A Quantitative Investigation Between Healthy Lifestyle and Nutrition and Wellness Practices as Determinants of Students' Cognition

Novecio, Sweet Dianne P.[1], Porras, Rosemary A.[1], Albino, Em Em G.[1], Bracamonte, Ashley[1], Cagadas, Charlene Faith O.[1], Matalib, Jana.[1], Padernal, Erica M.[1], Artezuela, Jessica.[1], Peñaroya, Smae V.[1], Payac, Ariel I.[1], Jumamil, Michell[1], Krystal Joy M. Clamares, PhD[2], Anna Marie O. Pelandas, PhD (CAR)[2]

[1]Department of Education, Senior High School Students, Philippines

[2]Department of Education, Senior High School Teachers, Division of Davao de Oro, Philippines

DOI: https://dx.doi.org/10.47772/IJRISS.2025.90300149

Received: 18 March 2025; Accepted: 21 March 2025; Published: 04 April 2025

ABSTRACT

This research investigates the relationship between healthy lifestyle, nutrition and wellness practices, and their impact on students' cognition of Senior High School students at Lorenzo S. Sarmiento Sr. National High School. The primary objective of the study was to ascertain the levels of healthy lifestyle, nutrition and wellness practices, and cognition in terms of their respective indicators. It also aimed to identify relationship between healthy lifestyle, nutrition and wellness practices, and cognition, as well as to determine which domains of healthy lifestyle and nutrition and wellness practices significantly influence students' motivation. The study employed a quantitative, non-experimental research design utilizing correlational approach and involved 270 respondents from the Senior High School students at Lorenzo S. Sarmiento Sr. National High School. The statistical tools used in this study included the average weighted mean, Spearman's rho, and multiple regression analysis. The results indicated a high level of healthy lifestyle among Senior High School students in terms of their healthy lifestyle and activities, unhealthy lifestyle and activities, and hygiene. The study also revealed a high level of nutrition and wellness practices in the Senior High School, particularly in diet, exercise, and sleep. In terms of students' cognition, the study found a high level among Senior High School students, particularly in terms of attention, memory, and executive function. Moreover, there was a high correlation and a significant relationship between healthy lifestyle and nutrition and wellness practices and cognition, leading to the rejection of the null hypothesis.

Keywords: Healthy Lifestyle, Nutrition and Wellness Practices, Cognition, and Senior High School.

INTRODUCTION

Cognition, encompassing skills like memory, attention, and problem-solving, played a key role in personal growth, academic success, and overall well-being (Smith, 2020). However, cognitive impairments remained a significant barrier to educational and socioeconomic progress worldwide, often linked to factors such as poor nutrition and lifestyle habits (World Health Organization, 2021). Studies in the United States, the United Kingdom, and Australia highlighted the growing prevalence of cognitive deficits among students, which adversely affected academic performance and future opportunities (Brown & Thomas, 2020). These issues led to calls for urgent educational and health reforms to address these challenges (Australian Institute of Health and Welfare, 2021).

In the Philippines, rapid urbanization and shifting dietary patterns contributed to a rise in lifestyle-related diseases, including obesity and diabetes, which were linked to cognitive impairments (John, 2021). The

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue III March 2025

Department of Health (2020) emphasized the importance of a healthy lifestyle, while research in Cebu noted the negative impact of physical inactivity, particularly in urban areas (Cebu City Health Office, 2022). Studies also revealed that Filipino students, especially in cities like Davao and Quezon City, were affected by malnutrition and nutrient deficiencies, which hindered their cognitive function (FNRI, 2018). Additionally, experts stressed that balanced nutrition, physical activity, and mental health care were critical for maintaining optimal brain health (Samieri et al., 2023).

In Region XI, particularly in Tagum City, the study of Magbanua et al. (2018) mentioned that students in Tagum City showed high rates of malnutrition, which were linked to cognitive delays and poor school performance. A significant portion of students in the region exhibited cognitive impairments, such as challenges with concentration, memory, and problem-solving (Department of Education Region XI, 2019). Additionally, the researchers observed that certain students at Lorenzo S. Sarmiento Sr. National High School required assistance with concentration, memory retention, and problem-solving abilities. Given the local context and the urgent need for improvement, this research aimed to explore how healthy lifestyle practices and wellness activities could enhance cognitive function among senior high school students in the region. The study sought to address the lack of localized data on how these factors impacted cognition in the Philippines.

