

# Beyond Cleanliness: The Correlation between Hygiene Knowledge Practices and Food Safety to Dimension Wellness of Students in School Community

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## ABSTRACT

This research examined the effects of hygiene knowledge practices and food safety on the dimension wellness of student. within the school setting. The main objective was to assess the extent of these factors influence, their correlations, and the specific wellness dimensions affected among Senior High School Students. Employing a quantitative, non-experimental design with complete enumeration, the study involved 183 participants from Lorenzo S. Sarmiento Sr. National High School. Key statistical methods included average weighted mean, Spearman's rho correlation, and multiple regression analysis. Findings revealed a very high level of influence from hygiene knowledge practices, along with indicators such as handwashing, oral hygiene, and body hygiene. Similarly, food safety showed very high influence across its indicators, such as cook or prepared food, chill or cool food storage, clean or hygiene, and food handling. Students' wellness levels were also very high across all dimensions or their indicators like emotional, physical, social, and intellectual. The results confirmed significant correlations between hygiene knowledge practices, food safety, and dimension wellness of students. This study highlights the importance of targeted knowledge on hygiene and food safety to enhance student well-being in the school community.

**Keywords:** Hygiene Knowledge Practices, Food Safety, Dimension Wellness of Students, and School Community.

## INTRODUCTION

### Rationale

In Korea, the ignorance on health of students leads them to blame themselves and the inability of the students to express their feelings and emotions which eventually results in their deteriorating health and wellness (Eriksson & Bergström et al., 2023). For example, in Pakistan, one study of school wellness found signs of problems such as that of the kids lack of health and ignoring the wellness of students (Abbas et al., 2024). Many areas of wellness are critical, and knowledge should be obtained based on the study, which are most likely to be needed in the comprehensive healthy people who do not have knowledge about wellness and health, so it is essential to understand what aspects are considered most important for well-being (Kauppi et al., 2025). Wellness education to college students significantly affects both their academic and life quality. Social support, time management, and academic stress are key elements (Santhosh & Girija, 2025).

In the Philippines, hygiene knowledge practices are essential for infection prevention and the minimization of the spread of diseases including diarrhea and respiratory diseases, particularly among students, which can be seen as reflected in the public health importance of hygiene education (Vally et al., 2021). Additionally, knowledge of good personal hygiene has a significant contribution towards students' health and academic performance, leading to significant enhancement of hygiene knowledge in students, which reduces the risk of illnesses and promotes wellness (Apanan et al., 2025). Improving hygiene practices like handwashing, oral care, and bathing can mitigate diseases among students that support health and academic performance (Cairncross et

al., 2020). As stated by Hasan et al. (2021) emphasized the importance of improving hygiene knowledge practices such as increased hygiene behaviors and reduced spread of diseases due to diarrhea among Indigenous Peoples in Barangay Lower Panaga, Davao del Norte.

In Manila City, it reveals the critical role of both food handlers and consumers in providing safe food, and also suggests consumer awareness of food safety policies to prevent foodborne diseases (Dolar et al., 2024). To illustrate the food safety and personal hygiene knowledge and practices of food handlers to avoid sickness, vomiting, and other diseases (Susanna & Putri, 2021). Furthermore, food safety is crucial because it shields consumers from foodborne illnesses and sickness, promotes food security, and stresses the approach for safety throughout the food supply chain (Liivat, 2024). In addition, food safety initiatives promote food security and human health, and emphasize the significance of the connection between health and food safety to meet the future needs of everyone (Kraemer et al., 2021).

Alcazaren et al., (2023) hygiene knowledge practices and food safety correlation of wellness of student's health and safety in region XI, Davao City. As a result, inadequate food safety and hygiene knowledge with limited access to clean water, poor hygiene, inconsistent food safety inspections, and poor understanding of hygienic food handling can lead to terrible effects on student's wellness (Mengistu & Tessema, 2023). Similarly, in Davao de Oro, hygiene issues that were associated with an outbreak of hand, foot, and mouth disease in Laak due to poor food safety facilities caused by poor hygiene practices and hygiene protocols similar to those at high school in Mawab, lack of good sanitation and poor personal hygiene practices such as not washing hands before meals or after can have an adverse effect on the students wellness (Mendoza & Star 2023). In addition, their observations indicated some of the issues in the wellness of students of Mawab Davao de Oro, in terms of hygiene knowledge practices and food safety.

