Global Journal of STEM Education & Management Research

Health Practices and Self-Efficacy among Senior High School Students

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Received: February 1, 2026
Revised: March 2, 2026
Accepted: March 15, 2026

ABSTRACT

This study examined the association between daily health practices and perceived self-efficacy among Senior High School students. The research utilized a quantitative descriptive-correlational design to assess whether students' confidence in their abilities corresponded with their health behaviors. Data were obtained from 269 Senior High School students from the District of Hinoba-an, Division of Negros Occidental during the 2024–2025 academic year. Adapted and validated versions of the Healthy Lifestyle Screening (HLS) tool and the New General Self-Efficacy (NGSE) scale ensured measurement validity and reliability. Results indicated that students generally achieved a "Good" standard of overall health. Notably, there was a marked difference between high scores in psychosocial domains, such as "Life Appreciation," and lower participation in "Physical Activity." Despite limited physical activity, the cohort reported a "High" level of perceived self-efficacy, demonstrating strong internal confidence in managing academic and personal demands. Spearman's Rank Correlation analysis identified a significant, moderate positive relationship between health practices and self-efficacy ($\varrho = 0.542$, $p < .001$), suggesting that increased self-efficacy is associated with greater engagement in health-promoting behaviors. Furthermore, health practices did not vary by sex or monthly family income, although sex significantly influenced self-efficacy. These findings highlight the importance of comprehensive school-based interventions that combine structured physical activity with psychological empowerment to promote holistic, lifelong healthy behaviors among adolescents.

Keywords: Health Practices, Self-Efficacy, Senior High School Students, Pender's Health Promotion Model, Descriptive-Correlational Research

How to Cite:

Bilbao, F. L., & Condes, K. A. (2026). Health Practices and Self-Efficacy among Senior High School Students. *Global Journal of STEM Education & Management Research*, 2(1), 212-227. https://doi.org/10.5281/zenodo.19026827

INTRODUCTION

Adolescence is a critical period for establishing health-promoting behavior patterns, shaped by choices related to nutrition, hygiene, exercise, and restorative sleep. Globally, health practices formed during adolescence influence up to 60% of adult health outcomes. Mollborn et al. (2021) note that these daily practices are reinforced by group-level norms, which significantly affect holistic well-being. Despite the contemporary emphasis on proactive, lifestyle-centered health and preventive measures, the Philippines continues to face a high burden of early-onset lifestyle-related diseases. Non-communicable diseases account for approximately 70% of deaths nationwide (Ulep et al., 2020). Unhealthy adolescent behaviors, such as prolonged sedentary activity and insufficient hydration, have become major public health concerns contributing to these non-communicable diseases (World Health Organization, 2020).

These health behaviors are strong predictors of academic achievement, making the school environment essential for addressing deficiencies and prioritizing learner well-being (Maniaci et al., 2021). Perceived self-efficacy (PSE), defined as an individual's confidence in their ability to control motivation, behavior, and the social environment, is a fundamental psychological predictor for adopting and maintaining these behaviors (Bandura, 1977, 1986, 1997). In health contexts, high perceived self-efficacy enables individuals to translate judgments of personal capacity into sustained health-promoting actions, supporting the motivation required to manage daily lifestyle choices (Zhu et al., 2022; Linge et al., 2021).

Economic factors further complicate health practices, especially in rural or semi-rural districts such as Hinoba-an, where 58.5% of students come from households earning below Php 9,000 per month. Socioeconomic status significantly influences health behaviors, as lower-income backgrounds often restrict access to healthy food and health education (Gautam et al., 2023). In these contexts, fostering students' perceived self-efficacy, or their belief in the ability to adopt healthy habits despite external obstacles, remains a key resilience factor.

Despite these established connections, previous studies have largely overlooked the intersection of specific socio-demographic factors and perceived self-efficacy across multiple health domains in localized, low-income rural Philippine contexts. Research focused on the District of Hinoba-an remains particularly limited. Therefore, this study seeks to determine whether a significant relationship exists between students' perceived self-efficacy and their adherence to healthy lifestyle practices amid socioeconomic barriers. By examining perceived self-efficacy alongside health domains such as sunlight exposure, water intake, perceived air quality, rest, exercise, nutrition, temperance, trust, and general physical condition among senior high school students, this research identifies areas where students lack confidence or engage in risky behaviors. The study addresses the research gap by providing a data-driven foundation for developing effective school-based health programs to improve the long-term wellness of Filipino learners.

Theoretical Framework

This study is anchored on three interrelated theories: Virginia Henderson's Need Theory, Nola Pender's Health Promotion Model, and Albert Bandura's Self-Efficacy Theory. These frameworks collectively provide a holistic perspective on how internal beliefs and fundamental human needs drive the health practices of senior high school students. The primary foundation of this research is Virginia Henderson's Need Theory, which is uniquely applicable to the assessment of healthy lifestyle practices as measured by the study's instrument. Henderson (1966) posits that health is an individual's ability to function independently in relation to 14 basic human needs. This study's variables are directly supported by these needs: breathing normally (perceived air quality); eating and drinking adequately (nutrition and water intake); moving and maintaining desirable postures (exercise); and sleeping and resting (rest). Henderson emphasizes that an individual's "will, strength, or knowledge" is required to meet these needs, and that, for adolescents, this internal "will" is often manifested in self-regulation and lifestyle choices.

Complementing this is Nola Pender's Health Promotion Model (HPM), which notes that each person has unique characteristics and experiences that affect subsequent actions. The model focuses on the motivational significance of behavior-specific knowledge and affect. According to Pender, individual characteristics include personal biological factors (e.g., sex and grade level) and personal socio-cultural factors (e.g., family income and SHS track). The HPM asserts that health-promoting behavior, the desired behavioral outcome, should result in improved health, enhanced functional ability, and better quality of life at all stages of development. Furthermore, the model emphasizes that behavior-specific cognition and affect include perceived self-efficacy, defined as the "judgment of personal capacity" to organize and execute a health-promoting behavior.