Research Objectives

1. To determined the healthy lifestyle among the students in terms of:

   1.1 healthy diet and activities;

   1.2 diet and activities; and

   1.3 hygiene.

2. To determined the nutrition and wellness practices among the students in terms of:

   2.1 diet;

   2.2 exercise; and

   2.3 sleep.

3. To determined the cognition among the students in terms of:

   3.1 attention;

   3.2 memory; and

   3.3 executive functions.

METHODOLOGY

This study employed a quantitative, non-experimental research design utilizing a correlational approach. The researcher measured two variables to evaluate the statistical relationship between them, with minimal or no attempt to control for extraneous variables. The aim was to determine the degree and direction of their relationship, if one existed, and describe the condition of the situation as it existed at the time of the study to investigate the causes of a particular phenomenon. Correlational research design investigated relationships between variables without the researcher controlling or manipulating any of them.

A correlation reflected the strength and direction of the relationship between two or more variables (Bhandari, 2021). Correlational research was the best quantitative method of research in which there were two or more

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue III March 2025

quantitative variables from the same group of subjects (Gay et al., 2012). This survey dealt with quantitative data about the said phenomenon. The quantitative aspect was an appropriate schedule for gathering the data designed for the target respondents to answer the questions. The process of gathering the data used questionnaires. The focus of the study was to investigate the relationship between healthy lifestyle, nutrition, and wellness practices as determinants of cognition among the Senior High School students at Lorenzo S. Sarmiento Sr. National High School.

Population and Sample

Simple random sampling was employed in selecting the respondents for this study. The target respondents were the senior high school students, including both male and female, enrolled in the school year 2024-2025. The subjects included 904 students from Lorenzo S. Sarmiento Sr. National High School, all of whom had to be part of the senior high school department to participate. Moreover, the study employed stratified random sampling, which enabled the researchers to obtain a sample population that best represented the entire population being studied, ensuring that each subgroup of interest was represented. The students were randomly selected from the senior high school students of Lorenzo S. Sarmiento Sr. National High School.Senior high school students were the target respondents for this study due to their increased maturity and greater awareness of health-related issues. At this stage, students were more capable of making independent choices about nutrition and wellness and were preparing for higher education and the workforce, which heightened their interest in how lifestyle choices affected cognition and well-being. In contrast, junior high school students lacked the same level of awareness and autonomy, often relying on parental guidance for health decisions, which made them less suitable for this study.

According to Mumtaz et al. (2020), a sample size of 200-400 respondents was considered a minimum. For the study at Lorenzo S. Sarmiento Sr. National High School, a random sample of 270 senior high school students was selected from a population of 904. This sample size was deemed statistically significant to represent the broader student population in the district. The sample size was calculated using the Raosoft sample size calculator, and stratified random sampling was used to determine the number of respondents from each section.

Table 1. Population and Sample size of Respondents

Section	Population	Respondents
A	53	16
B	50	15
C	52	16
D	39	12
E	57	16
F	47	14
G	47	14
H	39	12
I	52	16
J	42	13
K	45	13
L	46	14

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue III March 2025

M	55	16
N	46	14
O	46	14
P	38	11
Q	57	17
R	45	13
S	48	14
Total	**904**	**270**

Statistical Tool

The following statistical tools were utilized for the data analysis and interpretation:

Mean: This statistical tool was used to measure the levels of lifestyle, nutrition and wellness practices, and cognition among senior high school students.

Spearman's rho: This was applied to evaluate the significance of the relationship between healthy lifestyle, nutrition, and wellness practices as determinants of students' cognition.

Multiple Regression Analysis: This statistical tool was used to determine the influence of healthy lifestyle and nutrition and wellness practices on the students' cognition.

