative ways across the science curriculum. Their work at a grassroots level, with teachers, children, and farmers, shows just how powerful farming and nature can be in helping develop a lifelong love for science and fueling children's innate curiosity and sense of wonder.

3.11. Summary of the Extent of Early Childhood Health and Nutrition—Table 11 shows the summary of the extent of early childhood health and nutrition. The result is focused on the highest and lowest mean ratings of indicators, which are as follows: allergen management (3.78), mealtime practices (3.53), and oral health (3.45) are oftentimes manifested, and wellness education (3.27) is sometimes manifested. The overall mean rating of 3.50 denotes the extent to which early childhood health and nutrition are oftentimes manifested and, thus, extensive.

This result of extensive in the Extent of early childhood health and nutrition will suggest that it is important to know and understand the proper way young children are introduced to and engage with food, which can significantly impact their nutritional habits. Establishing positive mealtime practices involves creating a conducive and enjoyable environment for children to explore a variety of nutritious foods. This finding is similar to the study of Ed-

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Table 11. Summary on the Extent of Early Childhood Health and Nutrition

No.	Early Childhood Health and Nutrition	Mean (Descriptive Equivalent)
1	Mealtime practices	3.53 (Extensive)
2	Allergen management	3.78 (Extensive)
3	Oral health	3.45 (Extensive)
4	Wellness education	3.27 (Moderately Extensive)
Overall Mean		**3.50 (Extensive)**

wards (2021) about early childhood health and nutrition encompassing a critical period for laying the foundation of lifelong well-being, and mealtime practices play a central role in this developmental stage. How young children are introduced to and engage with food can significantly impact their nutritional habits. Establishing positive mealtime practices involves creating a conducive and enjoyable environment for children to explore a variety of nutritious foods. Additionally, allergen management is crucial during these formative years, as allergies may emerge or become apparent. Careful attention to ingredient labels, communication with parents about specific dietary needs, and creating allergen-aware meal plans contribute to a safe dining experience for all children. This was supported by Ubbes and Whitesel, (2022) stressed that oral health is another vital component of early childhood well-being. Promoting good oral hygiene practices, such as regular tooth brushing, encourages healthy dental habits from a young age. Parents, caregivers, and educators can collaborate to instill these routines and ensure that children develop strong oral health practices that will benefit them throughout their lives. Furthermore, wellness education at this stage lays the groundwork for a holistic understanding of health. Teaching children about the importance of balanced nutrition, regular physical activity, and overall well-being sets the stage for a lifetime of healthy choices. In conclusion, early childhood health and nutrition, as reflected in mealtime practices, allergen management, oral health, and wellness education, play a pivotal role in shaping the health trajectories of young individuals. By fostering positive habits and providing a supportive environment, caregivers and educators contribute significantly to the well-rounded development of children during this crucial developmental phase.

3.12. Significant Relationship Between Food Competence Practices and Early Childhood Health and Nutrition—Table 12 revealed the yielded results of the significant relationship between food competence practices and early childhood health and nutrition. It provides information that the posed null hypothesis, stating that there is no significant relationship between food competence practices and early childhood health and nutrition, must be rejected for it provided empirical evidence to show its correlation. It can be depicted that Pearson's Correlation generated a significant correlation between food competence practices ($r=0.877$; $p<.001$) and early childhood health and nutrition.

The significant relationship between food competence practices and early childhood health and nutrition underscores the foundational impact of informed dietary habits on the well-being of young individuals. Food competence practices, encompassing nutritional knowledge, healthy food choices, meal planning and preparation, portion control, mindful

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Table 12. Significant Relationship between Food Competence Practices and Early Childhood Health and Nutrition

Variables	r-value	p-value	Interpretation	Decision
Early Childhood Health and Nutrition	0.877	<0.001	Significant	Reject H_0

*significant at $p < 0.05$

eating, and food safety, collectively contribute to shaping positive health outcomes during this critical developmental stage (Ubbes and Whitesel, 2022). Early childhood is a period of rapid growth and development, making proper nutrition essential for physical, cognitive, and emotional well-being. Through food competence practices, caregivers and educators can instill a solid understanding of nutritious choices, encouraging young children to develop a positive relationship with food. By integrating these practices into the early years, children not only receive the necessary nutrients for growth but also establish lifelong habits that promote overall health. The relationship between food competence and early childhood health is a symbiotic one, emphasizing the pivotal role of informed nutrition in laying the groundwork for a healthy and flourishing future (Ciren, 2021).