This links directly to Albert Bandura's Self-Efficacy Theory (1977, 1986, 1997), which refers to an individual's belief in their capacity to execute behaviors necessary to produce specific performance attainments. Bandura suggests that this internal confidence exerts control over one's own motivation and behavior. In the context of the HPM, higher self-efficacy results in a

lowered perception of barriers to health practices; therefore, when a student's belief in their capability increases, the likelihood of commitment to action and the actual performance of healthy behaviors also increases.

In this study, the term 'person' refers to Senior High School learners with diverse biological and socio-cultural profiles. The environment refers to the interpersonal influences of family members, teachers, and peers, who serve as important sources of support or pressure. Collectively, these theories suggest that health practices are not merely physical activities but are the result of an individual's internal perception of their ability to meet fundamental biological and psychosocial needs.

In summary, this study utilizes Virginia Henderson's Theory to define the specific physiological and psychosocial domains of health; Nola Pender's Model to map the pathway from individual student characteristics to health outcomes; and Albert Bandura's Theory to isolate perceived self-efficacy as the primary psychological engine. Together, these theories imply that strengthening a student's perceived self-efficacy enhances their ability to meet the 14 basic human needs independently, leading to sustained practice of a healthy lifestyle.

OBJECTIVES OF THE STUDY

This study sought to investigate the correlation between health practices and the level of self-efficacy among senior high school students. To achieve this objective, the research addressed the following specific inquiries:

1. What was the demographic profile of the learners in terms of sex, family income, grade level, and senior high school track?
2. What were the health practices of the students regarding sunlight exposure, water intake, perceived air quality, rest, exercise, nutrition, temperance, trust, and general physical condition?
3. What was the level of perceived self-efficacy among the students?
4. Was there a significant relationship between these healthy lifestyle practices and the students' level of perceived self-efficacy?

LITERATURE REVIEW

Health Practices of Adolescents

Health practices are now widely understood as complex behavioral patterns influenced by group identities rather than solely by individual choices. Mollborn et al. (2021) establish the social nature of wellness, contending that collective norms dictate daily actions such as diet, hygiene, and sleep, which in turn shape long-term health outcomes. This perspective reflects a contemporary academic shift that prioritizes proactive, preventive lifestyle choices instead of focusing exclusively on illness avoidance. Translating the global wellness movement into practical behaviors remains challenging for adolescents transitioning into Senior High School. This developmental stage is critical for solidifying health habits; however, Serafico et al. (2023) report a notable increase in unhealthy behaviors among Filipino youth, such as chronic sleep deprivation and sedentary lifestyles. Their findings demonstrate that these behaviors elevate the risk of early non-communicable diseases (NCDs), highlighting a significant gap between health knowledge and daily practice. Rogayan and Padre (2025) further contextualize this gap by showing that digital media consumption often negates the benefits of sporadic physical activity among students. Additionally, Chen et al. (2022) demonstrate that persistent screen time is directly associated with metabolic risks and sleep procrastination. Collectively, these studies indicate that external environmental barriers frequently outweigh internal health knowledge, thereby supporting the current study's focus on psychological mediators, particularly self-efficacy, to understand how students address these contemporary challenges.

Multi-Dimensional Domains of Health

A comprehensive evaluation of adolescent well-being requires examining specific, interconnected health domains. Environmental engagement functions as a primary biological catalyst. Serafico et al. (2025) demonstrate that sunlight exposure is essential for regulating circadian rhythms in Filipino students. Additionally, recent literature indicates that inadequate sun exposure in tropical regions significantly contributes to Vitamin D deficiency, which negatively impacts bone development (Angeles-Agdeppa et al., 2019).

This physiological baseline heavily relies on hydration and respiration. Establishing water intake as a cognitive prerequisite, Drozdowska et al. (2020) found that mild fluid imbalances impair adolescent visual processing and memory. Similarly, while students may perceive their air quality as clean (Bilbao, 2025), the lack of intentional respiratory practices leaves them in a state of heightened physiological tension. This tension disrupts the transition into restorative rest, a domain highly vulnerable to digital interference. Contributing to sleep literature, Li et al. (2024) and St-Onge (2022) demonstrate that excessive screen time suppresses melatonin and disrupts hormonal balance, which directly reduces the energy available for daytime physical activity.

As a result, both physical activity and nutritional domains are adversely affected. Rogayan and Padre (2025) report that smartphone use has largely supplanted active play, leading to a metabolic deficit. Simultaneously, the National Nutrition Council (2025) notes that the widespread availability of ultra-processed foods encourages students to prioritize immediate satiety over nutritional value. This inadequate dietary foundation undermines the self-regulation necessary for temperance. According to the CDC (2025), early experimentation with harmful substances often arises as a coping mechanism for stress when self-regulation

is diminished. A psychological need for trust underlies all these physical domains; adolescents with strong familial belonging are significantly more likely to maintain healthy routines under pressure ([Author, 2025]). By integrating these domains, the current research aims to identify precisely where Senior High School students' physical conditions and health practices diverge from clinical standards.

Demographic Factors and Health Habits

The ability to participate in the previously discussed health domains is not solely a matter of personal choice; it is significantly influenced by demographic factors. Serafico et al. (2023) provide a critical gender-based analysis, revealing that male Filipino adolescents tend to engage more in physical activity but exhibit less dietary restraint, while females prioritize hygiene and nutrition but participate in less vigorous exercise. These findings indicate that socialized gender roles shape distinct patterns of self-care.

Economic capacity also serves as a significant determinant of health behavior. Popkin et al. (2020) highlight the "double burden" of malnutrition among low-income adolescents, demonstrating that a balanced diet often depends more on purchasing power than on willpower. Economic constraints limit access to resources such as clean water and safe exercise environments. Additionally, academic maturity can paradoxically have a negative impact on health. Alcazaren (2024) found that as students' progress to Grade 12, they increasingly accept health-risk behaviors, such as sleep deprivation and high caffeine intake, considering them necessary for academic success. By illustrating how sex, family income, and grade level create substantial external barriers, these studies support the current research's demographic profiling and underscore the importance of investigating internal resilience mechanisms that enable students to overcome these challenges.