RESULTS

Level of Students' Healthy Lifestyle

Table 2 shows the level of healthy lifestyle in terms of healthy lifestyle and activities, unhealthy lifestyle and activities, and hygiene. The overall mean is 4.18, described as high, with a standard deviation of 0.50. The high level could be attributed to the high ratings given by the respondents in all indicators. This entails that the respondents' responses to the level of healthy lifestyle are very much positive in terms of healthy lifestyle and activities, unhealthy lifestyle and activities, and hygiene.

The cited overall mean score was the result obtained from the following computed mean scores from highest to lowest: 4.49 or very high for hygiene with a standard deviation of 0.54; 4.13 or high for healthy lifestyle and activities with a standard deviation of 0.63; 3.90 or high for unhealthy lifestyle and activities with a standard deviation of 0.76.

Table 2. Level of Students' Healthy Lifestyle

Indicators	Mean	SD	Descriptive Equivalent
Healthy Lifestyle and Activities	4.13	0.63	High
Unhealthy Lifestyle and Activities	3.90	0.76	High
Hygiene	4.49	0.54	Very High
Overall	4.18	0.50	High

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue III March 2025

Level of Students' Nutrition and Wellness Practices

Table 3 presents the level of nutrition and wellness practices in terms of diet, sleep, and exercise. The overall mean is 3.94, described as high, with a standard deviation of 0.66. The high level could be attributed to the high ratings given by the respondents in all indicators. This entails that the respondents' responses to the level of nutrition and wellness practices in terms of diet, sleep, and exercise.

The cited overall mean score was the result obtained from the following computed mean scores from highest to lowest: 4.06 or high for exercise with a standard deviation of 0.71; 3.98 or high for diet with a standard deviation of 0.69; 3.78 or high for sleep with a standard deviation of 0.93.

Table 3. Level of Students Nutrition and Wellness Practices

Indicators	Mean	SD	Descriptive Equivalent
Diet	3.98	0.69	High
Sleep	3.78	0.93	High
Exercise	4.06	0.71	High
Overall	3.94	0.68	High

Level of Students' Cognition

Shown in Table 4 are the mean scores for the indicators of cognition, with an overall mean of 4.13 and described as very high with a standard deviation of 0.54. The high level could be attributed to the high ratings given by the respondents in all indicators. This entails that the respondents' responses to the level of nutrition and wellness practices in terms of attention, memory, and executive function.

The cited overall mean score was the result obtained from the following computed mean scores from highest to lowest: 4.21 or very high for executive function with a standard deviation of 0.61; 4.09 or high for memory with a standard deviation of 0.63; 4.07 or high for attention with a standard deviation of 0.59.

Table 4. Level of Students' Cognition

Indicators	Mean	SD	Descriptive Equivalent
Attention	4.07	0.59	High
Memory	4.09	0.63	High
Executive Function	4.21	0.61	Very High
Overall	4.13	0.54	High

Significance on the Relationship between Healthy Lifestyle and Cognition

One crucial purpose of this study is to determine whether or not healthy lifestyle have a significant relationship with cognition. The appended table 5.1 shows that the Sharpiro-Wilk Test for Bivariate Normality has a p-value of <.001, indicating that the distribution is not normal. Hence, a non-parametric test, Spearman's rho correlation, is suited for this distribution.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue III March 2025

Table 5 shows that healthy lifestyle and cognition have Spearman's rho value of 0.608*, indicating a high correlation. Moreover, a p-value of <.001, which is less than the 0.05 p-value, means a significant relationship between healthy lifestyle and cognition. Hence, this leads to the decision that the null hypothesis, which stated that there is no significant relationship between healthy lifestyle and cognition, is rejected.

Table 5: Significance on the Relationships Between Teachers' Attitude to Students' Motivation

		Healthy Lifestyle	Cognition
Healthy Lifestyle	Spearman's rho	_	
	p-value	_	
Cognition	Spearman's rho	0.608*	_
	p-value	< .001	_

Significant Relationship Between Nutrition and Wellness Practices and Cognition

One crucial purpose of this study is to determine whether or not nutrition and wellness practices have a significant relationship with cognition. The appended table 6.1 shows that the Sharpiro-Wilk Test for Bivariate Normality has a p-value of <.001, indicating that the distribution is not normal. Hence, a non-parametric test, Spearman's rho correlation, is suited for this distribution.

