PERCEIVED INFLUENCE OF DIETARY HABITS ON ACADEMIC PERFORMANCE AMONG NURSING STUDENTS IN THE UNIVERSITY OF BENIN,EDO STATE.

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IN PARTIAL FULFILLMENT OF THE AWARD OF THE DEGREE OF BACHELOR OF NURSING SCIENCES (BNSC), IN THE FACULTY OF NURSING SCIENCES,DEPARTMENT OF MEDICAL SURGICAL NURSING, UNIVERSITY OF BENIN, BENIN CITY

OCTOBER, 2025.

DECLARATION

This is to declare that this research project titled "**PERCEIVED INFLUENCE OF DIETARY HABITS ON ACADEMIC PERFORMANCE AMONG NURSING STUDENTS IN THE UNIVERSITY OF BENIN,EDO STATE."** was carried out by **ENIAYEWU PRECIOUS OLAMIDE**. It is solely the result of my work except where referenced or acknowledged as being derived from other person(s) or resources.

MATRICULATION NUMBER: ___________________

IN THE DEPARTMENT OF MEDICAL SURGICAL NURSING, FACULTY OF NURSING SCIENCES, UNIVERSITY OF BENIN, BENIN CITY.

SIGNATURE: _________________

DATE: _________________

CERTIFICATION/APPROVAL

This is to certify that this research project titled" **PERCEIVED INFLUENCE OF DIETARY HABITS OF NURSING STUDENTS ON ACADEMIC PERFORMANCE IN THE UNIVERSITY OF BENIN EDO STATE”** was carried out by **ENIAYEWU PRECIOUS OLAMIDE** with mat.no **BMS1807034** in the Faculty Nursing Science under the supervision of **MRS M.A INIOMOR.**

MRS. M.A. INIOMOR ____________________

Supervisor Sign & Date

PROF.(MRS.) C.E OMOREGBE ____________________

Head of Department(Medical surgical Nursing) Sign & Date

EXTERNAL SUPERVISOR ____________________

Sign & Date

DEDICATION

I dedicate this Project work to GOD ALMIGHTY, whose guidance and strength have been my constant companion throughout my academic journey, and to my wonderful Parents for their unwavering support.

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I express my heartfelt gratitude to God, for His divine guidance, wisdom, and strength throughout this research journey.

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ABSTRACT

The dietary habits of students can have a profound impact on their academic performance, particularly in demanding fields such as nursing. With the growing awareness of nutrition's role in cognitive function and academic success, this study examined the perceived influence of dietary habits on the academic performance among nursing students at the University of Benin. The purpose of the study was to assess the dietary patterns of nursing students and determine how these habits relate to their academic performance. A descriptive cross-sectional design was adopted. The population comprised nursing students from 200 to 500 level, excluding 100 level students. Data were collected using a structured, self-administered questionnaire, and analyzed using descriptive and inferential statistics. The results showed that the majority of respondents, 242 (85.5%), had good dietary habits, while 40 (14.2%) reported poor dietary habits. In terms of academic performance, 269 (95.4%) had good performance and only 13 (4.6%) had poor performance. A statistically significant association was observed between dietary habits and academic performance ($p < 0.001$), indicating that students with better dietary habits were more likely to perform well academically.In conclusion, the study highlights a positive relationship between healthy dietary habits and academic success among nursing students. It is recommended that nutrition education and awareness be incorporated into student support programs to promote better eating habits and, by extension, improve academic outcomes.

Keywords: Dietary habits, academic performance, nutrition.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Academic performance in higher education is influenced by multiple factors, including study habits, stress management, and overall well-being. Among these, dietary habits play a crucial role in shaping cognitive function, concentration, and learning efficiency. University students, particularly those in demanding fields like nursing, often experience irregular eating patterns due to academic pressure, time constraints, and mental stress. These factors can lead to unhealthy dietary choices, including frequent meal skipping, reliance on processed foods, and fast food, all of which may have a negative impact on academic performance.

Several studies have examined the relationship between dietary habits and student performance, highlighting the importance of proper nutrition in enhancing cognitive abilities. López-Moreno et al. (2021) conducted a pilot study on university students in Madrid, analyzing the effects of eating habits and alcohol consumption on academic performance. Their findings revealed that students who maintained a well-balanced diet, rich in essential nutrients such as proteins, vitamins, and healthy fats, exhibited higher cognitive function and better academic outcomes. In contrast, those with poor dietary habits, showed decreased concentration levels and lower academic performance. This study reinforces the idea that dietary choices significantly influence students' ability to focus, retain information, and perform well in their coursework.

One of the most important dietary habits linked to academic performance is breakfast consumption. Studies indicate that students who eat breakfast regularly tend to perform better academically compared to those who frequently skip it. Breakfast serves as a vital source of nutrients that enhance memory retention, concentration, and problem-solving skills (López-Moreno et al., 2021). The brain requires a continuous supply of glucose and essential micronutrients to function optimally, and the absence of breakfast can lead to reduced energy levels, impaired cognitive function, and difficulty focusing on academic tasks. Research conducted by Resimo et al. (2024) found that university students who skip breakfast frequently report higher levels of fatigue, decreased participation in academic activities, and lower overall academic performance.

Similarly, Iglesias-López et al. (2023) explained how nutrient intake, emotional eating anxiety levels affect female nursing students. Their research found that stress and anxiety often lead to emotional eating, which in turn contributes to poor dietary choices and worsened academic performance. The study emphasized that students who consumed nutrient-dense meals, particularly those high in proteins, fiber, and essential vitamins, demonstrated stronger cognitive function, better concentration, and improved memory retention. Additionally, the study noted that poor eating habits were linked to reduced academic motivation and lower grades. This highlights the complex relationship between mental health, eating behaviors, and academic success.

Further supporting this link, Resimo et al. (2024) conducted a study on college students in a private school, focusing on how dietary habits correlate with academic performance. Their research found that students who frequently skipped meals, consumed highly processed or fast foods, and maintained irregular eating schedules tended to have lower academic performance. These findings align with existing research, which suggests that a structured and nutritious diet supports brain function, improves memory retention, and enhances overall learning abilities. The study also emphasized the importance of meal frequency, suggesting that students who consumed regular, well-balanced meals performed better in cognitive tasks and had higher academic achievements than those with erratic eating patterns.

Given the evidence from these studies, it is clear that promoting healthy dietary habits among nursing students is essential for academic success. Universities should consider implementing nutritional education programs, stress management workshops, and policies aimed at encouraging healthier food choices among students. Additionally, providing affordable, nutritious meal options on campus could help students develop better eating habits that contribute to improved academic performance.

For nursing students, who often face intense coursework and clinical rotations, maintaining an healthy diet is of great benefit. Healthy diet do not only supports cognitive function but also helps manage stress, enhance energy levels, and improve overall well-being, all of which are crucial for good academic performance and success. As research continues to explore the connection between diet and academic performances. It becomes evident that ensuring students have access to nutritious food options should be a top priority for educational institutions.

1.2 Statement of problems

Academic performance among university students is influenced by multiple factors, including study habits, stress levels, and overall well-being. However, one crucial yet often overlooked factor is dietary habits. University students, especially those in demanding fields like nursing,often engage in poor eating patterns due to academic pressures, financial constraints, and time limitations. These unhealthy dietary behaviors, such as skipping meals especially breakfast eating junks and fast foods, may have negative consequences on cognitive function, memory retention, and overall academic success (Iglesias-López et al., 2023; López-Moreno et al., 2021; Resimo et al., 2024).

Existing research highlights that poor dietary habits can lead to fatigue, reduced concentration, and impaired learning capabilities, all of which are essential for academic success (López-Moreno et al., 2021). Studies also indicate that emotional eating and high levels of anxiety contribute to unhealthy eating patterns, which further deteriorate cognitive performance (Iglesias-López et al., 2023). Moreover, skipping breakfast—a common habit among university students,has been linked to decreased academic participation and lower overall performance (Resimo et al., 2024). Despite these findings, there is limited research that directly examines how these dietary habits influence academic performance among nursing students, who often experience high levels of stress due to the rigorous nature of their coursework.

Given the critical role of nutrition in cognitive function and academic success, this study seeks to investigate the relationship between dietary habits and academic performance among nursing students at the University of Benin.Also identifying specific dietary patterns that affect student performance negatively.

1.3 Objectives of the Study

The main aim of this study is to examine the influence of dietary habits on the academic performance of nursing students at the University of Benin.

Specific Objectives

1. To examine the dietary habits of nursing students at the University of Benin.

2.To determine the academic performance of nursing students at the University of Benin

3. To explore the relationship between dietary habits and academic performance of nursing students in the University of Benin

1.4 Research questions

This study seeks to answer the following questions:

1. What are the dietary habits of nursing students at the University of Benin?

2. What is the academic performance of nursing students at the University of Benin?

3. What is the relationship between dietary habits and academic performance among nursing students at the University of Benin?

1.5 Research Hypothesis

Null Hypothesis (H_0): There is no significant relationship between the dietary habits of nursing students and their academic performance at the University of Benin.

1.6 Significance of Study

This study is significant as it provides empirical evidence on how dietary habits influence the academic performance of nursing students at the University of Benin. Given the demanding nature of nursing education, proper nutrition is essential for maintaining cognitive function, concentration, and overall well-being. The findings of this study will be beneficial in several ways:

1. For Students:

Research has shown that regular breakfast consumption improves cognitive function, memory retention, and concentration, leading to better academic performance (López-Moreno et al., 2021). However, many university students tend to skip meals, particularly breakfast, due to busy schedules, stress, and financial constraints (Resimo et al., 2024). By highlighting the relationship between dietary habits and academic success, this study can help students become more conscious of their nutritional choices and adopt healthier eating patterns.

2. For Educators:

Educators play a crucial role in guiding students toward academic success. The findings from this study can help them understand the significance of proper nutrition in enhancing cognitive function, concentration, and motivation. By incorporating nutritional awareness into their teaching strategies, educators can encourage students to adopt healthier dietary habits that positively impact their academic performance.

3. For Institutions:

Universities and other educational institutions shape students' academic experiences. This study will provides data-driven insights into the link between nutrition and academic performance. Institutions can use these findings to implement policies and student support programs that promote healthier eating habits, such as offering balanced meal options in cafeterias, organizing nutrition awareness campaigns, or integrating wellness initiatives into student life.

4. For Healthcare Practitioners and Policymakers:

Research has linked poor dietary choices to increased anxiety, fatigue, and reduced academic performance among nursing students (Iglesias-López et al., 2023). By providing evidence of these correlations, this study can serve as a foundation for public health policies aimed at improving student nutrition. Healthcare professionals and policymakers can use this information to develop targeted interventions that address stress-related dietary habits and promote a balanced diet among university students.

5. For Future Research:

This study contributes to the growing body of literature on student nutrition and academic performance. While previous research has examined general university populations, fewer studies have specifically focused on nursing students, who face unique academic and clinical demands (Resimo et al., 2024). By addressing this gap, the findings can guide future research into the long-term effects of dietary habits on students' professional development, health outcomes, and career performance.

By emphasizing the importance of healthy dietary habits, this study aims to encourage universities, students, and policymakers to take proactive steps in ensuring that students receive the nutritional support they need to succeed academically.

1.7 Scope of Study

This study explores how dietary habits impact the academic performance of nursing students at the University of Benin. It focuses on key factors like meal patterns, breakfast consumption, emotional eating, examining how these habits affect concentration, memory, and overall academic success. By gathering data from undergraduate nursing students, the study aims to highlight the connection between nutrition and learning outcomes, considering the unique challenges and stress they face in their academic journey.

