2025

AP® Research Academic Paper

Sample Student Responses and Scoring Commentary

Inside:

Sample I

- ☑ **Scoring Guidelines**
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Academic Paper — 5 Points

Score of 1 **Report on Existing Knowledge**	Score of 2 **Report on Existing Knowledge with Simplistic Use of a Research Method**	Score of 3 **Ineffectual Argument for a New Understanding**	Score of 4 **Well-Supported, Articulate Argument Conveying a New Understanding**	Score of 5 **Rich Analysis of a New Understanding Addressing a Gap in the Research Base**
• Presents an overly broad topic of inquiry.	• Presents a topic of inquiry with narrowing scope or focus, that is NOT carried through either in the method or in the overall line of reasoning.	• Carries the focus or scope of a topic of inquiry through the method AND overall line of reasoning, even though the focus or scope might still be narrowing.	• Focuses a topic of inquiry with clear and narrow parameters, which are addressed through the method and the conclusion.	• Focuses a topic of inquiry with clear and narrow parameters, which are addressed through the method and the conclusion.
• Situates a topic of inquiry within a single perspective derived from scholarly works OR through a variety of perspectives derived from mostly non-scholarly works.	• Situates a topic of inquiry within a single perspective derived from scholarly works OR through a variety of perspectives derived from mostly non-scholarly works.	• Situates a topic of inquiry within relevant scholarly works of varying perspectives, although connections to some works may be unclear	• Explicitly connects a topic of inquiry to relevant scholarly works of varying perspectives AND logically explains how the topic of inquiry addresses a gap.	• Explicitly connects a topic of inquiry to relevant scholarly works of varying perspectives AND logically explains how the topic of inquiry addresses a gap.
• Describes a search and report process.	• Describes a nonreplicable research method OR provides an oversimplified description of a method, with questionable alignment to the purpose of the inquiry.	• Describes a reasonably replicable research method, with questionable alignment to the purpose of the inquiry.	• Logically defends the alignment of a detailed, replicable research method to the purpose of the inquiry	• Logically defends the alignment of a detailed, replicable research method to the purpose of the inquiry.
• Summarizes or reports existing knowledge in the field of understanding pertaining to the topic of inquiry.	• Summarizes or reports existing knowledge in the field of understanding pertaining to the topic of inquiry.	• Conveys a new understanding or conclusion, with an underdeveloped line of reasoning OR insufficient evidence.	• Supports a new understanding or conclusion through a logically organized line of reasoning AND sufficient evidence. The limitations and/or implications, if present, of the new understanding or conclusion are oversimplified.	• Justifies a new understanding or conclusion through a logical progression of inquiry choices, sufficient evidence, explanation of the limitations of the conclusion, and an explanation of the implications to the community of practice.
• Generally communicates the student's ideas, although errors in grammar, discipline-specific style, and organization distract or confuse the reader.	• Generally communicates the student's ideas, although errors in grammar, discipline-specific style, and organization distract or confuse the reader.	• Competently communicates the student's ideas, although there may be some errors in grammar, discipline-specific style, and organization.	• Competently communicates the student's ideas, although there may be some errors in grammar, discipline-specific style, and organization.	• Enhances the communication of the student's ideas through organization, use of design elements, conventions of grammar, style, mechanics, and word precision, with few to no errors.
• Cites AND/OR attributes sources (in bibliography/ works cited and/or intext), with multiple errors and/or an inconsistent use of a discipline specific style.	• Cites AND/OR attributes sources (in bibliography/ works cited and/or intext), with multiple errors and/or an inconsistent use of a discipline specific style.	• Cites AND attributes sources, using a discipline-specific style (in both bibliography/works cited AND intext), with few errors or inconsistencies.	• Cites AND attributes sources, with a consistent use of an appropriate discipline-specific style (in both bibliography/works cited AND intext), with few to no errors.	• Cites AND attributes sources, with a consistent use of an appropriate discipline-specific style (in both bibliography/works cited AND intext), with few to no errors.