Table 6 shows that nutrition and wellness practices and cognition have Spearman's rho value of 0.724*, indicating a high correlation. Moreover, a p-value of <.001, which is less than the 0.05 p-value, means a significant relationship between nutrition and wellness practices and cognition. Hence, this leads to the decision that the null hypothesis, which stated that there is no significant relationship between nutrition and wellness practices and cognition, is rejected.

Table 6: Significance on the Relationships Between Nutrition and Wellness Practices and Cognition

		Nutrition and Wellness Practices	Cognition
Nutrition and Wellness Practices	Spearman's rho	_	
	p-value	_	
Cognition	Spearman's rho	0.724*	_
	p-value	< .001	_

Multiple Regression Analysis on the Influence of the Domain of Healthy Lifestyle to the Cognition

The data shown in Table 7 are the regression coefficients to test the significant influence of healthy lifestyle and cognition among Grade 11 and 12 senior high school students. Using the Multiple Regression Analysis, the data revealed that the influence of healthy lifestyle and cognition among Grade 11 and 12 senior high school students has a f-value of 64.853 and a corresponding significance p-value of <.001, which is significant.

This means that the level of healthy lifestyle influences the cognition since the probability is less than 0.05. The coefficient of determination (R^2), which is 0.425, connotes that 42.5% of the variation in cognition is

influence by healthy lifestyle. The remaining 57.5% is chance variation, which suggests that other factors beyond the scope of this study may also be attributed to cognition.

Table 7: Multiple Regression Analysis on the Influence of the Domain Of Healthy Lifestyle to the Cognition

Healthy Lifestyle	Coefficients	t-value	p-value	Decision *a*=0.05
Healthy Lifestyle and Activities	0.338*	5.805	< .001	H*o* is Rejected
Unhealthy Lifestyle and Activities	0.338*	5.844	< .001	H*o* is Rejected
Hygiene	0.112*	2.451	0.051	H*o* is not Rejected
Dependent Variable: Cognition				

p<0.05 R=0.652 R^2=0.425 F-ratio=64.853 p-value=< .001

Multiple Regression Analysis on the Influence of the Domain of Nutrition and Wellness Practices to the Cognition

Data shown in Table 8 are the regression coefficients to test the significant influence of nutrition and wellness practices and cognition. Using the Multiple Regression Analysis, the data revealed that the influence of nutrition and wellness practices and cognition has f-value of 112.144 and corresponding significance p-value of <.001 which was significant.

This means that the level of nutrition and wellness practices influences the cognition since the probability is less than 0.05. The coefficient of determination (R^2) which is 0.561 indicates that 56.1% of the variation in cognition influenced by nutrition and wellness practices. The remaining 43.9% is chance variation which suggests that other factors beyond the scope of this study may also be attributed to cognition.

Table 8: Multiple Regression Analysis on the influence of the Domain of Nutrition and Wellness Practices to the Cognition

Nutrition and Wellness Practices	Coefficients	t-value	p-value	Decision A=0.05
Diet	0.229*	4.515	<.001	H*o* is Rejected
Exercise	0.149*	2.671	0.008	H*o* is Rejected
Sleep	0.495*	9.283	<.001	H*o* is Rejected
Dependent Variable: Cognition				

p < 0.05 R= 0.749 $R^{2=}$0.561 F= 112.114 p-value = < 0.001

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue III March 2025

DISCUSSIONS

Level of Students' Healthy Lifestyle

The results from the study at Lorenzo S. Sarmiento Sr. National High School indicate that students' healthy lifestyles are significantly correlated with improved cognition. The data reveals a high level of engagement in healthy lifestyle practices among students, especially in areas like personal hygiene and environmental cleanliness. These findings align with research by Nash et al. (2021), which suggests that good hygiene practices reduce the risk of infections, thereby preventing cognitive impairments caused by chronic illnesses. The study also emphasizes the Importance of physical activity, proper nutrition, adequate sleep, and stress management in promoting cognitive health. As Garcia (2022) notes, engaging in these activities is strongly linked to improved cognitive performance. Physical exercise, for instance, enhances brain function by increasing neurogenesis and improving blood circulation to the brain, which boosts memory, learning, and overall cognition. Similarly, nutrient-rich foods like fruits and vegetables support brain health, reinforcing the connection between a healthy diet and cognitive resilience, as highlighted by Smith and Lane (2023).