1.8 Operational Definition of Terms

1. Influence: The effect or impact that dietary habits have on the academic performance of nursing students, including changes in cognitive function, concentration, retention ability, and overall scholastic achievements.

2. Dietary Habits: This refers to the eating patterns, food choices, and meal frequency of nursing students, including breakfast consumption, emotional eating, and alcohol intake.

3. Academic Performance:The measurable outcomes of students' learning, assessed through grades, test scores, and overall academic achievements in their nursing coursework.

4. Breakfast Consumption:The regular intake of a morning meal before academic activities, which is analyzed in relation to its effects on cognitive function and academic success.

5. Emotional Eating:The tendency to consume food in response to stress, anxiety, or emotions rather than hunger, which may influence concentration and learning efficiency.

6. Cognitive Function: The mental processes involved in learning, including memory, attention, and problem-solving, which are influenced by students' nutritional choices.

7. Nursing Students: Undergraduate students enrolled in the nursing program at the University of Benin, who are the focus of this study.

CHAPTER TWO

LITERATURE REVIEW

This chapter presents reviews of literatures relevant to the study perception of the influence of dietary habits among nursing students on academic performance in the University of Benin

This was discussed under the following headings;

Conceptual review

Theoretical review

Empirical review

2.1.1 Concept of Dietary Habits

Dietary habits refer to the regular patterns of food consumption that individuals or populations adopt over time. These habits include not only the types of food consumed but also the frequency, portion sizes, and timing of meals. They are shaped by a combination of personal, cultural, social, and environmental factors (Rosales, 2021). Dietary habits are critical to human health as they directly affect physical well-being, cognitive functioning, and the risk of developing chronic diseases.

Dietary habits are defined as the habitual decisions people make regarding food and drink intake. These decisions influence energy balance, nutrient adequacy, and overall health outcomes. Healthy dietary habits typically involve consuming nutrient-dense foods such as fruits, vegetables, whole grains, lean proteins, and low-fat dairy while limiting added sugars, saturated fats, sodium, and highly processed foods(U.S. Department of Agriculture & U.S. Department of Health and Human Services, 2020).(USDA & HHS, 2020). Adopting healthy dietary patterns is essential for preventing diet-related chronic diseases such as cardiovascular disease, type 2 diabetes, and obesity (USDA & HHS, 2020).The importance of dietary habits extends across all life stages. For instance, during infancy and childhood, proper nutrition supports growth and development. In adulthood, maintaining healthy dietary patterns can reduce the risk of chronic diseases. In older adulthood, it helps preserve muscle mass and cognitive function (Rosales, 2021). Thus, dietary habits play a vital role in promoting health throughout the lifespan.

2.1.2 Components of Dietary Habits

1. Dietary Patterns: A dietary pattern refers to the combination of foods and beverages consumed over time rather than focusing on individual nutrients or meals. Research has shown that dietary patterns emphasizing whole foods like fruits, vegetables, legumes, nuts, whole grains, lean proteins and unsaturated fats are associated with better health outcomes (USDA & HHS, 2020). On the otherhand,dietary patterns high in refined grains, added sugars and saturated fats increase the risk of chronic diseases (Rosales, 2021).

2. Meal Timing and Frequency: The timing and frequency of meals also influence dietary habits. For example, skipping breakfast has been linked to poor nutrient intake and adverse health outcomes. Regular meal consumption helps maintain energy levels and supports metabolic health (USDA & HHS, 2020). Also, late-night food consumption can disrupt sleep patterns and metabolic function, potentially leading to fatigue, weight gain, and decreased academic performance.

3. Cultural and Religious Influences: Cultural and religious traditions significantly shape dietary habits. Foods consumed during festivals or religious events often reflect cultural values but may not always align with healthy eating guidelines (Rosales, 2021). For example, religious practices

such as fasting can affect meal timing, nutrient intake, and overall health. While fasting may offer spiritual and potential health benefits, prolonged or unbalanced fasting can lead to fatigue, reduced concentration, and altered metabolic function.

4. Nutritional Quality: The nutritional quality of foods consumed plays a crucial role in overall health. Nutrient-dense foods, such as fruits, vegetables, whole grains, and lean proteins, provide essential vitamins and minerals while supporting metabolic function and energy levels. In contrast, energy-dense but nutrient-poor options, like sugary drinks and processed snacks, contribute to excessive calorie intake without sufficient nutrients, increasing the risk of obesity and metabolic disorders (USDA & HHS, 2020). A balanced diet that prioritizes whole, unprocessed foods is essential for maintaining overall well-being.

2.1.3 Types of Dietary Habits

Dietary habits encompass the consistent patterns of food and drink consumption that individuals adopt over time. These habits are influenced by personal preferences, cultural norms, environmental factors, and psychological states. Specific dietary behaviors, such as alcohol consumption, caffeine intake, stress eating, emotional eating, hydration practices, and portion control, play crucial roles in determining overall health and well-being.

1. Alcohol Consumption

Alcohol intake significantly impacts diet quality by leading to poorer dietary patterns. This includes reduced consumption of nutrient-dense foods like fruits and vegetables. Alcohol provides calories without nutritional value, displacing essential macronutrients like carbohydrates, proteins, and fats. Excessive alcohol consumption can result in malnutrition due to its effects on nutrient absorption and metabolism.

2. Caffeine Intake

Caffeine is widely consumed through beverages such as coffee and tea. Moderate intake is associated with improved cognitive performance and alertness, but excessive consumption can lead to dehydration and disrupted sleep patterns. Caffeinated beverages often contain added sugars, contributing to poor dietary quality.

3. Stress Eating

Stress eating involves consuming food in response to emotional distress rather than hunger. This behavior often leads to overconsumption of calorie-dense but nutrient-poor foods like sweets and processed snacks. Stress-induced eating is linked to hormonal changes, increasing cravings for high-fat and high-sugar foods.

4. Emotional Eating

Emotional eating is consuming food in response to emotions such as sadness or boredom. Emotional eaters often struggle with regulating their food intake and may develop unhealthy relationships with food. This habit is concerning among students and young adults facing academic pressures.

5. Hydration Practices

Proper hydration is essential for maintaining bodily functions like temperature regulation and nutrient transport. Insufficient hydration can impair physical performance and cognitive function. While water is the healthiest hydration option, many consume sugary drinks or caffeinated beverages, contributing to poor dietary quality.

6. High Intake of Fast Food and Processed Foods: A dietary habit characterized by frequent consumption of fast food, sugary drinks, and heavily processed snacks. This pattern is often high in unhealthy fats, sugars, and sodium while lacking essential nutrients, which may contribute to obesity, metabolic disorders, and other health risks.

7. Portion Control: The habit of eating appropriate portions vs. overeating or undereating affects weight management and overall health. Consistently consuming large portions can lead to excessive calorie intake and weight gain, while eating too little may result in nutrient deficiencies. Practicing portion control can helps maintain a balanced diet, preventing both overconsumption and malnutrition.

2.1.4 Positive Impacts of Healthy Dietary Habits

1. Healthy Metabolism

Proper meal timing, portion control, and balanced nutrient intake support a healthy metabolic rate, reducing the risk of weight gain and metabolic disorders. Skipping meals or excessive calorie restriction can slow metabolism, making weight management more difficult.

2. Stable Energy Levels

Eating regular, balanced meals prevents blood sugar fluctuations, reducing energy crashes, irritability, and fatigue. Consuming nutrient-dense foods rather than processed snacks helps sustain energy throughout the day.

4. Effective Weight Management

Practicing portion control and mindful eating helps prevent overeating and promotes healthy digestion. Eating slowly and recognizing fullness cues reduce the likelihood of excess calorie intake, supporting a healthy weight.

5. Optimal Hydration and Organ Function

Adequate water intake supports digestion, kidney function, and mental clarity. Drinking water instead of sugary drinks reduces the risk of obesity and metabolic disorders. Proper hydration also prevents dehydration-related issues like headaches, fatigue, and kidney stones.

6. Improved Digestive Health

Consistently consuming fiber-rich foods (fruits, vegetables, whole grains, and legumes) and staying hydrated promote gut health, regular bowel movements, and efficient nutrient absorption. Mindful eating (chewing food properly and avoiding distractions) also aids digestion.

7. Enhanced Cognitive Function and Mental Clarity

Regular, balanced meals with essential nutrients (including healthy fats and protein) help maintain concentration, memory, and overall brain health. Skipping meals or relying on processed snacks can impair focus and increase fatigue.

8. Better Sleep Quality and Recovery

Avoiding late-night heavy meals and caffeine before bedtime supports restful sleep. Poor eating habits such as consuming large meals before bed or excessive caffeine intake can lead to insomnia, acid reflux, and disrupted sleep cycles.

2.1.5 Negative Impacts of Unhealthy Dietary Habits

1. Increased Risk of Obesity

Unhealthy dietary habits, such as frequent consumption of fast food, sugary beverages, and excessive snacking, contribute to obesity. Poor portion control, irregular meal timing, and late-night eating lead to excessive calorie intake and poor nutrient balance. These habits increase body fat accumulation, raising the risk of obesity-related conditions such as heart disease, diabetes, and joint problems (USDA & HHS, 2020).

2. Higher Prevalence of Metabolic Disorders

Irregular eating patterns, excessive consumption of refined carbohydrates, and high intake of processed foods contribute to insulin resistance and type 2 diabetes. Habitual intake of sugary beverages and high-glycemic foods leads to frequent blood sugar spikes, increasing the risk of metabolic syndrome and hormonal imbalances (Rosales, 2021).

3. Cardiovascular Problems

Unhealthy dietary habits, such as high sodium intake, excessive consumption of saturated fats, and low intake of heart-healthy foods, contribute to hypertension and elevated cholesterol levels. Diets heavy in processed foods, fried meals, and trans fats increase the likelihood of heart disease, stroke, and atherosclerosis. Skipping meals and poor hydration further strain cardiovascular health (USDA & HHS, 2020).

4. Weakened Cognitive Function and Mental Health Issues

Frequent consumption of processed foods, excessive sugar intake, and skipping meals negatively impact brain function. Poor dietary habits can lead to nutrient deficiencies in omega-3 fatty acids, B vitamins, and iron, which are essential for mental clarity and focus. These deficiencies contribute to cognitive decline, memory problems, and mental fatigue. Additionally, diets high in processed foods and unhealthy fats have been linked to an increased risk of depression and anxiety (Harvard Health Publishing, 2021).

5. Increased Healthcare Costs and Economic Burden

The long-term effects of unhealthy dietary habits contribute to rising healthcare expenses due to the growing prevalence of diet-related chronic diseases. Increased medical costs for obesity, diabetes, and cardiovascular diseases place a strain on healthcare systems. Additionally, poor dietary choices lead to decreased productivity, increased absenteeism, and lower quality of life, affecting both individuals and society (USDA & HHS, 2020).

2.1.6 Concept of Academic Performance

Academic performance refers to the extent to which students achieve learning outcomes in an educational setting. It is commonly assessed using indicators such as grades, standardized test scores, and cumulative grade point averages (GPAs), which provide a quantitative measure of students' proficiency in different subjects (Busalim et al., 2021). However, beyond numerical evaluations, academic performance also includes qualitative aspects such as critical thinking, problem-solving skills, participation in class activities, and the practical application of knowledge in real-life contexts (Chango et al., 2024).

In modern educational research, academic performance is defined as students' ability to effectively complete academic tasks, measured through standardized assessments and coursework evaluations (Busalim et al., 2021). Various factors influence academic achievement, including individual learning styles, access to educational resources, psychological well-being, and the overall learning environment. Additionally, strong academic performance opens opportunities for higher education, scholarships, and career advancement.