3.13. Domains of Food Competence Practices Significantly Influence Early Childhood Health and Nutrition—Table 13 depicts the simple regression coefficient analysis showing that food competence practices significantly influence early childhood health and nutrition. Domains of food competence practices in terms of nutrition knowledge (0.000), healthy food choices (0.000), meal planning and preparation (0.002), portion control and mindful eating (0.000), and food safety and hygiene (0.000), significantly influenced early childhood health and nutrition. Meanwhile, the R2 value of 0.877 suggests that 87.7 percent of food competence practices can explain early childhood health and nutrition. This provides empirical evidence that food competence practices can account for and explain variability in early childhood health and nutrition. In addition, the F-value shows all the sums of squares, given regression being the model and Residual being the error. The F-value (254.596) and F-statistic is significant p<.000, tells that the model is significantly a better predictor of early childhood health and nutrition.

Food competence practices exert a profound and multifaceted influence on early childhood health and nutrition, playing a pivotal role in shaping the overall well-being of young individuals. At the core of this relationship is the acquisition of nutrition knowledge, which empowers caregivers, parents, and educators to make informed decisions about the dietary needs of children. The ability to make healthy food choices is an integral component of food competence, ensuring that young children are exposed to a diverse range of nutrient-dense foods essential for their growth and development. Meal planning and preparation practices further contribute by establishing structured routines that prioritize balanced and nourishing meals (Ciren, 2021). Portion control and mindful eating, integral aspects of food competence, help in fostering a healthy relationship with food from an early age. Children learn to recognize hunger and fullness cues, promoting self-regulation and preventing overeating. Moreover, food safety practices are paramount to safeguarding the health of young children, minimizing the risk of foodborne illnesses through proper storage, preparation, and hygiene measures (Njura et. al., 2020).

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Table 13. Regression Coefficient Analysis on Domains of Food Competence Practices Significantly Influence Early Childhood Health and Nutrition

Model	Variable	B	Beta	Standard Error	p-value	Decision
H_0	(Intercept)	4.145	0.079	60.416	0.001	4.143
H_1	(Intercept)	0.313	0.175	1.066	0.270	0.201
	Nutrition Knowledge	0.817	0.117	0.101	1.010	0.315
*Reject H_0						
	Healthy Food Choices	0.431	0.118	0.132	1.275	0.196
*Reject H_0						
	Meal Planning and Preparation	0.212	0.097	0.211	2.086	0.038
*Reject H_0						
	Portion Control and Mindful Eating	0.921	0.508	0.136	1.259	0.296
*Reject H_0						
	Food Safety and Hygiene	0.502	0.057	0.210	3.068	0.038
*Reject H_0						
R^2	= 0.877					
F-value	= 254.596					
p-value	= <0.000					

*Significant @ $p < 0.05$

The influence of food competence extends beyond mere nutrition by contributing to the establishment of positive lifelong habits. Early exposure to these practices creates a foundation for a holistic understanding of health and wellness. By instilling these habits during the formative years, caregivers and educators lay the groundwork for a lifetime of healthy choices, impacting not only immediate health outcomes but also preventing the development of adverse health conditions in the future. The significant relationship between food competence practices and early childhood health and nutrition underscores the transformative potential of informed dietary habits in fostering optimal well-being during this crucial developmental stage (Descartes Goldman, 2022).