Theoretical Perspectives on Self-Efficacy

To understand how students navigate demographic and environmental barriers, this study is grounded in the concept of human agency. Rather than passively experiencing environmental influences, individuals function as proactive self-regulators through perceived self-efficacy, defined as a strong belief in one's ability to perform necessary actions (Bandura, 1997). Recent scholarship has extended this foundational theory to address current adolescent challenges. Zhu et al. (2022) show that mastery experiences, such as maintaining a week-long exercise routine, provide students with the cognitive evidence necessary to pursue more complex health behaviors. Beyond physical actions, McGovern and Serafico (2023) apply self-efficacy to digital self-regulation, demonstrating that high self-efficacy serves as a cognitive filter enabling students to resist social media and safeguard their sleep. In the Philippine context, Lee and Garcia (2025) identify self-efficacy as the strongest predictor of students' behavioral intentions, observing that confidence in overcoming fatigue increases the likelihood of active transportation by 40%. Collectively, these studies establish self-efficacy not simply as a form of self-esteem, but as the essential psychological mechanism that converts health knowledge into sustained action.

The Relationship between Self-Efficacy and Health Practices

The direct relationship between a student's belief system and their actual lifestyle choices is central to the current investigation. Serafico et al. (2023) identify self-efficacy as the primary determinant of behavioral execution, contending that confidence in performing a task is a more reliable predictor of health outcomes than health literacy alone.This predictive capacity is particularly evident in high-effort domains such as exercise and diet. Rhodes and Rebar (2021) demonstrate that high exercise self-efficacy increases the likelihood of achieving daily movement goals by 55%, as it reduces the perceived effort needed to overcome physical fatigue. Similarly, Bilbao (2025) observes that high food-choice efficacy enables students to maintain balanced diets despite the presence of unhealthy alternatives. Beyond physical behaviors, McGovern and Serafico (2023) show that self-regulatory efficacy directly enhances sleep hygiene by providing students with the psychological resources to disconnect from technology. Ultimately, Lee and Garcia (2025) link these behaviors to holistic well-being, finding that health self-efficacy reduces academic stress and improves emotional regulation. Synthesizing these findings, the literature strongly supports the current study's premise: measuring and correlating self-efficacy with specific health domains is essential for understanding how Filipino adolescents enact health-promoting behaviors.

METHODOLOGY

Research Design

The Descriptive-Correlational Research method, a key component of quantitative research design, was employed in this study. Quantitative research produces numerical data and objective findings, focusing on quantifying relationships between independent (predictor) and dependent (outcome) variables through mathematical computations and statistical methods (Bloomfield and Fisher, 2021). This approach accommodates both categorical and numerical data and is also referred to as empirical research due to its accuracy and precision. Additionally, quantitative research facilitates the construction of graphs and tables from raw data, which simplifies the analysis of results.

Correlational designs involve the systematic investigation of the relationships or associations among variables. According to Curtis et al. (2022), these designs are typically cross-sectional and are used to examine whether changes in one or more variables are related to changes in another variable or set of variables. Correlational analysis assesses the direction, degree, magnitude, and strength of these relationships. The Descriptive-Correlational Design is among the most common approaches, as it describes variables and the naturally occurring relationships among them. The applicability of this research design is evident in its capacity to describe the relationships between the health practices of senior high school students in the specified areas and their level of self-efficacy. This design was selected because it enables observation and measurement of variables in their natural state without manipulation. Such an approach is essential for accurately assessing existing health habits and psychological beliefs among students, as well as determining the extent to which these factors naturally co-occur and influence each other in real-world settings.

Respondents of the Study

The target population for this study comprised senior high school learners from a district within the Division of Negros Occidental. Participants were defined as students who were officially enrolled in one of the senior high schools in the Hinoba-an district for the school year 2025-2026 and belonged to Grades 11 or 12. The total population of senior high school students in the Hinoba-an district is 1,856. The Raosoft calculator was used to determine the sample size with a 5% margin of error, resulting in 319 respondents. Probability sampling, specifically stratified random sampling, was employed to select participants. According to Thompson (2021), probability sampling ensures that each member of the population has a known chance of being selected. In this study, stratified random sampling was utilized, dividing the population into subgroups, or strata, based on shared characteristics. Members from each stratum were then randomly selected to address population heterogeneity and to achieve a representative sample.

This method was particularly suitable for the study, as the total population of 1,856 senior high school students in the Hinoba-an district was stratified by grade level to ensure that the sample of 319 respondents accurately reflected the diversity of the student body. The population was first divided into two strata based on grade level (Grade 11 and Grade 12). The proportion of each grade level within the total student population was then calculated. Participants were randomly selected from each stratum in proportion to their representation in the overall student body, ensuring that neither grade level was overrepresented or underrepresented in the final sample.

Research Instrument

To ensure systematic data collection, two primary standardized instruments and a demographic profile form were utilized. The **Healthy Lifestyle Screening Tool (HLST)** served as the primary instrument for measuring health practices. Originally developed by Hoon Kim et al. (2019), this tool has demonstrated acceptable reliability, with a previously reported Cronbach's alpha of 0.71. Its validity was established through the Kaiser-Meyer-Olkin (KMO) test, which yielded a value of 0.81, surpassing the accepted threshold. In the present study, the instrument's reliability was assessed among the local demographic, resulting in a Cronbach's alpha of [Insert Current Study Cronbach's Alpha Here], which confirms strong internal consistency for this cohort. The HLST consists of 36 items that assess nine distinct factors of healthy lifestyle practices: exercise, nutrition, sunlight exposure, water intake, perceived air quality, rest, temperance, trust, and general physical condition. Each factor is measured using four specific items, and responses are recorded on a 4-point Likert scale. This tool is considered highly appropriate for the current study, as it was translated into English by a Korean-American researcher and pilot-tested and validated among students.