Moreover, academic performance plays a fundamental role in shaping students' personal and professional growth by fostering essential skills such as self-discipline, adaptability, and lifelong learning. It is commonly evaluated through formative assessments (e.g., quizzes, assignments, and classroom activities) and summative assessments (e.g., final exams and research projects) to provide a comprehensive overview of students' competencies. As education evolves with advancements in technology and pedagogy, academic performance is increasingly assessed based on digital literacy, collaborative abilities, and problem-solving skills in dynamic learning environments.

2.1.7 Components of Academic Performance

1. Academic Achievements

Academic achievements are traditionally measured through grades, test scores (CGPA), class rankings, and completion rates. These metrics provide a standardized way to assess student performance and compare it across institutions or regions. High academic achievements often correlate with better opportunities for higher education and career prospects. Consistent academic performance is influenced by factors such as effective teaching, curriculum design, and student engagement.

2. Cognitive Abilities

Cognitive abilities, including memory, logical reasoning, information processing, and problem-solving skills, play a crucial role in academic success. Cognitive abilities such as logical reasoning and working memory significantly predict performance in subjects like mathematics and language. Additionally, self-discipline and planning often mediate the relationship between cognitive abilities and academic outcomes.

3.Learning and Study Skills

Effective learning strategies such as time management, organization, note-taking, and efficient study habits are essential for academic success. These skills help students retain knowledge over time and apply it effectively during assessments. Active learning techniques,such as summarizing information, self-testing, and engaging in group discussions enhance comprehension and long-term retention. Students who adopt structured study routines tend to perform better academically.

4. Practical Application

The ability to apply theoretical knowledge to real-world contexts is a critical aspect of academic performance. This includes hands-on activities like laboratory experiments, internships, technical skill development, and vocational training. Practical application not only reinforces theoretical concepts but also prepares students for professional challenges. For instance, engineering students benefit from project-based learning where they solve real-world problems using their technical expertise.

5. Social and Behavioral Skills

Academic environments often require collaboration through group projects or participation in extracurricular activities. These experiences develop interpersonal skills such as teamwork, communication, leadership, and adaptability. Such social competencies are vital for holistic development and contribute to academic success by fostering a supportive learning environment. Behavioral traits like self-regulation and resilience help students navigate challenges effectively.

2.1.8 Factors influencing Nursing Students' Academic Performance

1.Personal Factors

Study Habits: Effective study habits are essential for nursing students to manage the rigorous demands of their coursework. Consistent study routines improve retention and understanding of complex nursing concepts, while poor study habits such as procrastination can hinder academic success (Fooladi et al., 2022).

Motivation and Engagement: Intrinsic motivation and active engagement in learning are crucial for academic success. Nursing students who are self-driven tend to perform better academically (Fooladi et al., 2022).

Demographics: Factors such as age, gender, and marital status influence academic outcomes. Younger students often perform better academically compared to older or married students due to fewer external responsibilities (Fooladi et al., 2022).

Student Aptitude:Academic success is influenced by various forms of intelligence, including intellectual ability (IQ), emotional intelligence (EQ), and spiritual intelligence. These factors shape a student's ability to process information, manage emotions, and maintain a sense of purpose, all of which contribute to overall performance in academic settings.

2. Nutrition

Nutrition significantly impacts cognitive function and energy levels, which are essential for academic performance. A balanced diet rich in fruits, vegetables, whole grains, and lean proteins supports brain health and focus (Reuter et al., 2020). Regular breakfast consumption is linked to improved concentration and memory retention during academic tasks (Reuter et al., 2020). Conversely, frequent consumption of fast foods and sugary beverages can lead to energy crashes and reduced cognitive efficiency. Adequate hydration is equally important for maintaining focus and preventing fatigue during learning activities (Reuter et al., 2020).

3. Institutional Factors

The quality of nurse educators is a critical determinant of academic success. Supportive relationships between educators and students foster better learning environments and enhance student outcomes (Fooladi et al., 2022). Access to well-equipped learning facilities, such as libraries and simulation labs, enables nursing students to practice clinical skills effectively while improving theoretical knowledge (Fooladi et al., 2022). Interactive curricula that integrate theoretical knowledge with practical application have been shown to improve both academic and clinical performance (Fooladi et al., 2022).

4.Environmental Factors

Socioeconomic background strongly influences nursing students' academic performance. Students from low-income families often face challenges such as limited access to educational resources or financial stress, which can hinder their ability to excel academically (Fooladi et al., 2022). Language barriers also pose difficulties for international students or those studying in a second language, affecting comprehension and exam performance (Fooladi et al., 2022). Furthermore, a supportive home environment is essential for fostering concentration and study habits; disruptive environments can negatively impact academic outcomes (Fooladi et al., 2022).

5. Clinical Training Factor

Clinical education quality is vital for nursing students' success. Programs that provide hands-on practice alongside theoretical learning prepare students for real-world challenges in healthcare settings (Fooladi et al., 2022). Adequate supervision during clinical placements has been linked to improved academic performance. However, the demanding nature of clinical rotations can lead to stress and burnout among nursing students. Institutions offering mental health support services can help mitigate these challenges and improve overall performance (Fooladi et al., 2022).

2.1.9 Influence of Dietary Habits of Nursing Students on Academic Performance

1. Nutrient Intake and Emotional Eating

Nursing students often experience emotional eating and anxiety, which can disrupt their nutrient intake and lead to dietary imbalances. These imbalances may negatively impact cognitive functions, affecting academic performance (Iglesias-López et al., 2023).

2. Eating Habits and Academic Performance

The dietary habits of nursing students, including stress eatings,late night eating significantly influence their academic outcomes. Students who maintain healthier eating habits tend to perform better academically compared to those with poor dietary practices (López-Moreno et al., 2021).

3. Nutrition Literacy and Eating Behaviors

Nutrition literacy plays a crucial role in shaping the eating behaviors of nursing students. Improved nutritional knowledge enhances informed dietary choices, which in turn supports better academic performance (Mancin et al., 2023).

4. Nutrition Education and Academic Success

Integrating nutrition education into nursing curricula can enhance students' understanding of dietary habits, thereby supporting academic success. Such programs help students make informed dietary choices, which can improve their cognitive abilities and academic outcomes (Mostafazadeh & Jafari, 2024).

5. Breakfast Consumption and Cognitive Function

Regular breakfast consumption is associated with improved cognitive function and academic performance among nursing students. Skipping breakfast can lead to decreased concentration and memory retention, negatively impacting learning outcomes (Resimo et al., 2024).

6. Dietary Patterns and Mental Performance

Adhering to healthy dietary patterns rich in fruits, vegetables, and whole grains supports better mental performance compared to diets high in processed foods. Nursing students who follow healthy dietary habits exhibit enhanced cognitive abilities necessary for academic success (Williams et al.,2023).

2.2 Theoretical Review

2.2.1 Pender's Health Promotion Model (HPM)

Pender's Health Promotion Model (HPM) is a widely recognized framework in nursing and health sciences that emphasizes the adoption of health-promoting behaviors to enhance well-being. Developed by Nola J. Pender in 1982, the model provides a comprehensive understanding of how individual characteristics, environmental factors, and behavior-specific cognitions influence health-related decisions. This theoretical review explores the key components, assumptions, and relevance of the HPM in understanding the dietary habits of nursing students and their impact on academic performance.

Overview of Pender's Health Promotion Model

The HPM views health as a positive dynamic state rather than merely the absence of disease. It aims to promote behaviors that improve quality of life and functional ability at all stages of development. The model is grounded in two social theories:

Fishbein's Expectancy-Value Theory: Suggests individuals are motivated to act based on their expectations of positive outcomes.

Bandura's Social Cognitive Theory:Emphasizes self-efficacy as a critical factor in initiating and maintaining behavioral change.

The Pender's Health Promotion Model (HPM)focuses on three major components:

1. Individual Characteristics and Experiences

2. Behavior-Specific Cognitions and Affect

3. Behavioral Outcomes

Key Components of the Model

1. Individual Characteristics and Experience

This component recognizes that each individual has unique personal attributes and past experiences that shape their health behaviors. Key factors include:

Personal Factors: Biological (age, gender), psychological (self-esteem), and sociocultural (socioeconomic status) factors.

Prior Related Behaviors:Previous experiences with health-promoting behaviors influence future actions.

In the context of nursing students, factors such as academic stress, time constraints, financial limitations, and cultural norms can affect their dietary habits.

2. Behavior-Specific Cognitions and Affect

This dimension focuses on variables that directly influence motivation for health-promoting behaviors:

Perceived Benefits: Beliefs about the advantages of engaging in healthy eating habits, such as improved energy levels and cognitive function.

Perceived Barriers: Challenges like limited access to healthy food or lack of time for meal preparation.

Perceived Self-Efficacy: Confidence in one’s ability to maintain healthy dietary practices despite challenges.

Activity-Related Affect:Emotional responses associated with dietary habits, such as enjoyment or stress related to meal preparation.

Interpersonal Influences: Peer pressure, family support, or role modeling by others that impact dietary choices.

Situational Influences: Environmental factors like availability of healthy food options at university cafeterias.

These variables are critical in shaping nursing students' dietary behaviors and can be addressed through tailored interventions.

3. Behavioral Outcomes

The ultimate goal of the HPM is to achieve health-promoting behaviors that enhance well-being. Behavioral outcomes are influenced by:

Commitment to action: The intention to adopt healthy eating habits.

Competing demands: External factors (e.g., academic workload) that may derail intended actions.

For nursing students, achieving a balance between academic responsibilities and maintaining healthy dietary habits is essential for optimal academic performance.

Assumptions of the Pender’s Health Promotion Model (HPM)

The model is based on four key assumptions:

1. Individuals actively regulate their behavior.

2. Individuals interact with their environment, which influences their actions over time.

3. Health professionals play a significant role in shaping individuals' health behaviors.

4. Self-initiated changes in behavior are essential for achieving health-promoting outcomes.

These assumptions highlight the dynamic interplay between personal agency, environmental factors and professional support in promoting healthy behaviors.