However, despite the fact that several research were done, no study on students' knowledge of hygiene practices and safely preparing food was conducted. To that end, the researchers hope to bridge the gap by researching hygiene knowledge practices and food safety to dimension wellness of students in school community. Furthermore, the association between the variables is also established in order to discover how it might be helpful to guide students with their hygiene knowledge and food safety in the wellness of students. Additionally, this study would intend to raise awareness among the intended beneficiaries and serve as the basis for planning hygiene knowledge practices programs and food safety programs that would help enhance many students and their wellness, hygiene knowledge practices and food safety; thus, there was need to conduct this study. This study can help to students on maintaining cleanliness and safe consumption of food so that their health can improve greatly.

## Research Objectives

This research is conducted to examine beyond cleanliness: the correlation between hygiene knowledge practices and food safety to dimension wellness of students in school community.

1. To determine the level hygiene knowledge practices and dimension wellness of students in terms of:

1.1: hand washing;

1.2: oral hygiene; and

1.3: body hygiene.

2. To determine the level of food safety and dimension wellness of students in terms of:

2.1: cook and prepared food;

2.2: chill and cool storage food;

2.3: clean and hygiene; and

2.4: food handling.

3. To determine the dimension wellness in students in terms of:

3.1: emotional;

3.2: physical;

3.3: social; and

3.4: intellectual.

4. To examine the significant relationship between hygiene knowledge practices and dimension wellness in students school community.

5. To examine the significant relationship between food safety and dimension wellness in students school community.

6. To determine which of the domains in hygiene knowledge practices would influence the dimension wellness in students school community.

7. To determine which of the domains in food safety would influence dimension wellness in students school community.

### **Research Hypotheses**

The following hypotheses were tested at a 0.05 level of significance.

1. There was no significant relationship between hygiene knowledge and dimension wellness in students school community.
2. There was no significant relationship between food safety and dimension wellness in students school community.
3. There was no domain in hygiene knowledge practices and wellness in students school community.
4. There was no domain in food safety and wellness in students school community.

### **REVIEW OF RELATED LITERATURE**

This part of the study contains a review of related articles and findings related to hygiene knowledge practices, food safety and dimension wellness of students in school community. Various variables and indicators in this study were presented.

#### **Hygiene Knowledge Practices**

Hygiene knowledge practice can be described as a practice to assist an individual in avoiding diseases, it is also advantageous by practicing through hygiene knowledge, which is to reduce the occurrence of diseases and enhance the condition of health (Kumar et al., 2020). Moreover, practicing cleanliness and hygiene, good health and regular hygiene will play a significant role in reducing the global burden of infectious diseases, which are largely due to bacterial causes, that can easily spread through direct and indirect contact which kill approximately 17 million individuals every year (Lai & Kaur, 2020).

For Ethiopia and other developing countries has poor school hygiene habits and ignorance are a serious health issue and one of the key factors for missing school due to diseases such as sickness, vomiting, diarrhea that is associated with poor hygiene (Tesfaye et al., 2021). Hygiene plays a big role in public health and even though

wealthier countries have better hygiene standards, developing countries struggle to advocate for and uphold hygiene practices, which often leads to rapid disease spread (Worafi, 2021).

Tehlan (2023) at home, school and public places involves the proper norms of hygiene, and this research together with practical tips of these principles will avoid spread of diseases. On the other hand, Berhe et al., (2020) poor sanitary and poor hygienic conditions contribute significantly to infectious diseases due to the absence of knowledge, attitude and practices. Moreover, hygiene practice knowledge can play an important role in health promotion and disease prevention through understanding and practicing hygiene properly at frequent times (Singh et al., 2023).

As explains Bains (2020) oral hygiene is integral to personal hygiene practices and should not be neglected, like hand hygiene and oral hygiene, it is crucial. Similarly, Nurudeen (2020) comprise care of oneself properly and they are also referred to as an act of keeping one's body clean in order to avoid any smell and also learning how to take care of your body.