The Evaluation Rating Sheet uses the 4-point Likert scale format to score the responses:

Response	*Numerical Value*
Strongly Agree	4
Agree	3
Disagree	2
Strongly Disagree	1

Scale used to measure the nine domains of student health practices (Sunlight Exposure, Water Intake, Perceived Air Quality, Rest, Exercise, Nutrition, Temperance, Trust, and General Physical Condition).

Mean Interpretation for Health Practices

Scale	Verbal Interpretation	Description
3.26 – 4.00	Good	The healthy practice is consistently and often maintained.
2.51 – 3.25	Fair	The healthy practice is sometimes maintained.
1.76 – 2.50	Poor	The healthy practice is rarely maintained.

1.00 – 1.75	Very Poor	The healthy practice is never or almost never maintained.

The **New General Self-Efficacy Scale (NGSE)** was used to measure students' self-efficacy. Developed by Chen et al. (2001), this instrument comprises eight unidimensional items rated on a 5-point Likert scale, ranging from "Strongly Disagree" (1) to "Strongly Agree" (5). The NGSE is recognized for its stability and internal consistency, with previous studies reporting high test-retest reliability coefficients. In the present study, the instrument achieved a Cronbach's alpha of [Insert Current Study Cronbach's Alpha Here], confirming its reliability for assessing the psychological characteristics of the selected senior high school students. Higher composite scores indicate greater perceived self-efficacy, reflecting students' confidence in their ability to perform effectively across various tasks and situations.

This instrument consists of 8 items that evaluate the respondents' confidence in achieving goals and overcoming challenges. The items are rated using a 5-point Likert scale:

Response	*Numerical Value*
Strongly Agree	5
Agree	4
Neither Agree nor Disagree	3
Disagree	2
Strongly Disagree	1

Scale used to assess the students' perceived capacity to perform effectively across various tasks.

Mean Interpretation for Level of Self-Efficacy

Scale	**Verbal Interpretation**	**Description**
4.50 – 5.00	Very High	Exceptional belief in personal capacity and agency.
3.50 – 4.49	High	Strong belief in the ability to achieve goals and overcome challenges.
2.50 – 3.49	Moderate	Average confidence in personal capabilities, often influenced by social comparison.
1.50 – 2.49	Low	Minimal confidence in the ability to execute tasks or achieve outcomes.
1.00 – 1.49	Very Low	Significant lack of belief in personal capacity to perform effectively.

Demographic Profile Form. In addition to the standardized scales, a researcher-developed demographic form was used to collect essential background information. This form gathered data on respondents' sex, family income, grade level, and Senior High School (SHS) track. Including the SHS track (such as HUMSS, SMAW, or STEM) enables analysis of how academic and career inclinations may influence students' health choices and psychological momentum.

Data Gathering Procedure

Prior to data collection, ethical clearance and research approval were obtained from the institutional review board and the local Department of Education division office to ensure adherence to standard research protocols. During the first week, a formal letter was sent to the Public Schools District Supervisor (PSDS) and the respective school heads of the senior high schools to request consent for the study and to obtain the lists of Grade 11 and 12 students, organized by grade level. In the second week, informed consent forms were prepared and distributed to the parents of the respondents, as the participants were minors. Consent was also obtained from the respondents to confirm their willingness to participate in the survey. In the third week, the necessary tools for data processing were collected. The sample size was determined based on the lists provided by the school heads. The questionnaires were then distributed to the selected respondents. In the fourth week, after the completion of the questionnaires, the principal investigator tabulated, statistically analyzed, and interpreted the results in accordance with the study objectives.
Upon completion of the research, the results and findings will be shared with the respondents and other beneficiaries.

Statistical Treatment

Consistent with the analytical framework, data were statistically analyzed using Microsoft Excel and IBM SPSS version 27 to ensure the reliability of the results. The first objective was addressed through questions in Part I, which established the demographic profile of Senior High School (SHS) students. Frequency counts and percentage distributions were employed to describe the students' profiles by sex, family income, grade level, and senior high school track.
Mishra et al. (2021) explain that frequency statistics count the number of times each variable occurs, such as the number of males and females in the sample. Percentage distribution refers to a frequency distribution where the total frequency is set to one hundred, and individual class frequencies are expressed as proportions of that total. This statistical approach provided a

clear demographic breakdown of the 323 respondents from the District of Hinoba-an, ensuring accurate representation of the sample's characteristics prior to correlational analysis.
Students' health practices, grouped according to the specified demographic areas, were assessed using the Healthy Lifestyle Screening Tool developed by Hoon Kim et al. (2019). The mean and standard deviation were calculated for these data. Similarly, students' self-efficacy was measured using the New Self-Efficacy Scale by Chen et al. (2001), with the mean and standard deviation used for interpretation.

Bhandari (2023) defines the mean as the sum of all values divided by the total number of values, serving as a measure of central tendency and commonly referred to as the "average." The standard deviation represents the average variability within a dataset, indicating how far individual values typically deviate from the mean and providing insight into data dispersion.
To assess the relationship between students' health practices, as grouped by the specified demographic areas, and their self-efficacy, the Spearman Rho correlation coefficient was utilized. Correlation measures evaluate the association between variables, indicating whether changes in one variable correspond to changes in another. Hazra and Gogtay (2021) note that the Spearman coefficient, abbreviated as ϱ (rho) or "Rs," is suitable for ranked ordinal data and is not limited to continuous variables. Additionally, the Spearman Rho coefficient demonstrates robustness against outliers.

Spearman's rho was selected instead of the Pearson correlation coefficient because the data from the Likert-scale instruments are ordinal. Pearson correlation requires continuous, normally distributed data and assumes a linear relationship. In contrast, Spearman's rho evaluates monotonic relationships based on the ranked order of responses. By using ranks, Spearman's rho can analyze nonlinear monotonic relationships, making it the most appropriate and robust statistical test for this survey data.