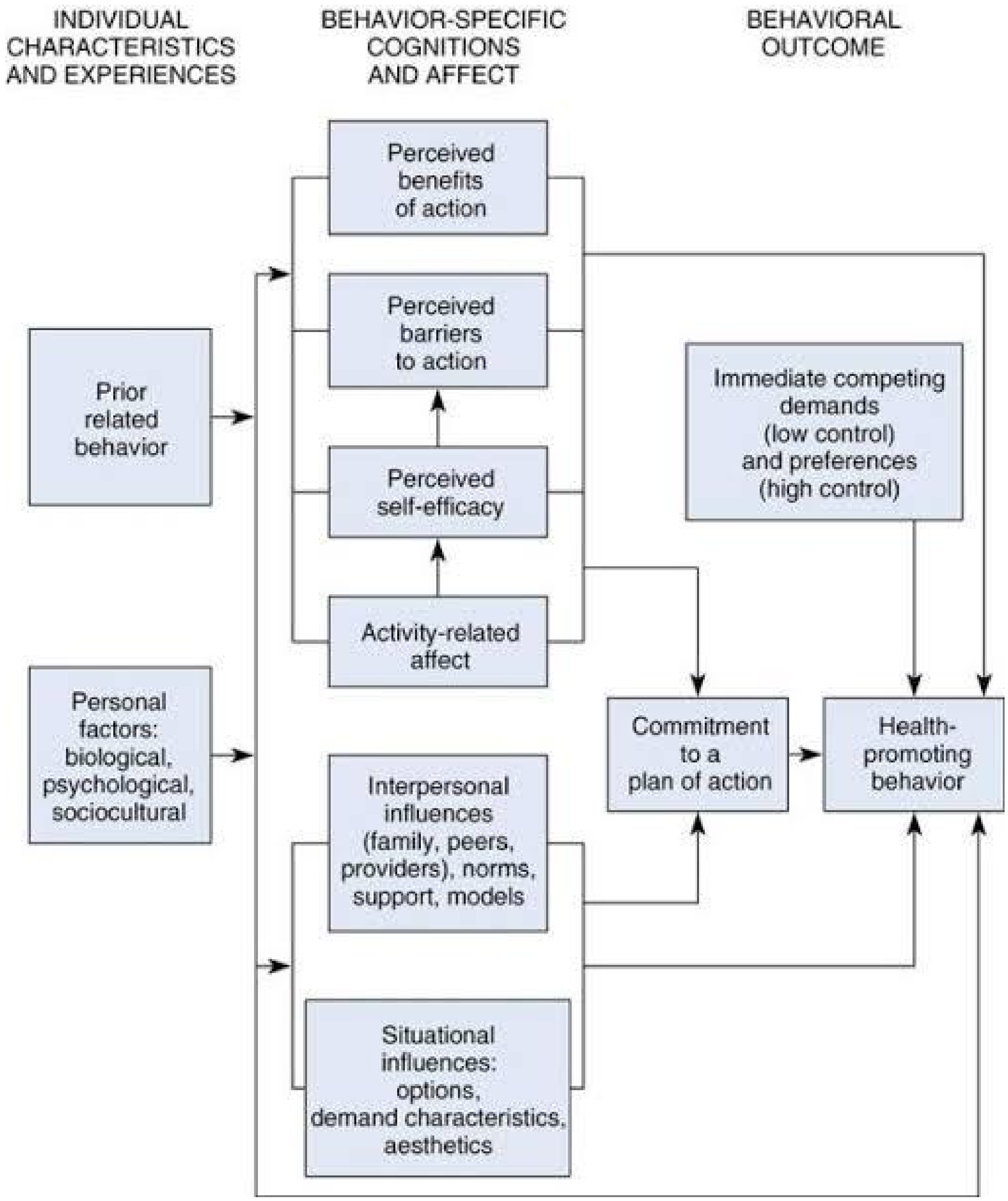

Figure 2.1: The Health Promotion Model

2.2.2 Application to the study

1. Individual Characteristics and Experiences

Pender's HPM emphasizes the role of personal factors and prior experiences in shaping health behaviors. In the context of nursing students' dietary habits, these factors are crucial:

Biological Factors: Age, gender, and metabolic needs influence dietary habits. For instance, younger students may have less structured eating patterns compared to older students.

Psychological Factors: Stress levels, self-esteem, and motivation significantly impact food choices. Nursing students often face high stress due to academic workload, which may lead to unhealthy eating habits such as skipping meals or consuming fast food.

Sociocultural Factors: Cultural norms and socioeconomic status affect access to healthy food options. Students from low-income backgrounds may struggle to afford nutritious meals.

By evaluating these factors through surveys or focus groups, researchers can identify patterns in dietary habits and their relationship with academic performance.

2. Behavior-Specific Cognitions and Affect

This component focuses on variables that directly influence dietary behaviors. It provides actionable insights into how nursing students perceive and engage with healthy eating habits:

Perceived Benefits:Highlighting the cognitive and physical benefits of healthy eating (e.g., improved concentration, better energy levels) can motivate students to adopt better dietary practices.

Perceived Barriers: Identifying barriers such as time constraints, lack of access to healthy food on campus, or financial limitations allows for targeted interventions. For example, providing affordable meal plans or quick healthy recipes could address these barriers.

Perceived Self-Efficacy: Enhancing students' confidence in their ability to maintain healthy eating habits is crucial. Workshops on meal planning or stress management can empower students to make better food choices.

Activity-Related Affect: Positive emotions associated with healthy eating (e.g., feeling energized) can reinforce these behaviors, while negative emotions (e.g., guilt from unhealthy eating) can deter them.

Interventions can be designed to address these perceptions through educational programs, peer support groups, or campus-wide campaigns promoting healthy lifestyles.

3. Behavioral Outcomes

The ultimate goal is to encourage nursing students to adopt health-promoting behaviors that enhance their academic performance. Behavioral outcomes include:

Increased consumption of balanced meals rich in nutrients essential for cognitive function (e.g., omega-3 fatty acids, vitamins).

- Reduction in unhealthy practices such as skipping meals or consuming excessive junk food.

- Improved energy levels and focus during academic activities.

To achieve these outcomes, interventions should be designed with the following steps in mind:

1. Assessment Phase

- Conduct baseline surveys using validated tools like the Health-Promoting Lifestyle Profile (HPLP) to assess current dietary habits, perceived barriers/benefits, and self-efficacy levels among nursing students.

2. Intervention Design

- Develop educational workshops focusing on:
  - The benefits of proper nutrition for academic success.
  - Strategies for overcoming common barriers (e.g., time management for meal preparation).
  - Building self-efficacy through practical skills like meal planning.
- Provide tailored resources such as weekly meal plans, quick recipes, and tips for maintaining a balanced diet on a budget.

3. Implementation Phase

- Deliver interventions through multiple channels:
  - On-campus workshops led by nutritionists or faculty members.
  - Peer-led support groups promoting accountability and motivation.
  - Online platforms offering resources like videos, articles, and interactive Q&A sessions.

4. Evaluation Phase

- Use post-intervention surveys to measure changes in dietary habits, perceived self-efficacy, and academic performance.

- Analyze data to identify successful strategies and areas for improvement.

By following this structured approach, the application of Pender's Health Promotion Model can effectively promote healthier dietary habits among nursing students, ultimately enhancing their academic performance

2.3 Empirical Review

2.3.1 Dietary habits of nursing students

A study conducted by Oluwasanmi et al. (2020) on Assessment of Dietary Pattern, Health Implication, and Nutritional Status of Clinical Medical Students in Southeast Nigeria: A Cross-sectional Study. The study was conducted among clinical medical students at a university in Southeast Nigeria. Data was collected using a pre-tested structured questionnaire that assessed dietary habits, health status, and nutritional intake. A total of 400 students participated, and the data was analyzed using descriptive statistics, chi-square test, and multiple logistic regression. The mean age of the respondents was 23.7 years ± 3.1, and 55% of the respondents reported consuming irregular meals, with 30% skipping breakfast on most days. The study found a significant association between poor dietary patterns and reduced academic performance ($p < 0.05$). Students with poor nutritional habits, particularly skipping meals, had a 2.1 times higher likelihood of experiencing academic underperformance. Additionally, nutritional deficiencies were linked to increased absenteeism and lower concentration during lectures. The authors concluded that inadequate dietary practices negatively impact the health and academic performance of clinical medical students. They recommend that medical schools promote nutritional education and encourage students to adopt healthier dietary practices to improve their academic outcomes.

A study conducted by Mwita et al. (2023) on Dietary Habits and Physical Exercise Patterns Among Undergraduate Nursing Students at Muhimbili University of Health and Allied Sciences, Tanzania: A Cross-sectional Study. The study was conducted among undergraduate nursing students at Muhimbili University of Health and Allied Sciences, Tanzania. Data was collected using a structured questionnaire that assessed dietary habits, physical exercise patterns, and health-related behaviors. A total of 300 nursing students participated, and the data were analyzed using descriptive statistics and chi-square tests. The mean age of the respondents was 21.4 years ± 2.8, and 45% of the students reported irregular meal patterns, with 35% skipping meals occasionally due to academic pressures. The study found that students with poor dietary habits and limited physical activity had significantly lower academic performance ($p < 0.05$). Additionally, students who exercised regularly showed better cognitive function and had higher academic performance. The authors concluded that both dietary habits and physical exercise significantly influence the academic outcomes of nursing students. They recommend the implementation of health promotion programs that encourage proper nutrition and physical activity to improve both health and academic performance.

A study conducted by Bashatah (2020) on Nutritional habits among nursing students using Moore Index for Nutrition Self Care: A cross-sectional study wad conducted in the nursing school Riyadh, Saudi Arabia involving a total of 140 students aged 18–19 years, with an average age of 18.5 years. Data collection took place between January and March 2019 through a self-reported questionnaire based on the Moore Index for Nutrition Self-Care, using a five-point Likert scale. Participants were selected through convenience sampling, and data were analyzed using descriptive statistics and bivariate analysis using SPSS version22.Results indicated that 85.7% of students had fair nutritional habits, while 7.9% exhibited good habits, and another 7.9% had poor habits. A significant positive association was found between regular physical activity and improved nutritional self-care ($\beta = -6.41$; SE 2.5, $p = .01$). Students who exercised regularly achieved a higher mean score of 53.42, compared to 46.83 among non-exercisers ($p = .002$). However, no significant relationships were observed between nutritional habits, gender, or age ($p = .8$; $p = .9$).The study emphasized the importance of educational programs promoting healthy eating habits and physical activity among nursing students. Raising awareness about proper nutritional habits can contribute to better overall health and academic performance.

A study conducted by Ahmad et al. (2022) on the Assessment of Dietary Pattern and Nutritional Status of BScN 4-Year Nursing Students at a Private Nursing College Lahore examined the dietary habits of undergraduate nursing students. The study employed a descriptive cross-sectional design and was conducted at Saida Waheed FMH College of Nursing, Lahore, Pakistan. A simple random sampling technique was used to select 132 participants, comprising 43.9% males and 56.1% females, with an age range of 15 to 35 years. The majority (59.2%) were between 21 and 25 years. Data was collected using a structured questionnaire and analyzed using SPSS version 25.The study revealed poor adherence to dietary recommendations, with students consuming legumes, nuts, fruits, and vegetables less than three times a week. Breakfast consumption was high, with 87.8% eating it daily, while 11.36% ate it sometimes, and 0.76% skipped it entirely. Hostel students were more likely to eat breakfast regularly (77 out of 87), while day scholars had lower consistency (39 out of 45). Students from middle-income families had better meal patterns, as 76 out of 83 ate breakfast daily.The study suggests that while students maintain regular meal patterns, their food choices lack balance, which may impact their energy levels, concentration, and overall academic performance. The findings highlight the importance of improving dietary habits through awareness programs to enhance students' cognitive function, focus, and learning outcomes.

2.3.2 Practices of healthy dietary habits among nursing students

A study conducted by Olorunfemi et al. (2023) on Knowledge of Adequate Diet Among Nursing Students at Achievers University, Owo, Nigeria aimed to evaluate the level of awareness and understanding of proper dietary habits among nursing students. The research utilized a descriptive cross-sectional design and was conducted between August 2022 and September 2022. A purposive sampling technique was used to select 307 nursing students, and data were collected using a validated self-administered structured questionnaire. The data were analyzed using SPSS version 23.0, applying descriptive statistics and chi-square analysis, with a p-value of <0.05 considered statistically significant.The study participants were aged 15 to 31 years, with a mean age of 22.5 years. The findings showed that 96.4% of the respondents agreed on the benefits of consuming more than three meals daily for a healthy lifestyle. Moreover, 89.6% of the students demonstrated a good understanding of proper nutritional principles, while 3.6% had poor knowledge. However, despite this high level of awareness, the study revealed no significant correlation between the students' knowledge of adequate diet and their actual dietary practices ($\chi 2 = 11.550$, $P = 0.072$). The body mass index (BMI) analysis showed that 50.8% of the students had an average weight, 36.2% were overweight, 10.1% were obese, and 2.9% were underweight.In conclusion, while the nursing students possessed adequate knowledge about proper dietary habits, this knowledge did not translate into practical application. The study recommended alternative interventions, such as promoting access to healthy meals, increasing awareness campaigns, and establishing institutional policies that support better dietary practices among nursing students.