Mindful Eating: The Links Between Diet and Mental Wellness: A Comprehensive Analysis

AP Research Studies

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Mindful Eating: The Links Between Diet and Mental Wellness

Introduction

In recent years, there has been a growing interconnection of the complex relationship between one's diet and their mental health. Mental disorders currently affect millions worldwide, and their prevalence is ever-growing. There is an urgent need for an approach to help those suffering from mental health conditions, and among these approaches, diet has emerged as a promising factor. The concept of dietary patterns is the overall composition and quality of an individual diet, and how it is related to an individual's health outcomes. Numerous studies have demonstrated the profound role of diet in physical health outcomes. They have solidified the connection between diet and physical health, shown by the fact that diet can prevent and manage chronic diseases, such as cardiovascular disease, diabetes, and obesity.

However, while much attention has been devoted to understanding the link between diet and physical health, the influence of factors that differ from the norm has not been given much consideration. Especially the often-overlooked factors of the influence of socioeconomic status and cultural food preferences. Much of the existing research has neglected the diversity of dietary habits and traditions found across different socioeconomic and cultural perspectives. Despite the clear influence of socioeconomic and cultural factors on dietary patterns, there is a clear gap in our understanding of how these differences translate into disparities in mental well-being. This gap is particularly concerning, as it limits the effectiveness of interventions aimed at improving mental well-being. Therefore, there is a pressing need for research that examines the health implications of different socioeconomic and cultural food choices, because by addressing this gap there would be a more comprehensive understanding of the relationship between mental well-being and diet.

Review of Literature

Background

In order to carefully consider the complex intercorrelation between diet, nutrition, and mental health, it is vital to examine the existing literature on this topic. It is also important to define the key terms. According to the World Health Organization (WHO), a specialized agency of the United Nations, a person who is obese has a body mass index (BMI) greater than or equal to 30. The WHO also defines mental health as a state of mental well-being that enables people to cope with the stresses of life.

Research has established a link between diet and physical health. For example this study from Nardocci and others, who are scholars from the University of Montreal, Department of Nutrition. They conducted a cross-sectional study where they estimated the ultra-processed food intake of 19,363 Canadian adults and then assessed whether or not they were obese. They found that ultra-processed foods made up almost half of the daily calories consumed by Canadian adults. This research establishes the relationship between the consumption of ultra-processed "unhealthy" foods and obesity. Obesity has been linked to numerous health issues, which implies that the consumption of ultra-processed food has a link to health issues, confirmed by their results that individuals in the highest quintile of ultra-processed food consumption were 32% more likely to be obese as compared to individuals in the first quintile.

In this article, researchers from the Clinical Nutrition Department at Imam Abdulrahman Bin Faisal University found a link between food, mood, and diseases. They thoroughly investigated diabetes mellitus, obesity, and depression and concluded that a person's mood affects their food choices, and their food choices affect their mood. This will be helpful with my research because it is evidence that food does affect the brain.

In this article, researchers who specialize in psychology are researching the topic of food addiction. They are trying to determine whether or not food addiction should become a valid diagnosis, and they found that areas of the brain that are responsible for executive functioning (for example: attention or decision-making) experience the same sensations with drug addiction, as they do with proposed food addiction. Drug addiction is considered a brain disorder because it changes the brain's circuits. Drug addiction is a psychological issue, and this research suggests that food addiction could also be a psychological issue.

This article explores the influence of gut microbiota on brain function and behavior and discusses the communication between the gut and the brain. The researchers highlight studies that link alterations in gut bacteria to changes in mood, cognition, and mental health. The article emphasizes microbiome research, and its possibilities for treating neurological disorders and mental health conditions.

This article explores the connection between the diets and mental health of a young adult population of college students in the Appalachian region. They found that students in this region face challenges such as low fruit and vegetable intake, high added sugar consumption, and a significant amount of people experiencing food insecurity. Their findings suggest that addressing food insecurity and promoting healthier diets could be crucial for improving the mental well-being of college students in the Appalachian region.

This article is a review of the research on the relationship between nutrition and depression, given depression being the psychiatric condition with the greatest economic, social, and healthcare burden on developed nations. They found that healthy dietary practices are associated with reduced symptoms of depression, they did not find a clear answer to what exactly contributes to this effect. The research focuses on age groups such as adolescents, adults, and

older people. The study recommends further research in order to establish a more conclusive link between diet and depression.