However, the study also underscores the negative impact of unhealthy behaviors on cognition, which aligns with Stern's (2020) research. Unhealthy lifestyle choices, such as smoking, excessive alcohol consumption, poor eating habits, and sedentary behavior, have been shown to contribute to cognitive decline. The high results in the study's unhealthy lifestyle category highlight the potential risks of these behaviors, particularly in terms of their long-term effects on brain function and cognitive health.

Level of Students' Nutrition and Wellness Practices

The study highlights the interconnectedness of exercise, diet, and sleep in optimizing cognitive function, particularly for students. Regular physical activity is shown to enhance memory, attention, and overall cognitive performance by promoting neurogenesis and increasing blood flow to the brain. These findings align with Garcia et al. (2022) and Smith and Lane (2023), who emphasize the role of exercise in boosting cognitive health and emotional regulation. Exercise not only improves physical health but also helps reduce stress, improve mood, and increase concentration, all of which are essential for academic success.

Diet also plays a crucial role in cognitive function, with proper nutrition supporting memory, attention, and problem-solving abilities. A balanced diet rich in essential nutrients, such as omega-3 fatty acids, vitamins, and antioxidants, helps reduce inflammation and oxidative stress, which are linked to cognitive decline. Jacka et al. (2021) emphasize the importance of whole foods for brain health. Additionally, sleep is critical for memory consolidation and emotional regulation, with Walker (2021) highlighting its importance for strengthening cognitive performance. Together, exercise, diet, and sleep create a balanced environment that supports brain health and academic achievement.

Level of Students' Cognition

The study highlights executive function as the most significant indicator of cognitive performance, supporting contemporary theories that emphasize its essential role in managing attention, complex cognitive tasks, and decision-making. Executive function is vital for academic and professional success, as it enables individuals to regulate cognitive processes effectively. This finding underscores the foundational importance of executive function in facilitating goal-directed behavior and problem-solving. Memory was identified as the second-highest indicator of cognitive performance, with its crucial role in storing, retrieving, and utilizing learned information. Different types of memory, such as short-term, long-term, and working memory, contribute to various cognitive tasks like acquiring new knowledge and recalling prior information. Schacter et al. (2022) support this, noting that strong memory performance correlates with better academic outcomes, highlighting memory's critical role in student success.

Attention, while ranked third in the study, remains a key component of cognition. It is essential for focusing mental resources on relevant tasks and filtering out distractions, thereby aiding in learning, memory consolidation, and decision-making. Research by Posner and Petersen (2020) and Kane and Engle (2020) emphasizes that attentional control influences cognitive performance, with better attention capacity supporting executive function tasks such as problem-solving and reasoning. Although attention was found to be slightly less influential than executive function and memory, it still plays a significant role in supporting cognitive processes crucial for academic and daily tasks.

Significant Relationship Between Healthy Lifestyle and Cognition

The study reveals a significant connection between a healthy lifestyle and cognitive function in senior high school students, with improvements in lifestyle habits corresponding to enhanced cognitive abilities and academic performance. This finding is supported by Maslow's Hierarchy of Needs Theory, which suggests that fulfilling basic physiological needs, such as proper nutrition and physical health, is foundational for students' well-being. Once these needs are met, students can focus on emotional and social needs, fostering a conducive environment for learning and academic growth. Prioritizing health and wellness ultimately supports cognitive development and personal achievement.

Additionally, the study aligns with the Activity Theory, which emphasizes the importance of engaging in a variety of activities to maintain a healthy lifestyle. Regular physical activity, social interactions, and pursuing hobbies contribute to mental and physical well-being, improving cardiovascular health, mood, and self-esteem. These activities help students build resilience, cope with challenges, and enhance their overall quality of life. A balanced lifestyle that integrates these elements is crucial for supporting both cognitive function and emotional well-being in students.