A study conducted by Mostafazadeh et al. (2024) on "Assessing the relationship between nutrition literacy and eating behaviors among nursing students: a cross-sectional study." The study was conducted among nursing students in three nursing faculties affiliated with Ardabil University of Medical Sciences, Iran. Data was collected using a structured questionnaire, including a demographic information form, the Nutritional Literacy Self-Assessment Questionnaire for Students (NL-SF12), and the Adult Eating Behavior Questionnaire (AEBQ). A total of 224 nursing students participated, with a mean age of 22.8 ± 3.16 years. Participants were selected using proportional stratified random sampling, and statistical analyses were conducted using SPSS version 14.0 and IBM AMOS 20.0.The results showed that nutritional literacy explained 44% of the variance in eating behavior, with significant predictive power for food approach ($R^2 = 0.33$) and food avoidance ($R^2 = 0.27$). The highest score in nutritional literacy was in the knowledge dimension (mean = 3.60), while the lowest was in applying skills (mean = 2.90). In terms of eating behaviors, the highest score was in enjoyment of food (mean = 3.84), while the lowest was in emotional over-eating (mean = 2.82). The study also found a significant relationship between nutrition literacy and 8students' exposure to nutrition-related information in universities, indicating that access to reliable nutritional education influences dietary habits. Additionally, BMI and physical activity levels were significantly associated with eating behavior.In conclusion, the study found that nursing students, despite having sufficient knowledge of nutrition, struggle with applying it to their daily dietary choices. Given that nursing students are often under academic and clinical stress, their dietary habits may be influenced by factors beyond knowledge alone. The findings highlight the need for targeted interventions to improve not only nutrition literacy but also practical dietary habits to support students' academic performance and overall well-being.

A study conducted by Jovanović et al. (2024) on The Physical Activity and Dietary Habits of Nursing Students examined the dietary patterns of nursing students and their impact on health. The study was a cross-sectional study conducted among 101 nursing students (80 females and 21 males) at the Faculty of Medicine, Juraj Dobrila University of Pula, Croatia, in September 2021.Data was collected using a structured, anonymous questionnaire consisting of 45 questions, covering sociodemographic data, knowledge and attitudes about obesity, eating habits, and physical activity. Measurement of anthropometric parameters (age, height, and body mass) was self-reported by the students. A recall sampling method was used. Descriptive statistical methods were used for analysis, conducted using Microsoft Excel 2010. The findings showed that while 53% of students consumed fruits and vegetables daily, 52% frequently consumed fast food and sugary drinks. Additionally, 23% ate sweets daily, and 14% never ate fish or seafood. Breakfast was regularly consumed by only 53% of the students, indicating irregular eating patterns. The study also found that despite having knowledge about the risks of obesity, students' dietary habits did not reflect this awareness. Regarding the impact of COVID-19, 70% of participants believed the pandemic contributed to weight gain in children and adults, possibly due to increased consumption of unhealthy foods and decreased physical activity. In conclusion, the study highlighted that nursing students, despite their awareness of obesity and its health implications, exhibited poor dietary habits characterized by high consumption of unhealthy foods and low adherence to a balanced diet. These findings underscore the need for interventions that promote healthier eating behaviors among nursing students, ensuring they develop habits that align with the health knowledge they will impart in their professional practice.

2.3.3 The Relationship between Dietary Habits on Academic performance Among nursing students

Bello et al. (2024) conducted a study on the impact of nutrition on the academic performance of boarding science students in selected secondary schools within the Ilorin Metropolis, Kwara State, Nigeria, adopting a descriptive cross-sectional approach and collecting qualitative data through structured questionnaires administered to a purposively selected sample of 264 boarding students aged 13 to 17. Key findings related to the student's dietary habits included: 56.1% agreed they skip meals to save money, 68.9% indicated they skip meals due to a lack of appetite, 43.9% reported that they sometimes missed meals to avoid food served in the dining hall, and 46.6% believed the school meal plan meets their nutritional needs; additional findings on factors affecting food choices revealed that 70.1% were influenced by taste, 62.5% considered the availability of the food, and 59.5% were influenced by the price of the food; in conclusion, the study highlights a significant relationship between nutrition and academic performance, emphasizing the urgency of targeted interventions to improve science students' overall well-being, enhance cognitive abilities, and ultimately, elevate scholastic achievement levels among boarding science students in Kwara State, recommending compulsory attendance at dining halls, educational initiatives, inclusion of fruits in school meals, and orientation programs for incoming students to foster positive dietary practices.

A Study conducted by Tutu (2024) on Dietary Practices and Academic Performance Among High School Students in Tamale Metropolis, Ghana.The study was conducted in Tamale

Metropolis, Northern Region, Ghana, investigated the relationship between dietary practices and academic performance among senior high school students. The study population comprised 15,250 students from eight senior high schools, with a sample of 800 students randomly selected from five schools. Data were collected using a structured questionnaire that included closed and open-ended questions and secondary data on academic performance in four core subjects. Dietary diversity was assessed using a 13-food group table based on FAO guidelines. Household food insecurity was measured using the Household Food Insecurity Access Scale. The questionnaire's reliability was confirmed through pilot testing, yielding a Cronbach's Alpha coefficient of 0.771. Ethical standards were maintained through informed consent and ensuring data confidentiality. Using a cross-sectional analytical survey design, data were analyzed using descriptive statistics, Pearson correlation, t-tests, and ANOVA in SPSS version 25, with a significance level set at $p < 0.05$.The respondents' average age was 16.1 years, and the majority were female (65.5%). Results indicated that breakfast was the most frequently skipped meal, averaging three times per week, primarily due to lateness for school. A high level of dietary diversity was observed, with 83.2% of students consuming six or more food groups in the preceding seven days; starchy foods were the most consumed (90%). Most students came from moderately (42%) or mildly (32.8%) food-insecure households.Significant positive correlations were found between higher dietary diversity and scores in English language ($r = 0.119$) and social studies ($r = 0.184$). However, no significant relationship was observed with mathematics or science scores. The study concludes that dietary diversity positively influences academic performance in reading-related subjects but not in mathematics or science.

The study by López-Moreno et al. (2021) investigated the relationship between dietary habits, alcohol consumption, and academic performance among 56 second-year nursing students (45 women and 11 men) at a university in Madrid, Spain. The study design was a cross-sectional study. The students' ages ranged from 18 to 25 years, with a mean age of 19.7 ± 1.6 years. Data were collected using validated surveys, three-day food records (Friday to Sunday), and anthropometric measurements. Statistical analyses, including Chi-square tests, ANOVA, and Spearman correlation, were performed using SPSS version 22.Anthropometric measurements revealed a mean BMI of 23 ± 3.4 kg/m². Students were classified according to WHO criteria as underweight (BMI <18.5 kg/m²), normal weight (BMI 18.5–24.9 kg/m²), overweight (BMI 25–29.9 kg/m²), and obese (BMI ≥30 kg/m²). The study found that 67.9% of students had a BMI classified as normal weight, while 25% were either overweight or obese, with a higher percentage among men (45.5%) than women (17.7%). Significant differences were found between genders for body weight (72.1 kg men vs. 62.5 kg women) and waist/hip ratio (0.88 men vs. 0.79 women) ($p < 0.05$).In terms of diet, the average daily energy intake was 1918 ± 725 kcal/day, with carbohydrates accounting for the highest percentage of calories (39.7 ± 8.5%) compared to fat (34.6 ± 9.8%) and protein (17 ± 4.2%). The Healthy Eating Index (HEI) considered the variety of food consumption over 3 days and gave a dietary rating of 0-100 points, considering factors such as %E from fat and saturated fatty acids, cholesterol, dietary sodium, and variety of food intake. The HEI score is categorized as: <50 inadequate, 50–70 acceptable-good, and >70 very good-excellent. A global evaluation of dietary habits showed that only 28.2% of students had an excellent HEI (36.4% of men vs. 26.7% of women), while 23.2% had an acceptable HEI (18.2% of men vs. 24.4% of women), indicating poor dietary habits among a significant portion of the sample. Additionally, 44.7% reported sleeping less than 6 hours per day.Regarding alcohol consumption, participants reported an average intake of 12.9 ± 11.7 g/day, representing 6.1 ± 5.9% of their daily calorie intake. Beer was the most consumed alcoholic beverage (50%), followed by spirits (46.4%) and wine (33.9%). The majority of students (83.9%) reported consuming alcohol at least once a week, with 37.5% starting between the ages of 16 and 17. Interestingly, students with a BMI below 18.5 showed a higher alcohol intake (16.4 g/day), and an increased energy contribution from alcohol was negatively correlated with BMI (Spearman's Rs = -0.33, $p < 0.05$). Of the students, 53.6% received failing grades and reported a higher daily alcohol intake than those who passed (32 g/day versus 24 g/day) ($p = 0.043$).The study concluded that both alcohol consumption and poor dietary habits are related to poor academic performance as well as diminished quality of life, and that awareness campaigns

A study conducted by Resimo et al. (2024) on Eating Habits and Academic Performance of College Students in a Private School investigated the relationship between dietary behaviors and academic performance among 1,201 undergraduate students at St. Paul University Surigao, Philippines, including 332 nursing students (27.64%), with an age range of 18 to 35 years. The study employed a descriptive-quantitative research design and used a researcher-designed questionnaire for data collection. A simple random sampling technique was used to select participants. Statistical analysis included Frequency Count, Percentage, Mean, Standard Deviation, Analysis of Variance (ANOVA), and Pearson r correlation, and data were analyzed using SPSS.The mean age of the respondents was 21.3 ± 1.8 years, with 57.54% (691) females and 42.46% (510) males. The study found a negative correlation between eating habits and academic performance. Specifically, students who engaged in fun eating, fog eating, storm eating, and fuel eating had lower GPA scores. Among the participants, 38.30% had a "Very Good" GPA (90-94), 42.46% had a "Good" GPA (85-89), while only 4.41% had an "Excellent" GPA (95-100) in the first semester. However, in the second semester, the percentage of students with an "Excellent" GPA dropped to 1.92%, while those with a "Good" GPA increased to 46.79%.The most common eating habit was fuel eating, where 80% of students consumed at least three meals a day, but only 50% consistently chose healthy food options over fast food. Storm eating, which involves eating due to stress, was also prevalent, with 2.81 ± 0.82 mean scores indicating frequent emotional eating. Fun eating behaviors, such as eating fast food (3.13 ± 0.70) and late-night snacking (2.84 ± 0.84), were common among students.The study found that sex, year level, and course of study significantly influenced fun eating, fog eating, and storm eating behaviors ($p < 0.05$), but age did not. Furthermore, Pearson correlation showed a statistically significant negative correlation between eating habits and academic performance, with fuel eating (-0.21, $p = 0.000$), fun eating (-0.10, $p = 0.001$), fog eating (-0.10, $p = 0.001$), and storm eating (-0.10, $p = 0.001$) all associated with lower GPA scores.In conclusion, the study highlighted that poor dietary choices negatively impact academic performance, particularly for students engaged in unhealthy eating patterns. It recommended the promotion of healthier eating habits through nutrition education, increased availability of nutritious food options, and stress management programs to enhance students' well-being and academic success.

2.4 Summary of Literature Review

Dietary habits play a crucial role in the academic performance of nursing students, as proper nutrition supports cognitive function, energy levels, and overall well-being. These habits encompass meal timing, nutritional quality, cultural influences, and behaviors such as stress eating, emotional eating, and hydration. Maintaining a balanced diet and staying hydrated enhance metabolism, focus, and learning efficiency, whereas unhealthy eating patterns can lead to fatigue, poor concentration, and metabolic issues.Pender’s Health Promotion Model (HPM) provides a framework for understanding dietary behaviors, emphasizing how individual characteristics, perceived benefits and barriers, and behavioral influences shape eating habits.