In this article, a doctor from Harvard Medical School explains the effects of the quality of the food you eat on your brain, and ultimately your mood. They explain how when people have diets that contain a lot of processed or refined foods, the brain has a hard time getting rid of them. They reported that the risk of depression is reportedly 25% to 35% lower in those who follow more 'traditional' diets, such as Mediterranean or Japanese diets, compared to 'Western' diets. These traditional diets are high in a rich intake of vegetables, fruits, unprocessed grains, and fish; as well as modest amounts of lean meats and dairy

In this article, the author discusses the growing significance of formulating diets to impact gut health in industries where animals are fed with formulated feed. He explains how antibiotics are not allowed in feed and the effects it has on human gut health. He also cites reports that explain that chickens consume a lot of their bedding material.

In this article, the author explains the role of inflammation as a potential mediator between diet and mental health, emphasizing the need for further research in this area. He highlights the need for large-scale, population-based studies to better understand the complex relationships between diet, mental health, and various demographic/environmental factors. This article emphasizes the need for more research in the field of nutritional psychiatry, which investigates the links between diet, nutrition, and mental health.

This article discusses research that indicates a potential link between the gastrointestinal tract and the central nervous system in anxiety-like behaviors. They found this from testing certain probiotic formulations, such as those containing Lactobacillus and Bifidobacterium, which demonstrate loosening effects on the central nervous system in both humans and rodents.

This article is a review of 51 other studies that examined the connection between food addiction and mental health symptoms and measured food addiction using the Yale Food Addiction Scale (YFAS). They found significant correlations between food addiction, binge eating, depression, and anxiety. They concluded that a positive relationship exists between food addiction and mental health symptoms.

In this article, researchers studied the dietary intake, nutritional knowledge, and food addiction among 16-25-year-olds who attend community mental health services. The results from 30 participants showed that 43% of energy intake came from energy-dense, non-nutritious foods; which is higher than the recommended limit of <15% and the general population levels of 35%. They conclude that unhealthy dietary patterns were prevalent in the early stages of mental illness, which could cause potential risks for future physical health.

In this article, researchers propose that highly processed foods have pharmacokinetic properties, the same seen in addictive drugs. These properties show a concentrated dose and rapid rate of absorption because of the rapid rate at which refined carbohydrates are absorbed into the system, indicated by glycemic load. They explain how addictive substances are rarely in their natural states, and how all foods are not addictive, they give the example of vegetables and cake.

This article explains the impact of nutrition on human mental performance, and it emphasizes the effects of food and fluid consumption. It specifically mentions the effects of alcohol, caffeine, breakfast, lunch, meal composition, and glucose drinks on cognitive efficiency. It explains that during meals, the proportion of protein to carbohydrate is related to brain serotonin synthesis.

This study explains how substance abuse is common among people with mental disorders, and how this is also the case for food addiction. They describe food addiction as a phenotype characterized by an addiction-like attraction to predominantly highly processed foods with a high content of refined carbohydrates and fat. They conducted a survey in Denmark with 5,000 people ages 18-62 and found that 23.7% met the criteria for food addiction, with the highest prevalence observed in those with eating disorders.

This article explains how mental disorders amount to 13% of the global disease burden, which surpassing cardiovascular and cancer burdens. It also explores the impact of diet on mental health, and reveals links between Western diets and psychiatric symptoms. They found that poor diets contribute to obesity, a risk for conditions like Alzheimer's. They conclude that recognizing nutrition's role requires sustained efforts and policy acknowledgment for improved mental health globally.

This article explains how food addiction proposes that people may experience an addictive response to certain foods, such as those high in fat and refined carbohydrates. They propose an alternative model to food addiction that suggests that it is a behavioral addiction, triggered by the action of eating. They argue in favor of this model rather than the substance-based model because of the variations among different addictive foods.

In this study, researchers investigated food addiction within Australian adults using the Yale Food Addiction Scale. These adults completed an online survey that collected information including: demographics, dietary intake, depression, anxiety, stress and personality dimensions including impulsivity, sensation seeking, hopelessness and anxiety sensitivity. They found that those with severe food addiction had elevated odds of severe depressive symptoms, while higher vegetable intake reduced the odds.