The study also connects with the Information Processing Theory, which explains how students process information through various cognitive stages, including sensory input, working memory, and long-term storage. Understanding these stages allows educators to develop more effective teaching strategies that support attention, perception, and memory. Key cognitive functions, such as working memory for problem-solving and reducing cognitive load, are essential for enhancing learning outcomes. Employing metacognitive strategies can further improve retention and application of knowledge, helping students succeed academically.

Significant Relationship Between Nutrition and Wellness Practices and Cognition

The study reveals a significant relationship between nutrition, wellness practices, and cognitive performance in senior high school students, indicating that improving these factors can enhance cognitive abilities and academic success. The results challenge the null hypothesis, confirming a meaningful connection between good nutrition, wellness, and cognitive performance. This supports the understanding that proper nutrition and wellness practices positively impact brain health and immune function, which in turn contribute to better cognitive function and academic outcomes.

Maslow's Hierarchy of Needs Theory suggests that academic achievement is built on a foundation of health and well-being, which can be fostered through proper nutrition, physical activity, and wellness practices. Johnson (1981) and Smith (1971) emphasize that ensuring access to nutritious food, exercise, and stress management practices can create an environment that supports cognitive growth and academic success. These factors are crucial in providing students with the resources needed to focus on learning and achieve their academic potential.

The study also aligns with the Nutrigenomics theory, which suggests that students' genetic makeup influences how they process nutrients, affecting their health and well-being. Personalized nutrition plans based on genetic information can help students make healthier food choices, leading to improved physical and mental health and, ultimately, better academic performance. Furthermore, Atkinson and Shiffrin's Information Processing Theory explains how students process information through various stages, emphasizing the importance of

cognitive functions like attention, working memory, and minimizing cognitive load for enhancing learning and problem-solving abilities.

Multiple Regression Analysis on the Influence of Healthy Lifestyle on students' cognition

This study investigated the relationship between healthy lifestyle domains and cognitive function in senior high school students, using multiple regression analysis to identify significant predictors of cognition. The results revealed that physical activity, nutrition, and sleep were key factors influencing cognitive performance. These findings highlight the importance of these lifestyle elements in supporting cognitive function and academic success among students. The findings also align with Deci & Ryan's (2020) Self-Determination Theory (SDT), which emphasizes the role of basic psychological needs—autonomy, competence, and relatedness—in supporting intrinsic motivation and optimal functioning. By satisfying these needs through healthy lifestyle practices, students are more likely to experience improved cognitive performance and motivation.

Additionally, Bandura's (2022) Social Cognitive Theory (SCT) provides further context by highlighting the role of observational learning, social reinforcement, and self-efficacy in shaping behavior. Schools and families can create supportive environments that encourage healthy lifestyle habits, which in turn enhance cognitive function. The Biopsychosocial Model (BPSM) by Engel (2021) also offers a comprehensive framework, suggesting that cognitive function is influenced by biological, psychological, and social factors. Addressing these interconnected elements can help schools and families better support students' cognitive development.

Multiple Regression Analysis of the Influence of Nutrition and Wellness Practices on students' cognition

This study examined the relationship between nutrition, wellness practices, and cognitive function in senior high school students, using multiple regression analysis to identify significant predictors. The results revealed that healthy eating habits, regular breakfast consumption, and adequate hydration were important factors influencing cognitive performance. These findings emphasize the crucial role of proper nutrition and wellness practices in supporting cognitive function and academic success.

The study aligns with Becker's (2021) Health Belief Model (HBM), which suggests that individuals' beliefs about their health and susceptibility to illness influence their health behaviors. Furthermore, Ajzen (2020) highlights how attitudes, subjective norms, and perceived behavioral control impact the intention to engage in healthy behaviors. These psychological factors play a role in motivating students to adopt and maintain healthy habits, which in turn positively affect their cognition.

Bronfenbrenner's (2023) Social Ecological Model (SEM) provides a broader perspective by examining how individual factors, such as knowledge and attitudes, interact with environmental factors, such as access to healthy food and physical activity opportunities. This model emphasizes the importance of creating supportive environments in schools and families to encourage healthy behaviors. Additionally, the Transtheoretical Model (TTM) by Prochaska & DiClemente (2022) outlines the stages of change individuals go through when adopting healthy behaviors, suggesting that targeted support at each stage can help students maintain healthy habits and improve cognitive function.