Research findings indicate that while nursing students are aware of healthy eating principles, many struggle to maintain them due to factors like academic stress, financial constraints, and time limitations. Studies consistently show that poor dietary choices—such as skipping meals, consuming excessive fast food, and lacking essential nutrients—negatively affect cognitive function and academic performance.

Despite the importance of good nutrition, there are challenges in students' adherence to healthy eating. Addressing these issues requires strategies such as nutrition education, improved access to healthy meals, and interventions that promote balanced diets. Encouraging healthier eating patterns can enhance students' academic success and overall well-being.

CHAPTER THREE

METHODOLOGY

This chapter provides a detailed description of the research methodology used in this study, including the study design, setting, participants, data collection instruments, data collection procedure, data analysis procedure, and ethical considerations.

3.1 Research Design

A research design refers to the structured plan or strategy used to carry out a research study. This study aims to examine the influence of dietary habits on the academic performance of undergraduate nursing students at the University of Benin, Benin City, Edo State. The descriptive survey method is employed to identify and describe the characteristics of a specific phenomenon. A cross-sectional design involves collecting data from a diverse group of individuals at a single point in time. The descriptive cross-sectional research design was adopted for this study, as it enabled the researcher to obtain sufficient and relevant information related to the research problem.

3.2 Research Setting

This study was carried out in the Faculty of Nursing Science in University of Benin located in Ovia North-East Local Government Area of Edo State, Benin City. The University of Benin was founded in 1970, started as the Institute of Technology and was later changed to the University of Benin by the National University Commission (NUC). This University has over 40,000 students enrolled every year both full time and part time and shared among the faculties. The University has an estimate of 77,000 students and have 14 faculties which comprised of Law, Engineering, Agriculture, Management Science, Art,Nursing Science,Physical Sciences, Environmental Sciences, Social Sciences, Pharmacy, Life Sciences, College of Medical Sciences and Education. Several departments are arranged by their faculties which is about 73 departments in the University. The selected faculty is the Faculty of Nursing Science in the School of Basic Medical Sciences.

3.3 Target Population

In this study, the study population was 713 students within the age 15- 40 years in the Faculty of Nursing Science and various levels ranging from 200 level to 500 level in the University of Benin. (100 level students were excluded because they don't have the knowledge of Diet and Nutrition yet,and their current academic performance cannot be assessed).This target population was chosen because they meet the criteria to be subjects of the research study.

Table 3.1 Faculty of Nursing Science

Academic level	**Total number of students**
200 Level	174
300 Level	192
400 Level	183
500 Level	164

(Source: Office of Director of Academic Planning, UNIBEN, March 2025.)

Inclusion criteria

i. Nursing students who are interested and available for the study

ii. Nursing students ranging from 200l-500l

3.4 SAMPLE SIZE DETERMINATION

Sample size is a market research term used for defining the number of individuals included in conducting research. Researchers choose their sample based on demographics, such as age, gender or physical location. The sampling size is the numbers of participants required and to which the study findings will be generalized

A sample size of 282 students was determined using the Taro Yamane formula;

n =

Where; n = required sample

N = total population (sample frame)

e = error of tolerance which is 0.05 at 95% confidence level

1 = constant

n=

= 256.2

= 256

In order to cater for attrition or non-response, 10% provision was made that is, 10% Attrition = x 256 = 25.6

Minimum sample size= 256 + 25.6= 281.6

Approximately n = 282

3.5 SAMPLING TECHNIQUE

The researcher used a convenient sampling technique in selecting the respondent into the study among undergraduate nursing students. Convenient sampling technique is a non-probability method in which the researcher used to choose the most conveniently and economically (in terms of time) available persons or objects as sample for the study,people who are available and interested in no particular order.This method was chosen because the respondents are always not available at the same time, therefore the instruments was conveniently distributed to the available respondents.The sample size was selected among undergraduate nurses ranging from 200 – 500 level.

3.6 INSTRUMENT FOR DATA COLLECTION

Data was collected using a self-structured questionnaire developed by the researcher with the help of the supervisor. The questions were carefully structured based on the research objectives to get in-depth information that will be relevant to the study from the respondents.

3.7 VALIDITY OF THE INSTRUMENT

Validity is defined as the extent to which an instrument measures what it is supposed to measure and perform as it is designed to perform. The research instrument was made to undergo a face and content validity assessment by my supervisor, to ensure a thorough and meticulous examination.

3.8 RELIABILITY OF THE INSTRUMENT

Reliability refers to the degree to which assessment tool produces stable and consistent result. The Cronbach Alpha reliability technique will be used in this study. In this study, the reliability testing was carried out such that questionnaire was distributed to approximately 10% of the actual sample size to students another from another faculty (Basic Medical Sciences) who will not be part of the actual survey with the aim of improving its reliability. Modifications were made based on the results of the pretesting.

3.9 METHOD OF DATA COLLECTION

The Researcher self-administered 282 well-structured questionnaires containing questions relating to this research study to sample survey at Nursing Science Department University of Benin, Edo state, while responses (data) being filled out in the questionnaire was formally and immediately gathered as the respondents was guided on how to answer the questions. The distribution of the questionnaires was carried out until the desired sample size was reached.

3.10 METHOD OF DATA ANALYSIS

Data analysis is the process of extracting information from data. All data was coded before data entry and analyzed using Statistical Package for Social Sciences (SPSS) version 26.0 spread sheet. The data was analyzed using simple descriptive statistics of frequencies and percentages. The data objectives served as sub-headings in reporting the results. Each question was scored according to the number of respondents that was answered correctly and percentage was used to present it. The level of significance was set at $p<0.05$.

3.11 ETHICAL CONSIDERATIONS

The researcher is aware of the ethical and moral principles associated with data collection form respondents. Privacy which is one of the most important aspects of human rights was maintained.

Ethical approval was sought for and obtained from the COLLEGE OF MEDICAL SCIENCE RESEARCH ETHICS COMMITTEE, UNIVERSITY OF BENIN before data collection.

The major ethical principles that were upholded during this study are:

a**. Autonom**y: The respondents participated in the research project voluntarily, as they were allowed to make their own decisions freely without being coerced.

b. **Maintenance of Confidentiality**: The researcher kept the personal details of the respondents like their names, phone numbers, and addresses confidential throughout the study. Confidentiality was maintained by not sharing this information with others and limiting access strictly to the supervisor and the statistician.

c. I**nformed Consen**t: The researcher ensured that the respondents were fully informed about the study, including its purpose, procedures, potential risks, and benefits, and they provided their complete consent before participating.

d**. Avoidance of Plagiarism**: All sources used in the study was properly cited and referenced.

e**. Freedom from Exploitation**: Respondents was assured that the information they provide will not be used against them, and no form of financial exploitation will occur.

f. **Right to Fair Treatmen**t: Every respondent was treated equally and fairly, with no form of discrimination.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Socio-demographic variable of the respondents

A total of two hundred and eighty-two respondents were recruited for this study, out of which, 212(75.2%) were females and 70(24.8%) were males. 165(58.5%) of the respondents were between the ages of 18-23years, 91(32.3%) were between the ages of 24-29years, 23(8.2%) were less than 18years. 126(44.7%) of the respondents were 500L students, 56(19.9%) were 200L students, 55(19.5%) were 400L students.45(16.0%) were 300L students. A significant majority of the respondents were single 266(94.6%) and 15(5.3%) were married. 99(35.1%) of the respondents were from Benin, 3(1.1%) were Hausa, 57(20.2%) were Igbo,96(35.0%) were Yorubas and 27(9.6%) were from Other ethnicity as shown in table 4.1.

Table 4.1: Sociodemographic variable of the respondents

N=282

Variable	**Frequency**	**Percentages**
Gender		
Male	70	24.8
Female	212	75.2
Age		
<18years	23	8.2
18-23years	165	58.5
24-29years	91	32.3
30-35years	2	0.7
>35years	1	0.4
Year of study		
200L	56	19.9
300L	45	16.0
400L	55	19.5
500L	126	44.7
Marital status		
Single	266	94.6
Married	15	5.3
Divorced	1	0.4
Ethnicity		
Benin	99	35.1
Hausa	3	1.1
Igbo	57	20.2
Yoruba	96	34.0
Others	27	9.6