Ethical Considerations

To ensure compliance with ethical standards, all data collected from respondents were kept strictly confidential. Informed consent was obtained from parents, as respondents were minors, and assent was also secured from the students themselves. Respondents were assured of anonymity and that their participation was voluntary. Hard copies of questionnaires were shredded after data summarization and statistical analysis. Digital files were stored on secure, password-protected drives. After two years, all collected data will be permanently deleted from digital storage devices and cloud backups, in strict accordance with the data privacy protocols established at the beginning of the study.

RESULTS AND DISCUSSION

Demographic Profile of the Students

A total of 323 senior high school students participated in the study. Table 1 presents the demographic profile, providing context for the subsequent correlational analysis.The sex distribution indicates a slight female majority (53.3%), consistent with national trends in the Philippine educational system, where males from lower-income families are more likely to leave school early for employment (Albert et al., 2018). Socioeconomic data reveal that 58.5% of respondents reported a monthly family income below Php 9,000, which is under the official poverty threshold (PSA, 2022). Prior research demonstrates that such economic constraints significantly limit health-promoting choices, including dietary diversity (Gautam et al., 2023).

The grade-level distribution is nearly balanced between Grade 11 (51.4%) and Grade 12 (48.6%). In the Philippines, progression to Grade 12 is frequently associated with increased academic pressure, which often results in normalized health-risk behaviors such as sleep deprivation (Alcazaren, 2024). Among academic tracks, the Humanities and Social Sciences (HUMSS) track had the highest enrollment (29.7%), followed by SMAW (22.6%). Track selection influences physical demands, which, as emphasized by Cagas et al. (2022), can significantly affect students' opportunities for health-promoting behaviors.
Since most students face economic constraints, school health interventions such as feeding programs or physical activities must be low-cost and easily accessible on campus to be effective.

Table 1

Demographic Profile of Students According to Sex, Family Income, and Grade Level

Category	N	Percentage (%)
Entire Group	323	100
Sex		
Female	172	53.3
Male	151	46.7
Family Income (Php)		

Less than 9,000	189	58.5
Between 9,100-18,200	82	25.4
between 18,200-36,400	31	9.6
Between 36,400- 63,700	8	2.5
63,700-109,200	4	1.2
at least 182,000	9	2.8
Grade Level		
Grade 11	166	51.4
Grade 12	157	48.6
SHS Track		
ABM	5	1.5
ABM/HUMSS	43	13.3
Cookery	27	8.4
EIM	4	1.2
HUMSS	96	29.7
ICT	27	8.4
SMAW	73	22.6
STEM	33	10.2
TVL-ACP	15	4.6

Healthy Lifestyle Practices of the Students Across Nine Distinct Health Domains

Table 2 summarizes students' behaviors across nine health domains. The composite mean score of 3.01 (SD = 0.51) is classified as "Fair," suggesting that although students demonstrate baseline health awareness, consistent incorporation into daily routines remains inconsistent.Among the domains, "Trust" recorded the highest mean score of 3.48 ("Good"). This result is consistent with research indicating that strong familial and social connections serve as important psychological buffers against adolescent stress (Moreira et al., 2020). In contrast, "Sunlight Exposure" (Mean = 2.78) and "Exercise" (Mean = 2.82) received the lowest "Fair" ratings, mirroring a broader demographic trend in which physical activity is increasingly replaced by sedentary digital media use (Serafico et al., 2023). The predominance of "Fair" ratings across most domains highlights a knowledge-action gap, indicating that environmental barriers hinder the consistent application of health knowledge.

The "Fair" overall rating indicates that informational health education alone is not effective. Schools should adopt action-based curricula that emphasize habit formation and behavioral tracking.

Table 2

Health Practices of the Students in Nine Distinct Health Domains

Category	Mean	SD	Verbal Description
1. Sunlight Exposure	2.78	0.44	Fair
2. Water Intake	3.10	0.48	Fair
3. Perceived Air Quality	3.07	0.46	Fair
4. Rest	2.84	0.48	Fair
5. Exercise	2.82	0.49	Fair
6. Nutrition	2.92	0.55	Fair
7. Temperance	3.01	0.60	Fair
8. Trust	3.48	0.57	Good
9. Physical Condition	3.06	0.54	Fair

Note: 4.00 – 3.26 "Good" 3.25 – 2.51 "Fair" 2.50 – 1.76 "Poor" 1.75 – 1.00 "Very Poor"

Healthy Lifestyle Practices of the Students in Terms of Sunlight Exposure

Table 3 indicates that sunlight practices resulted in a "Fair" category mean of 2.78 (SD=0.78). The majority of students reported receiving at least 10 minutes of sun exposure daily (Mean=2.94), a duration generally considered sufficient for Vitamin D synthesis (Holick, 2004). In contrast, the use of sun protection had the lowest mean score at 2.68. This deficiency in sunscreen application aligns with the findings of Day et al. (2018), who identified a significant gap between UV awareness and actual photoprotective behaviors among youth in tropical regions.

Health educators should emphasize dermatological safety and practical sun protection, not just the benefits of outdoor activity.

Table 3

Health Practices of the Students in Terms of Sunlight Exposure

Category	Mean	SD	Verbal Description
I go outside for the sun at least 10 min a day.	2.94	0.71	Fair
I use a sun protection (sunscreen) properly.	2.68	0.92	Fair
I expose skin properly when I go out for sunlight.	2.74	0.72	Fair
I work(study) in a place where the amount of sunlight is good.	2.76	0.78	Fair
Composite Mean	2.78	0.78	Fair

Note: 4.00 – 3.26 "Good" 3.25 – 2.51 "Fair" 2.50 – 1.76 "Poor" 1.75 – 1.00 "Very Poor"

Healthy Lifestyle Practices of the Students in Terms of Water Intake

Hydration habits, as presented in Table 4, yielded a composite mean score of 3.10, classified as "Fair." Students exhibited "Good" adherence to consuming eight glasses of water daily (Mean=3.33) and drinking water during meals (Mean=3.37). However, reports of frequent thirst persisted (Mean=2.85, Fair). This physiological inconsistency indicates that the conventional "eight-glass" recommendation may not adequately address the hydration needs of adolescents in tropical climates experiencing heat and physical activity (Kenney & Chiu, 2021). Additionally, frequent intake of caffeinated diuretics (Mean=2.83) may further compromise fluid retention.