This article explains how the concept of food addiction is a highly debated topic and how studies establish its links to obesity and disordered eating. They explain how the controversy is due to it being defined in the Diagnostic and Statistical Manual of Mental Disorders, more commonly known as the DSM-5. This review outlines current research that provides better classification that differentiates it from an eating addiction and shows potential overlap with eating disorders. They suggest that food addiction may be distinct from established eating disorders, but more research would be required to develop a specific diagnosis.

This article describes how the addiction model of eating disorders and obesity is gaining attention, but explains how the evidence from other studies challenges its validity. They explain that it's because of inconsistent evidence from various studies; the existence of commonalities in brain reward processes between obesity and substance abuse is acknowledged by neurobiological research, but there are big differences between these conditions that undermine the validity of the claim.

World Health Organization. (2024). Obesity and overweight. World Health Organization. https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight

Methods

For my topic, I wanted to research something about dietary habits. So in my research, I did a systematic review of the current research to familiarize myself with my topic. I figured that American adolescents come from diverse backgrounds, which would influence their dietary habits. Many teenagers will eat their families' traditional foods because that is what is readily available to them at home. Upon brief research, I realized that the primary focus on certain demographic groups/ regions could generalize findings. In my research, I wanted to address this gap and that would require research that includes populations from various backgrounds.

Throughout my research, I aimed to analyze the existing research on the relationship between dietary patterns and mental well-being. The above evidence suggests significant associations between dietary patterns and mental well-being, however, I found a gap where more research is needed. I found that more research is needed to clarify the underlying mechanisms and reasons for these relationships. I hypothesize that these relationships have underlying reasonings that deal with the relationship between the person and the food they eat. These relationships can be cultural, as many Americans belong to different cultures with different traditional foods. These reasons can also be socioeconomic as many people are unable to afford higher-quality foods. Many suggestions for healthy eating suggest foods that are not accessible to certain individuals.

Conclusion

To conclude it is clear that the relationship between dietary patterns and mental well-being in adolescents is incredibly complex. Through my review of the literature, I have gained valuable insight into the various factors that influence these relationships and their implications for the mental well-being of adolescents. To help these individuals it is necessary to prioritize research that addresses the gaps in the current research, and our understanding of the mechanisms which underly the relationships between what you eat and how you feel.

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Academic Paper

Note: Student samples are quoted verbatim and may contain spelling and grammatical errors.

Overview

NEW for 2025: The question overviews can be found in the *Chief Reader Report on Student Responses* on AP Central.

Sample: I
Score: 1

This paper earns a score of 1. The research focus on p. 2 is an overly broad inquiry on the topic of mindful eating and wellness. The research goal is stated on p. 2: "Therefore, there is a pressing need for research that examines the health implications of different socioeconomic and cultural food choices, because by addressing this gap there would be a more comprehensive understanding of the relationship between mental well-being and diet." The literature review on pp. 3-8 is a list of sources summarized in isolation on topics that are broadly related to the research focus.

The method is stated on p. 8: "So in my research, I did a systematic review of the current research to familiarize myself with my topic." This continues on p. 9: "Throughout my research, I aimed to analyze the existing research on the relationship between dietary patterns and mental well-being, , however, I found a gap where more research is needed." The paper does not present and discuss results. Instead the paper's method statement refers back to the review of literature on the previous pp. 3-8. The paper states a broad conclusion on p. 9: "To conclude it is clear that the relationship between dietary patterns and mental well-being in adolescents is incredibly complex." A complete set of references is included. However, the lack of in-text citations, and the consistent use of "this article explains" makes it difficult to determine which sources were being referenced in the literature review.

This paper does not earn a score of 0 because the paper has a researchable topic, establishes a connection between diet and wellness, and attempts a report on existing knowledge.

This paper does not earn the score of a 2 because while the method of "systematic review" is mentioned on p. 7, it is not used. The statement of the method does not describe the steps in the systematic review, nor does it give the criteria upon which the student selected the works to be analyzed, nor the analysis criteria. The method then leads straight to conclusion, as results are not presented or discussed. As such, the paper describes a search-and-report process on a broad topic.