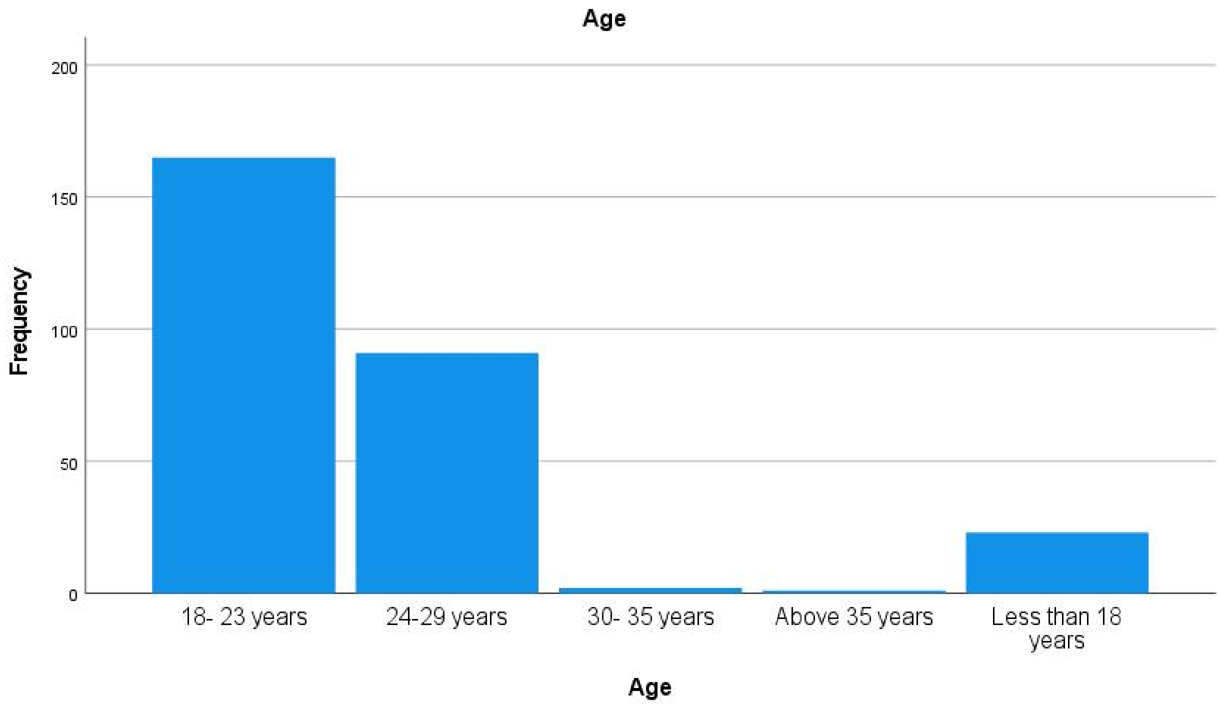

Fig 4.1 Bar chart showing the age distribution of the respondents

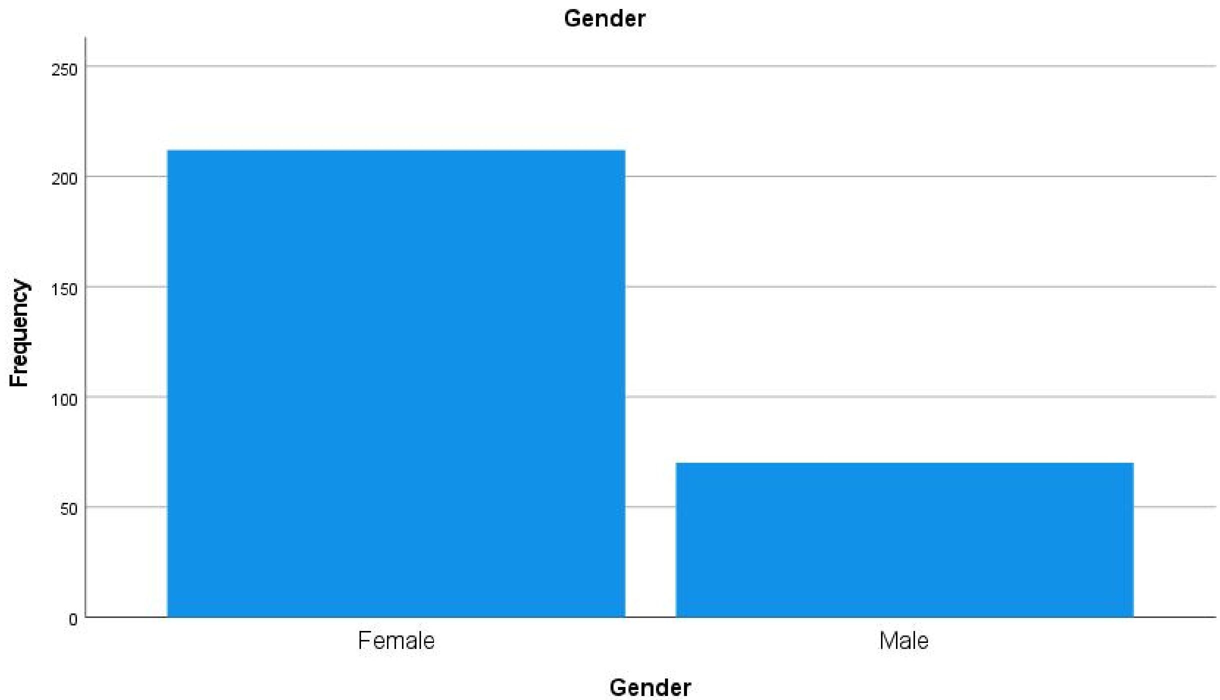

Fig 4.2 Bar chart showing the gender distribution of the respondents.

4.2 Dietary habits of the respondents

128(45.4%) of the respondents reported that they sometimes plan their meals ahead to ensure they are healthy. 97(34.4%) of the respondents reported that they eat breakfast sometimes. 60(21.3%) of the respondents reported that they always eat protein at every meal. 137(48.6%) of the respondents reported that they eat vegetables sometimes. 30(10.6%) of the respondents reported that they always eat fruits, 103(36.5%) of the respondents reported that they rarely choose eating fast food over home-cooked meals. 99(35.1%) of the respondents reported that they most of the times eat more than usual when 6they are stressed and anxious. 122(43.3%) of the respondents reported that they always drink up to 3-5 sachets of water daily. 92(32.6%) of the respondents sometimes drink soda instead of water. 23(8.2%) of the respondents always drink coffee or caffeinated drinks. Majority of the respondents had good dietary habit 242(85.8%) as shown in table 4.2.

Table 4.2: Dietary habits of the respondents

Questions	Never	Rarely	Sometimes	Most of the times	Always
Do you plan your meals ahead to ensure they are healthy	17(6.0%)	44(15.6%)	128(45.4%)	63(22.3%)	30(10.6%)
How often do you eat breakfast daily	6(2.1%)	61(21.6%)	97(34.4%)	50(17.7%)	68(24.1%)
Do you eat protein at every meal	2(0.7%)	15(5.3%)	112(39.7%)	93(33.0%)	60(21.3%)
How often do you eat green vegetables		78(27.7%)	137(48.6%)	43(15.2%)	24(8.5%)
How often do you eat fruits	2(0.7%)	68(24.1%)	134(47.5%)	48(17.0%)	30(10.6%)
How often do you choose eating fast food over home-cooked meals	20(7.1%)	103(36.5%)	59(20.9%)	81(28.7%)	19(6.7%)
How often do you eat more than usual when you're feeling anxious or stressed	11(3.9%)	60(21.3%)	91(32.3%)	99(35.1%)	21(7.4%)
How often do you drink up to 3-5 sachets of water daily	1(0.4%)	31(11.0%)	61(21.6%)	67(23.8%)	122(43.3%)
How often do you drink soda instead of water	43(15.2%)	60(21.3%)	92(32.6%)	51(18.1%)	36(12.8%)
How often do you drink coffee	37(13.1%)	77(27.3%)	88(31.2%)	57(20.2%)	23(8.2%)

or caffeinated drinks
Mean score 32.54±5.77
Poor Dietary Habit 40(14.2%)
Good dietary habit 242(85.8%)

4.3 Academic performance of the respondents

156(55.3%) of the respondents agreed that they pay attention listen during every lecture, 136(48.2%) of the respondents agreed that they actively participate in every academic activity. 112(39.7%) of the respondents that they make themselves ready in all my courses and prepare ahead of tests and examinations. 193(68.4%) of the respondents strongly agreed that they want to get good grades in every course. 39(13.8%) of the respondents strongly agreed that they start assignments and projects as soon as they are assigned. 113(40.1%) of the respondents agreed that enjoy homework and activities because they help gain more knowledge. Majority of the respondents Had good academic performance 269(95.4%) as shown in table 4.3.

Table 4.3: Academic performance of the respondents

Statement	Strongly agree	Agree	Neutral	disagree	Strongly disagree
I pay attention and listen during every lecture	59(20.9%)	156(55.3%)	37(13.1%)	29(10.3%)	1(0.4%)
I actively participate in every academic activity.	57(20.2%)	136(48.2%)	62(22.0%)	26(9.2%)	1(0.4%)
I make myself ready in all my courses and prepare ahead of tests and examinations	49(17.4%)	112(39.7%)	66(23.4%)	53(18.8%)	2(0.7%)
I get good grades in every course examination.	193(68.4%)	73(25.9%)	12(4.3%)	4(1.4%)	
I start assignments and projects as soon as they are assigned.	39(13.8%)	82(29.1%)	73(25.9%)	82(29.1%)	6(2.1%)
I enjoy homework and activities because they help me gain more knowledge.	54(19.1%)	113(40.1%)	73(25.9%)	31(11.0%)	11(3.9%)
Mean score 22.63±3.89					
Poor academic performance 13(4.6%)					
Good academic performance 269(95.4%)					

4.4 Chi-Square association between dietary habits and academic performance.

As shown in table 4.4, There was a significant association between dietary habits and the academic performance of the respondents (X^2=68.332, p=<0.001)

Table 4.4: Chi-Square association between dietary habits and academic performance.

Variable		**Poor academic performance**	**Good academic performance**	**X^2**	**P**
	Poor dietary habits	12	28	68.332	<0.001
	Good dietary habits	1	241		

4.5 Research Hypothesis

In the research hypothesis section, we test relationships between variables using the chi-square test. When the p-value from a chi-square test is less than the significance level (commonly 0.05), we reject the null hypothesis, suggesting a significant association exists. Conversely, if the p-value is greater than 0.05, we fail to reject the null hypothesis, indicating no significant relationship between the variables (Statistics solutions, 2024). Table 4.4 showed that there is a significant relationship between dietary habits and Academic performance (X^2=68.332, p=<0.001).

CHAPTER FIVE

DISCUSSION OF FINDINGS

This chapter presents a summary and interpretation of the major findings of the study in relation to the objectives, hypotheses, and existing literature reviewed in Chapter Two. The discussion highlights how the results support, extend, or contradict previous studies on dietary habits and academic performance. It also shows the contribution of this study to the body of knowledge in nursing.

5.1.1 Socio-demographic variable of the respondents

The main aim of this study was to examine the influence of dietary habits on the academic performance of nursing students at the University of Benin. The population of participants recruited for this study were three times more females than males. This finding was similar to that of Zaghamir and Ibrahim (2023) and Green (2021) whose studies showed a greater percentage of females 60% and 92.5% respectively. The findings of this study also revealed that majority of the respondents were in the age classification of young adults while the least of the population were middle aged adults. These results were in tandem with Olorunfemi et al (2023) whose study showed the age distribution of the participants fell within the 15–20-year range was 154 (50.2%) ages between 21 and 25 years was 139 (45.3%) and a small fraction, 5 (1.6%), were 31 years or older, but the result of this current study wasn't in correspondence with Bashatah (2020) whose respondents were within the ages of 18-19years. More than two-third of the respondents of this current study were single this corresponded with Bashatah (2020) and Olorunfemi et al. (2023) whose study showed majority of the participants were single. This current study also revealed a little less than half of the population were in their final year. This did not correspond with Olorunfemi et al. (2023) whose participants were more of 100level students.

5.1.2 Dietary habits of respondents

This study reported that about 24% of the respondents always had breakfast daily, and 30% of this respondents always plan their meals ahead to ensure that they are healthy. This aligned with Bashatah (2020) whose study reported a 35% of the respondents always had breakfast. Less than half of the percentage of the respondents stated that they sometimes had proteins, vegetables or fruits in their meals. More than half of the respondents of this study stated that they sometimes eat more than usual when anxious or stressed and also preferred fast food over home cooked meals. This results corresponds with Jovanović et al. (2024) which reported 88.7% of students preferred home-cooked meals and 11.3% preferred ready meals, while 58.6% reported 'rare' consumption while 41.4% 'moderate' consumption when anxious. Majority of the respondents of this study drank 3-5 sachets of water daily while less than one-third of the respondents substituted soda or caffeinated drinks for water. The collective understanding of the respondents in the study underscored a notable trend, with a significant majority exhibiting a commendable level of knowledge of good dietary habit. The results of this study did not align with Murshid (2022) whose study reported high prevalence unhealthy dietary habits such as: high fast food intake, meal skipping, and low fruits and vegetables consumption. All these unhealthy dietary behavior becomes detrimental particularly during periods of intensive exam preparations (Olorunfemi et al.,2023).

5.1.3 Academic Performance of the respondents

More than half of the respondents of this current study reported to pay attention and listen during lectures and also participate actively during lectures. While, less than half make themselves ready in all courses and prepare ahead of tests and examinations. Majority wants to get good grades in all courses. Less than half of the respondents enjoy homework and activities because they help gain more knowledge and starts assignments and projects as soon as they are assigned. Giving an overall good academic performance.This aligns with Resimo et al. (2024) found that students who maintained good academic routines such as completing assignments on time achieved good academic performance.This result is also supported by López-Moreno et al. (2021), who examined academic performance among nursing students in Madrid, Spain. Their study found that students who attends lectures, and prepare ahead for examinations performed significantly better than those who skip lectures and don't prepare ahead for examinations.

Overall, the high level of academic performance observed among the nursing students in this study may be attributed to other factors like the professional demands of nursing education, which encourages discipline, continuous learning, and self-motivation.

5.1.4 Relationship between dietary habits and academic performance.

This study reported a significant association between dietary habits and the academic performance of the respondents. This was in agreement with Bello et al. (2024) who examined the impact of nutrition on the academic performance of boarding science students in Ilorin Metropolis, Nigeria, using a descriptive cross-sectional approach. They found that poor eating behaviors such as skipping meals to save money (56.1%) or due to lack of appetite (68.9%) were common among students, and these behaviors significantly affected academic outcomes. They also observed that students who believed their school meal plans met nutritional needs performed better academically. Bello and colleagues concluded that nutrition plays a critical role in enhancing cognitive function and scholastic achievement. Their recommendation for educational interventions and inclusion of fruits in meals strongly supports the present study's call for promoting healthy dietary habits among students for optimal academic success.