4. Conclusions and Recommendations

This chapter presents the findings, conclusion, and recommendation based on the results of the data analysis, discussion, and drawing of implications. Findings are based on the posed statement of the problem; conclusions are based on the findings generated, and recommendations are based on the impact of the discussions.

4.1. Findings—The following were the study's findings, as shown in the results of the presentation, analysis, and discussions. The extent of food competence practices in terms of nutrition knowledge and food safety and hygiene was oftentimes manifested; portion control and mindful eating, healthy food choices and meal planning, and preparation are sometimes manifested. The overall mean rating of extent of food competence practices was sometimes manifested, thus, moderately extensive. The extent of early childhood health and nutrition in terms of allergen management, mealtime practices, and oral health is often manifested, and wellness

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education is sometimes manifested. Thus, the overall mean rating of the extent of early childhood health and nutrition is often manifested, thus extensive. Pearson's Correlation generated a significant correlation between food competence practices and early childhood health and nutrition. Domains of food competence practices, such as nutrition knowledge, healthy food choices, meal planning and preparation, portion control and mindful eating, and food safety and hygiene, significantly influenced early childhood health and nutrition.

4.2. Conclusions—Given the findings of the study presented, the following are the conclusions to wit; The extent of food competence in terms of nutrition knowledge and food safety and hygiene was oftentimes manifested; portion control and mindful eating, healthy food choices, and meal planning and preparation were sometimes, thus, moderately extensive. The extent of early childhood health and nutrition in terms of allergen management, mealtime practices and oral health are oftentimes manifested, and wellness education is sometimes manifested, thus, extensive. There was a significant correlation between food competence practices and early childhood health and nutrition. Domains of food competence practices in terms of nutrition knowledge, healthy food choices, meal planning and preparation, portion control and mindful eating, and food safety and hygiene significantly influenced early childhood health and nutrition. Developing comprehensive food-related skills, knowledge, and attitudes can benefit early childhood health and nutrition. The principles of the food competence theory of Nijura align with nutrition knowledge, food safety, portion control, mindful eating, healthy food choices, and meal planning and preparation. A study shows a significant correlation between food competence practices and positive health outcomes in early childhood, supporting the theory's assertion.

4.3. Recommendations—With the presented conclusions of the study, the following are recommendations, to wit. Public School District Supervisor. May advocate for comprehensive professional development programs for educators, caregivers, and school staff focusing on food competence practices. Allocate resources and support to integrate nutrition education into the early childhood curriculum, ensuring that teachers and caregivers are equipped with the knowledge and skills to promote healthy eating habits among young children. Encourage collaborative initiatives with health professionals and nutrition experts to provide ongoing training and resources for the implementation of effective food competence practices across all schools in the district. School Principal. May implement and support the integration of nutrition education into the early childhood curriculum, ensuring that teachers and caregivers are well-trained and equipped to foster food competence practices. Create a school environment that promotes healthy eating habits, such as providing nutritious food options in school meals, organizing nutrition-related workshops for parents, and establishing school gardens to encourage hands-on learning about fresh produce. Foster collaboration among teachers, caregivers, and parents to reinforce consistent messages about the importance of food competence and early childhood nutrition. Teacher. May participate in professional development opportunities focused on enhancing food competence practices, including nutrition education, meal planning, portion control, and fostering a positive eating environment. Incorporate food competence principles into classroom activities, integrate nutrition education into various subjects, and create a supportive atmosphere for healthy eating habits. Collaborate with parents to reinforce food competence practices at home, providing resources and guidance on nutritious meal options and the importance of a well-balanced diet for early childhood develop-

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ment. Future Researcher. May investigate the long-term impact of early childhood nutrition education and food competence practices on health outcomes, academic performance, and overall well-being. Explore the effectiveness of different strategies in implementing and sustaining food competence practices in diverse educational settings. Contribute to the development of evidence-based guidelines and interventions for promoting food competence in early childhood education, considering variations in cultural contexts, socioeconomic factors, and educational approaches.

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