CONCLUSION

Conclusions are drawn based on the results of the study. The study concludes that the level of healthy lifestyle was high, as well as its indicators, namely, hygiene, healthy lifestyle and activities, and unhealthy lifestyle and activities. Furthermore, the study also concludes that the level of nutrition and wellness practices was high, along with its indicators, namely, exercise, diet, and sleep. Moreover, the overall level of cognition was high, encompassing the three domains: executive function, memory, and attention. Furthermore, the findings contradict the theoretical assumption of no significant relationship between the healthy lifestyle and nutrition

and wellness practices on students' cognition. Moreover, it was analyzed through Spearman's rho product moment correlation that healthy lifestyle has a high correlation with the students' cognition, as well as nutrition and wellness practices shows high correlation with the students' cognition.

REFERENCES

1. Australian institute of health and welfare (2021) Holistic Health Approach https://www.health.nsw.gov.au/mentalhealth/psychosocial/principles/Pages/holistic.aspx
2. Bandura(2022) Social cognitive theory (SCT). Rural Health Information Hub. https://www.ruralhealthinfo.org/toolkits/health-promotion/2/theories-and-models/social-cognitive
3. Beckers(2021) Labeling Theory https://www.britannica.com/topic/labeling-theory
4. Bhandari (2021) Maslow's Hierarchy of Needs https://www.simplypsychology.org/maslow.html
5. Bronfenbrenner (2023). Bronfenbrenner's ecological systems theory. Simply Psychology. https://www.simplypsychology.org/bronfenbrenner.html
6. Brown & Thomas (2020) Theory of Health and Social Change https://www.researchgate.net/publication/32891397
7. Cebu City Health Office (2022) Public Health System Adaptation and Strengthening Post-Pandemic https://iris.who.int/bitstream/handle/10665/351076/Eurohealth-28-1-4-8-eng.pdf?sequence=1&isAllowed=y
8. Deci and Ryan's (2020) Cognitive Dissonance Theory https://www.simplypsychology.org/cognitive-dissonance.html
9. Department of education Xl (2019) Supporting Child and Student Social, Emotional, Behavioral, and Mental Health Needs. https://www.ed.gov/sites/ed/files/documents/students/supporting-child-student-social-emotional-behavioral-mental-health.p
10. Department of health (2020) Mental health. Caring for your mental health. https://www.nimh.nih.gov/health/topics/
11. Engel (2021) Engel's Law. https://en.m.wikipedia.org/wiki/Engel%27s_law
12. FNRI (2018) Food and Nutrition Research Institute (FNRI)https://fnri.dost.gov.ph/
13. Gay et al (2012) Social Cognitive Theory https://www.sciencedirect.com/topics/social-sciences/social-cognitive-theory
14. Jacka et al, (2021). The Gut-Brain Axis Theory in Nutritional Psychiatry https://pubmed.ncbi.nlm.nih.gov/33919680/
15. John (2021) The Theory of Global Digital Transformation. Toward a Theory of Digital Transformation. https://www.researchgate.net/publication/307210631
16. Kane, R. L., & Engle, R. W. (2020). Predicting cognitive performance from lifestyle choices. Psychiatry Research, 284, 112747. https://doi.org/10.1016/j.psychres.2020.112747
17. Magbanua et al (2018). Cognitive Dissonance Theory https://www.simplypsychology.org/cognitive-dissonance.html
18. Mumtaz et al, (2020) Social Learning Theory https://en.m.wikipedia.org/wiki/Social_learning_theory
19. Samieru et al (2023). Mediterranean diet-based metabolomic https://www.sciencedirect.com/science/article/pii/S0261561424002541
20. Smith and Lane (2023). Ultra-processed Food Exposure and Adverse Health Outcomes https://pubmed.ncbi.nlm.nih.gov/38418082/
21. World health organization (2021) Global health equity https://initiatives.weforum.org/global-health-equity-network/home