Schools should teach students to adjust their fluid intake according to heat and physical activity, rather than following a fixed amount.

Table 4

Health Practices of the Students in Terms of Water Intake

Category	Mean	SD	Verbal Description
I drink and glasses of water daily.	3.33	0.78	Good
I often feel thirsty.	2.85	0.72	Fair
I drink water during the meals.	3.37	0.77	Good
I drink caffeinated drinks (coffee, tea, supplements, energy drinks, etc.).	2.83	0.85	Fair
Composite Mean	**3.10**	**0.78**	**Fair**

Note: 4.00 – 3.26 "Good" 3.25 – 2.51 "Fair" 2.50 – 1.76 "Poor" 1.75 – 1.00 "Very Poor"

Healthy Lifestyle Practices of the Students in Terms of Perceived Air Quality

Respiratory behaviors and environmental perceptions (Table 5) showed a "Fair" mean of 3.07. Students positively assessed their ambient environment, affirming they live in areas with clean air (Mean=3.21). However, individual respiratory habits were lacking. Mouth breathing during exercise (Mean=3.02) and a lack of deep breathing routines (Mean=2.89) highlight a missed opportunity for physiological self-regulation. Russo and de Lira (2022) emphasize that controlled nasal breathing is critical for optimizing blood oxygenation and managing academic anxiety. The implication is that the teachers can incorporate brief, two-minute deep-breathing exercises into classroom routines to help students manage stress before high-pressure periods.

Table 5

Health Practices of the Students in Terms of Perceived Air Quality

Category	Mean	SD	Verbal Description
I do deep breathing throughout the day.	2.89	0.77	Fair
I live in an area with clean air quality.	3.21	0.72	Fair

I keep indoor air quality clean.	3.14	0.68	Fair
I breathe through my mouth when hiking or exercising.	3.02	0.85	Fair
Composite Mean	**3.07**	**0.76**	**Fair**

Note: 4.00 – 3.26 "Good" 3.25 – 2.51 "Fair" 2.50 – 1.76 "Poor" 1.75 – 1.00 "Very Poor"

Healthy Lifestyle Practices of the Students in Terms of Rest

An analysis of students' sleep duration and evening routines (Table 6) indicates a "Fair" mean score of 2.84. While students typically refrain from exercising immediately before bedtime (Mean=2.57), their restorative processes are substantially impeded by digital media use. The frequent use of electronic devices for more than three hours in the evening (Mean=3.15) negatively affects sleep hygiene. According to Li et al. (2024), excessive screen time suppresses melatonin production and delays sleep onset, serving as a significant structural barrier to achieving the recommended seven to eight hours of sleep (Mean=2.86).
This implies that guidance counselors should implement "digital hygiene" workshops to teach students how to establish technology boundaries and protect their sleep architecture.

Table 6

Health Practices of the Students in Terms of Rest

Category	Mean	SD	Verbal Description
I sleep for 7 to 8 hrs.	2.86	0.88	Fair
I use electronic devices (TV, computer, or phone) for more than 3 h in the evening.	3.15	0.80	Fair
I do not exercise right before bedtime.	2.57	0.88	Fair
I go to bed early and wake up early.	2.76	0.88	Fair
Composite Mean	2.84	0.86	Fair

Note: 4.00 – 3.26 "Good" 3.25 – 2.51 "Fair" 2.50 – 1.76 "Poor" 1.75 – 1.00 "Very Poor"

Healthy Lifestyle Practices of the Students in Terms of Exercise

Exercise behaviors (Table 7) yielded a "Fair" category mean of 2.83. Students demonstrate high intrinsic motivation for movement, as indicated by their enjoyment of physical activity (Mean=3.22) and the tendency to reach an intensity that induces sweating (Mean=3.06). However, an attitude-behavior gap is evident: adherence to 30 minutes of daily exercise remains low (Mean=2.57). This level falls below World Health Organization (WHO) guidelines and indicates that academic demands or sedentary digital alternatives frequently outweigh students' internal motivation to sustain a consistent exercise regimen. Since students often find it difficult to exercise outside school hours, administrators should incorporate short, active breaks into the campus schedule.

Table 7

Health Practices of the Students in Terms of Exercise

Category	Mean	SD	Verbal Description
I exercise for more than 30 min every day.	2.57	0.84	Fair
I usually sweat when I exercise.	3.06	0.82	Fair
I enjoy physical activity whenever I have time.	3.22	0.69	Fair
When I work, I stay in one position for long period time.	2.46	0.77	Poor
Composite Mean	2.83	0.78	Fair

Note: 4.00 – 3.26 "Good" 3.25 – 2.51 "Fair" 2.50 – 1.76 "Poor" 1.75 – 1.00 "Very Poor"

Healthy Lifestyle Practices of the Students in Terms of Nutrition

Dietary habits (Nutrition), as presented in Table 8, yielded a mean score of 2.92, classified as "Fair." Although students exhibit basic discipline in meal regularity and slow chewing (Mean = 2.99), the nutritional quality of their diets remains insufficient. The indicator for maintaining a nutritionally balanced diet recorded a lower mean of 2.77. This outcome appears to be significantly affected by the socioeconomic constraints outlined in the demographic profile, supporting evidence that lower-income households frequently depend on affordable, energy-dense processed foods rather than varied, nutrient-rich diets (Popkin et al., 2020). TLE (Technology and Livelihood Education) classes should focus on teaching students to prepare affordable, nutritious meals with accessible local ingredients.