Likewise, Tutu (2024) conducted a study on dietary practices and academic performance among high school students in Tamale Metropolis, Ghana, and found a significant positive correlation between dietary diversity and academic performance. The study revealed that students who consumed six or more food groups performed better, while those with low dietary diversity or frequent meal skipping tended to perform poorly. This supports the current study's observation that students with healthier eating patterns exhibited higher academic performance levels. Chandravanshi et al. (2024) reported that a high dietary habit score was related to high levels of academic performance and in contrast, a low dietary habit score was related to low levels of academic performance. (P value = 0.0351). It is widely known that dietary habits usually change when young enter university. Interestingly, moving away from home, implies lack of time and knowledge in cooking and other food choices such as fast food which involves high saturated fat and meat, less fiber and fruits and mainly processed food (Chandravanshi et al.. 2024). It is not rare, that meals are often skipped by students while the management of food preparation is avoided. At the same time, the healthy way of living is disrupted by the studying hours that may vary every day. This study revealed that better dietary habit results in better academic performance.Similarly, the findings of this study are in line with those of López-Moreno et al. (2021), who investigated dietary habits, alcohol consumption, and academic performance among nursing students in Madrid, Spain. Their study found that poor dietary practices and excessive alcohol intake were significantly related to poor academic outcomes, as more than half (53.6%) of students with poor eating habits recorded failing grades. They concluded that healthy dietary behaviors contribute positively to students’ overall well-being and academic achievement. This aligns with the current study’s conclusion that adequate nutrition supports learning efficiency and mental alertness.Furthermore, this present study supports the findings of Resimo et al. (2024), who examined the eating habits and academic performance of college students in the Philippines. Their study revealed a statistically significant negative correlation between unhealthy eating habits such as fun eating, fog eating, and storm eating and students’ Grade Point Averages (GPA). Students who practiced healthy dietary behaviors, including regular meal consumption and preference for nutritious foods, demonstrated better academic results. This agrees with the current study’s observation that good dietary habits are associated with improved academic performance among nursing students.

Overall, the consistency between this study and previous works suggests that nutrition plays a crucial role in students’ cognitive functioning, concentration, and educational outcomes, regardless of geographical or cultural context. It can therefore be inferred that nursing students with good dietary habits are more likely to sustain the physical and mental energy needed for optimal learning, while those with poor eating habits may experience reduced academic productivity. The significant Chi-square value obtained ($p < 0.001$) confirms that this relationship was not due to chance but reflects a genuine association between nutrition and learning effectiveness.

5.2 Implication to Nursing

The study intended to report the the influence of dietary habits on the academic performance of nursing students at the University of Benin. Nursing students, often face intense coursework and clinical rotations, and all these physical and mental labour requires adequate nutritional intake which do not only supports cognitive function but also helps manage stress, enhance energy levels, and improve overall well-being, all of which are crucial for good academic performance and success promoting the future of a stronger clinical field.

A. To Nursing Students

1. Evidence from this study would help nursing students understand the importance of maintaining good dietary habits in enhancing concentration, memory, and academic performance.

2. It would also help students recognize that proper nutrition supports stress management and physical endurance needed for long hours of study and clinical activities.

B. To Clinical Practice

1. It would help reinforce the role of adequate nutrition in improving alertness, efficiency, and quality of care during clinical practice.

2. It would also guide student nurses to serve as role models in promoting good nutrition and healthy lifestyle choices among patients and the wider community.

C. To Management

1. Evidence from this study would help nursing school management develop and implement nutrition awareness and wellness programs to support students' health and learning outcomes.

2. It would also guide management in providing access to affordable, nutritious meals within the school environment, fostering better academic performance and a healthier student body.

5.3 Limitations of the study

1. This study is a cross-sectional study and hence the level of evidence is not so high.

2. The sample size of this study was small and was delimited to just a particular university (Uniben) in Benin city and hence may not the representative of the study population (student nurses).

3. A self-report questionnaire was used for this study and hence may be subject to participant's bias meaning the respondents may have not reported the accurate dietary habits and academic performance.

5.4 Summary of Findings

Academic performance in higher education is influenced by multiple factors, including study habits, stress management, and overall well-being. Among these, dietary habits play a crucial role in shaping cognitive function, concentration, and learning efficiency. This study aimed to examine the influence of dietary habits on the academic performance of nursing students at the University of Benin. with the intent to bridge the gaps in scientific knowledge available. A descriptive cross- sectional design study was used. A self-structured questionnaire was administered to the respondent. After data was retrieved, the data obtained was statistically analyzed using the Statistical Package for Social Science (SPSS version 24.0). Beyond descriptive statistics, inferential statistical tool of chi-square was used to identify variables.

The result of the study revealed that the total number of participants was 282. 212(75.2%) were females while 70(24.8%) were males. 165(58.5%) of the respondents were between the ages of 18-23years, 91(32.3%) were between the ages of 24-29years. A significant majority of the respondents were single 266(94.6%) and 15(5.3%) were married. 99(35.1%) of the respondents were from Benin, 96(35.0%) were Yorubas. Majority of the respondents had good dietary habit 242(85.8%), Majority of the respondents Had good academic performance 269(95.4%) and there was a significant association between dietary habits and the academic performance of the respondents (X^2=68.332, p=<0.001).

5.5 Conclusion

From the just concluded study it was observed that a majority of the respondents had good academic performance and good dietary habits of 269(95.4%) and 242(85.8%) respectively and there was also a significant association between dietary habits and the academic performance of the respondents (X^2=68.332, p=<0.001).

5.6 RECOMMENDATIONS

A. For Institutions

1. Institutions should advocate for healthier food options within and around the school environment to promote good dietary habits among students.
2. The establishment of a central kitchen or cafeteria within the school premises is recommended to ensure the availability of affordable, balanced, and nutritious meals.
3. Institutions should integrate nutrition education programs into the nursing curriculum, using engaging and practical approaches to raise awareness of the link between nutrition and academic performance.

4. Adequate lunch breaks should be incorporated into the academic timetable to allow students enough time to eat proper meals, as sufficient energy is vital for focus and assimilation.

B. For Students

1. Nursing students should take personal responsibility for maintaining healthy dietary habits, recognizing that good nutrition supports learning, concentration, and clinical performance.

2. Students should apply the knowledge gained from nutrition education programs to make informed dietary choices, balancing academic responsibilities with proper meal planning and self-care.

5.7 SUGGESTIONS FOR FURTHER STUDY

Further research to examine other factors that might serve as mediators for eating habits, in addition to subjective knowledge. Suggested factors include anxiety and stress, which are particularly relevant during the school sessions, and might serve as mediating variables for eating habits.

Longitudinal or mixed-methods research designs are also suggested to better capture the causal pathways and lived experiences of students regarding their eating behaviors and academic performance over time.

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APPENDIX I

QUESTIONNAIRE

FACULTY OF NURSING SCIENCE
COLLEGE OF MEDICAL SCIENCES
UNIVERSITY OF BENIN,
BENIN CITY, EDO STATE

Dear Respondent,

I am **ENIAYEWU PRECIOUS OLAMIDE**, a final year student in the above named institution. I am carrying out a research study on "**PERCEIVED INFLUENCE OF DIETARY HABITS ON ACADEMIC PERFORMANCE AMONG NURSING STUDENTS IN THE UNIVERSITY OF BENIN EDO STATE." .**This questionnaire is designed to collect information for the study.

This study is strictly for academic purpose and you are hereby assured that all information supplied will be treated in a strictly confidential manner.Kindly assist me by indicating your opinion where necessary.

Thank you.

Instruction: Tick (✓) the option that is best applicable to you.

Section A:SOCIO-DEMOGRAPHIC DATA

1. Age: Less than 18 years[ ] 18–23 years[ ] 24–29 years[ ] 30–35 years[ ] Above 35 years[ ]

2. Gender: Male[ ] Female[ ]

3. Year of Study:200 Level[ ] 300 Level[ ] 400 Level[ ] 500 Level[ ]

4. Marital Status: Single[ ] Married[ ]

5. Ethnicity: Benin[ ] Hausa [ ] Igbo[ ] Yoruba[ ] Other [ ]

Section B: Dietary Habits of Nursing students

Please answer the following questions by selecting one option: Never, Rarely, Sometimes, Most of the Time, Always.

6. Do you plan your meals ahead to ensure they are healthy?

Never [ ] Rarely [ ] Sometimes[ ] Most of the Time[ ] Always[ ]

7. How often do you eat breakfast daily?

Never [ ] Rarely [ ] Sometimes[ ] Most of the Time[ ] Always[ ]

8. Do you eat protein at every meal?

Never [ ] Rarely [ ] Sometimes[ ] Most of the Time[ ] Always[ ]

9. How often do you eat green vegetables?

Never [ ] Rarely [ ] Sometimes[ ] Most of the Time[ ] Always[ ]

10. How often do you eat fruits?

Never [ ] Rarely [ ] Sometimes[ ] Most of the Time[ ] Always[ ]

11. How often do you choose eating fast food over home-cooked meals?

Never [ ] Rarely [ ] Sometimes[ ] Most of the Time[ ] Always[ ]

12. How often do you eat more than usual when you're feeling anxious or stressed

Never [ ] Rarely [ ] Sometimes[ ] Most of the Time[ ] Always[ ]

13. How often do you drink up to 3-5 sachets of water daily?

Never [ ] Rarely [ ] Sometimes[ ] Most of the Time[ ] Always[ ]

14. How often do you drink soda instead of water?

Never [ ] Rarely [ ] Sometimes[ ] Most of the Time[ ] Always[ ]

15. How often do you drink coffee or caffeinated drinks?

Never [ ] Rarely [ ] Sometimes[ ] Most of the Time[ ] Always[ ]

Section C: Academic Performance of Nursing Students

Please select the option that best describes your level of agreement with each statement below.

Options: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree.

16. I pay attention and listen during every lecture.

Strongly Agree[ ] Agree [ ] Neutral[ ] Disagree[ ] Strongly Disagree[ ]

17. I actively participate in every academic activity.

Strongly Agree[ ] Agree [ ] Neutral[ ] Disagree[ ] Strongly Disagree[ ]

18. I make myself ready in all my courses and prepare ahead of tests and examinations.

Strongly Agree[ ] Agree [ ] Neutral[ ] Disagree[ ] Strongly Disagree[ ]

19. I get good grades in every course examinations .

Strongly Agree[ ] Agree [ ] Neutral[ ] Disagree[ ] Strongly Disagree[ ]

20. I start assignments and projects as soon as they are assigned.

Strongly Agree[ ] Agree [ ] Neutral[ ] Disagree[ ] Strongly Disagree[

21. I enjoy homework and academic activities because they help me gain knowledge.

Strongly Agree[ ] Agree [ ] Neutral[ ] Disagree[ ] Strongly Disagree[ ]

APPENDIX II

RELIABILITY OF INSTRUMENT (QUESTIONAIRE) OF INFLUENCE OF DIETARY HABITS OF NURSING STUDENTS ON ACADEMIC PERFORMANCE IN THE UNIVERSITY OF BENIN

A pilot study was conducted using 10% of the target population of Undergraduates Nursing students, University of Benin, to test the reliability of the Instrument, lapses in the tool was amended and corrections were made making the instrument reliable.

The pilot test involved 28 participants from a Faculty (Basic Medical Sciences) outside the main study sample. Responses were collected, and the following Cronbach's alpha values were calculated for each section:

Section	Number of items	Scale variance of total items	Average item Variances	Inter item correlation	Cronbach's Alpha
Dietary habits of nursing students	10	4.12	0.82	0.36	0.71
Academic performance	6	12.50	1.20	0.31	0.74
Overall reliability					0.725
					≈ 0.73