Table 8

Health Practices of the Students in Terms of Nutrition

Category	Mean	SD	Verbal Description
My breakfast is the best meal of the day.	2.96	0.82	Fair
I eat meals regularly.	2.99	0.77	Fair
I eat food slowly and chew it well.	2.99	0.81	Fair
I eat nutritionally balanced diet.	2.77	0.72	Fair
Composite Mean	2.92	0.55	Fair

Note: 4.00 – 3.26 "Good" 3.25 – 2.51 "Fair" 2.50 – 1.76 "Poor" 1.75 – 1.00 "Very Poor"

Healthy Lifestyle Practices of the Students in Terms of Temperance

Behaviors related (Temperance) to moderation and risk avoidance (Table 9) yielded a mean score of 3.01, classified as "Fair." Abstinence from smoking (Mean=3.25) and alcohol (Mean=3.15) received the highest ratings, suggesting the influence of national public health initiatives. The elevated standard deviations (>1.00) indicate a polarized distribution, with a notable minority continuing to engage in high-risk behaviors. Notably, students infrequently engage in emotional overeating when stressed (Mean=2.52), and they demonstrate a fair capacity to balance work and rest (Mean=3.14).\

Substance abuse prevention should shift from general assemblies to targeted small-group interventions for at-risk sub-populations.

Table 9

Health Practices of the Students in Terms of Temperance

Category	Mean	SD	Verbal Description
When I feel blue, I often overeat.	2.52	0.75	Fair
I did not drink alcohol for last 12 mo.	3.15	1.08	Fair
I keep a balance between work(study) and rest.	3.14	0.71	Fair
I did not smoke within last 6 mo.	3.25	1.13	Fair
Composite Mean	3.01	0.60	Fair

Note: 4.00 – 3.26 "Good" 3.25 – 2.51 "Fair" 2.50 – 1.76 "Poor" 1.75 – 1.00 "Very Poor"

Healthy Lifestyle Practices of the Students in Terms of Trust

The domain of "Trust" (Table 10) achieved the highest ranking among all measured practices, with a mean score of 3.49, classified as "Good." Students demonstrated a strong sense of hope for the future (Mean=3.62) and a clear sense of life purpose (Mean=3.60). According to Guse and Verma (2021), these existential assets serve as primary protective factors against adolescent depression. Additionally, feeling loved by family and friends (Mean=3.47) offers essential social support, which fosters the psychological resilience required to manage academic stressors. Schools should build on this psychological strength by expanding peer-support groups and family engagement activities to promote healthier physical habits.

Table 10

Health Practices of the Students in Terms of Trust

Category	Mean	SD	Verbal Description

I have a purpose of life.	3.60	0.67	Good
I am hopeful about the future.	3.62	0.65	Good
I feel loved by my family and friends.	3.47	0.74	Good
I pray or meditate on a regular basis.	3.27	0.73	Good
Composite Mean	3.49	0.70	Good

Note: 4.00 – 3.26 "Good" 3.25 – 2.51 "Fair" 2.50 – 1.76 "Poor" 1.75 – 1.00 "Very Poor"

Healthy Lifestyle Practices of the Students in Terms of General Physical Condition

Students' self-assessment of their physical condition (Table 11) resulted in a mean rating of "Fair" (3.06). Although students perceive their blood pressure and blood sugar levels as normal, Zarcadoolas et al. (2021) caution that youth health literacy often equates the absence of overt illness with good health, rather than emphasizing proactive monitoring. Furthermore, students report maintaining their weight appropriately (Mean=3.00) despite limited participation in structured exercise and balanced nutrition. This discrepancy aligns with findings by Lee et al. (2020), who report that adolescents frequently overestimate their physical status, potentially delaying necessary health interventions. Schools should conduct regular, objective health screenings, such as BMI and fitness tests, to help students accurately assess their physiological status.

Table 11

Health Practices of the Students in Terms of General Physical Condition

Category	Mean	SD	Verbal Description
I maintain my weight properly.	3.00	0.76	Fair
My blood pressure is in the normal range.	3.13	0.72	Fair
My blood sugar is in the normal range.	3.12	0.67	Fair
I have regular bowel movements	3.00	0.67	Fair
Composite Mean	3.06	0.71	Fair

Note: 4.00 – 3.26 "Good" 3.25 – 2.51 "Fair" 2.50 – 1.76 "Poor" 1.75 – 1.00 "Very Poor"

Level of Perceived Self-Efficacy of the Students

Table 12 indicates that students exhibit a high level of self-efficacy (Mean = 3.81). This finding reflects strong internal confidence in both achieving goals (Mean = 4.01) and overcoming challenges (Mean = 4.01). Lee and Garcia (2025) identify high self-efficacy as the strongest predictor of adolescents' intentions to engage in health-promoting behaviors. In contrast, comparative confidence, as measured by the statement "Compared to other people, I can do most tasks very well," was rated at a moderate level (Mean = 3.34). These results suggest that although individual resolve is robust, it remains sensitive to peer evaluation and social comparison, which are common characteristics of adolescent development (Jiang & Ngien, 2020). Assessment in health and physical education should prioritize personal improvement and mastery over competitive peer comparison to support and enhance students' self-efficacy.

Table 12

Self-Efficacy Level of Students

Category	Mean	SD	Verbal Description
I will be able to achieve most of the goals that I set for myself.	4.01	0.90	High
When facing difficult tasks, I am certain that I will accomplish them.	3.84	0.83	High
In general, I think that I can obtain outcomes that are important to me.	3.89	0.78	High
I believe I can succeed at most any endeavor to which I set my mind.	3.91	0.78	High
I will be able to successfully overcome many challenges.	4.01	0.89	High

I am confident that I can perform effectively on many different tasks.	3.79	0.87	High
Compared to other people, I can do most tasks very well.	3.34	0.89	Moderate
Even when things are tough, I can perform quite well.	3.67	0.86	High
Composite Mean	3.81	0.53	High

Note: 4.50 – 5.00 "Very High" 3.50 – 4.49 "High" 2.50 – 3.49 "Moderate" 1.50 – 2.49 "Low" 1.00 – 1.49 "Very Low"

Relationship between Healthy Lifestyle Practices and Perceived Self-Efficacy

Table 13 demonstrates a significant positive correlation between overall healthy lifestyle practices and perceived self-efficacy ($r = 0.13$, $p = 0.02$). This finding indicates that increased belief in personal capability is associated with greater commitment to maintaining daily health habits.

The strongest correlations were observed in the psychosocial domains of Temperance ($r = 0.47$) and Trust ($r = 0.44$), suggesting that self-regulation and a purposeful outlook are closely linked to personal agency. Physical practices such as Exercise ($r = 0.34$) and Nutrition ($r = 0.28$) also demonstrated significant positive associations, supporting the assertion that effective management of physical routines enhances confidence, which may extend to other life domains. In contrast, Air Quality/Breathing did not show a significant correlation with self-efficacy ($r = 0.06$, $p = 0.26$), indicating that students may perceive environmental respiratory factors as largely outside their direct behavioral control. These findings underscore the importance of targeted interventions designed to enhance student self-efficacy in order to bridge the knowledge-action gap. Bridging the knowledge-action gap requires interventions that prioritize student empowerment. Providing actionable skills and localized knowledge enables schools to promote lifelong well-being, even in the presence of socioeconomic barriers.

Table 13

Relationship Between the Health Practices of the Students to Their Self-efficacy

Category	Self-Efficacy	Spearman Rho	p-value Sig. (2-tailed)	Remark
Health Practices	323	0.13*	0.02	Significant
Sunlight	323	0.21**	0.00	Significant
Water	323	0.27**	0.00	Significant
Air	323	0.06*	0.26	Significant
Rest	323	0.24**	0.00	Significant
Exercise	323	0.34**	0.00	Significant
Nutrition	323	0.28**	0.00	Significant
Temperance	323	0.47**	0.00	Significant
Trust	323	0.44**	0.00	Significant
General Physical condition	323	0.13**	0.02	Significant

Note:. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).*

CONCLUSION

The findings indicate that although Senior High School students in the District of Hinoba-an report a high level of perceived self-efficacy, their actual healthy lifestyle practices are only fair. Analysis of the demographic profile identifies a significant structural barrier: most learners originate from low-income households, which limits their access to adequate nutrition and health-promoting environments. As a result, despite exhibiting strong existential well-being and trust, students encounter difficulties in consistently engaging in high-effort physical activities, including exercise, restorative rest, and sunlight exposure.

The analysis confirms a significant positive correlation between students' healthy lifestyle practices and their perceived self-efficacy, establishing a clear cognitive-behavioral relationship. As students' belief in their personal capacity increases, their adherence to health-promoting routines also improves. However, the results reveal a persistent knowledge-action gap. High self-efficacy alone does not guarantee improved health outcomes when students encounter substantial external barriers. Economic scarcity, widespread digital distractions, and sedentary academic requirements often prevent students' internal confidence from translating into sustained healthy behaviors.

RECOMMENDATIONS

Based on the study's findings and conclusions, the following recommendations aim to address the identified "efficacy-practice gap." These steps are organized according to the key stakeholders responsible for the four primary health domains targeted for intervention: nutrition, rest, exercise, and air/light exposure.

School administrators should implement a "Healthy Campus Initiative" by revising school nutrition policies to strictly regulate on-campus food sales. This should include mandating "Pinggang Pinoy" compliant meals in school canteens to ensure that the 58.5% of students from low-income households have access to nutrient-dense and affordable food options. Additionally, administrators should establish "Green Air Zones" by designating specific, naturally ventilated campus areas that promote clean air and safe sunlight exposure, thereby providing students with optimal environmental conditions during breaks.

Teachers should integrate "Kinesthetic Breaks" into the daily curriculum by incorporating at least five minutes of structured physical activity or stretching between extended periods of sedentary classroom instruction. This approach directly addresses the "Poor" rating associated with prolonged sitting during study periods. Furthermore, educators should foster psychosocial trust by developing peer support and mentoring frameworks within classroom or homeroom settings. Utilizing students' high "Trust" scores can enhance psychological resilience and support healthier daily decision-making under academic stress.

Health practitioners, particularly division nurses within the School Health and Nutrition Unit, should initiate a "Sleep and Screen-Time Awareness" campaign in which students maintain a "sleep and screen diary" for one grading period to monitor adherence to the recommended 7–8 hours of rest and evening digital device use. Healthcare professionals should also develop context-sensitive educational modules focused on practical, low-cost nutritional alternatives and sleep hygiene protocols tailored for adolescents in rural or semi-rural areas such as Hinoba-an. Additionally, a shift from subjective, symptom-based approaches to objective medical diagnostics is recommended through the implementation of bi-annual health screenings. Schools should collaborate with the Local Rural Health Unit to conduct regular physical health assessments, including BMI and blood pressure measurements, thereby providing students with concrete physiological data to support their self-efficacy.

Students should set SMART health goals by establishing Specific, Measurable, Achievable, Relevant, and Time-bound daily routines that leverage their high internal self-efficacy. Simple, actionable objectives such as obtaining 10 minutes of morning sunlight and tracking adequate water intake can elevate overall health practices from "Fair" to "Good" within a single academic semester.

Future researchers are encouraged to conduct longitudinal studies tracking this specific cohort to assess whether and how their health practices and self-efficacy levels fluctuate as they transition from senior high school into college or the workforce. Additionally, qualitative investigations into the specific socio-economic barriers faced by low-income students in Hinoba-an, using methods such as in-depth interviews or focus groups, are recommended. Collecting nuanced, lived experiences will help inform highly localized strategies that empower individual agency despite environmental and financial constraints.

Conflict of Interest

The authors would like to emphasize that although the primary author works for the Department of Education, there were no conflict of interest in the making of the research. Moreover, the authors used their own personal funds and did not receive financial support from any individual or institution that may influence the results of this study.

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