To see better school outcomes between school types, this study focuses on the different approaches to leadership styles and skilled personnel that help promote good hygiene practices in school settings and assesses the effectiveness of these hygienic practices in schools during school hours (Wognski, 2021). Furthermore, better hygiene practices and sanitation practices in schools promote infection prevention, the prevention of pathogen transmission, and the maximization of good health (Kabir et al., 2021). Another thing which needs to be concerned is the hygiene knowledge habits mainly aimed at students in school (Nurhayati & Wuri, 2020).

In Africa, foodborne disease and transmission have been poor hygiene and a lack of proper hygiene, hence the fast spread of viruses and many types of diseases (Ogidi, Imarhiagbe & Ogwu, 2024).

**Hand Washing.** Preventing transmission of infectious diseases among students by washing your hands is a simple and inexpensive way to cut down infectious diseases (Eshetu, 2020). According to Alozie et al. (2023) the most prominent intervention in combating infectious diseases including diarrhea and vomiting among children and adolescents is that of hand washing. In addition, lack of handwashing stations and accordingly lack of handwashing practice among students are among the most significant risk factors for respiratory infections (Mao et al., 2024).

Hand hygiene is also very useful for students to minimize the risk of infectious diseases and improve public health outcomes for the students and the school community (Caramia et al., 2024). Proper handwashing of hands, adequate facilities, and proper procedure of proper hygiene measures can ensure safety and eliminate the risk of further disease spread to the students and school community (Melaku & Addis, 2023).

Effects of poor hand washing behavior on the practice of proper hand washing and the most critical when it comes to preventing infectious diseases, such as diarrhea, among the students and youth is hand washing (Onwunali et al., 2023). More than one third of students also washed hands correctly, and the grade level of the students, their place of residence, referents role models for hand washing, presence of a hand washing station, and access to soap and water all affect their hand washing behavior (Alemu et al., 2022). Additionally, students are active, however, the high level of their contact in their schools could increase their exposure to diseases associated with poor handwashing practices as Nigerian schools often face inadequate hand hygiene facilities, limited hand washing supplies, and a general lack of awareness about hand hygiene (Wada & Oloruntoba, 2021).

An ignorance of good handwashing practice was severely endangering human health, particularly with respect to the threat of many infectious diseases to students and others in schools (Almoslem et al., 2021). Hayat (2021), this research tries to some extent to teach handwashing skills in a student's school by means of video animation to avoid the spread of diseases and safeguard students' health. Moreover, washing hands with soap and water reduces the rate of infections by 50% and diarrheal events by 48%. Therefore, elementary school students' hand washing behavior to identify the impacts of hand washing with soap (Berhanu et al., 2022). One of the ways to avoid transmission of disease is to observe proper hand hygiene and hand washing can exert its impact on disease and to issue advice regarding the rate of hand washing to prevent the transmission of viruses, bacteria, and types of viruses (Xun et al., 2021).

To wash the hands requires not only knowing why and how often, but also when and this teaches students and others about the ways or duration and therefore the development of handwashing skills of students (Öncü & Vayisoğlu, 2021). Also, using soap and water to wash hands is the best way to combat infectious pathogens by reducing nosocomial infection; effective hand washing also prevents the transmission of viruses like the flu and common cold, and the new coronavirus (Gedamu et al., 2021).

**Oral Hygiene.** Good oral hygiene is essential for the upkeep of the dental health of teeth, gums, and prostheses, affecting both treatment success and patient compliance (Alhaddad et al., 2025). In addition, oral diseases are an important public health problem in Africa, but oral health frequently gets less emphasis in national health plans and universal health coverage programs for students and school community (Foláyan et al., 2025).

Understanding knowledge about oral health is also key to learning habits that keep good health in equilibrium (Tadin et al., 2022). Moreover, oral health ranks high as an international problem that impacts overall health and happiness, with visual impairment being a major limitation to good oral hygiene (Fantaye et al., 2022). Consequently, poor oral hygiene damages overall health and happiness of students (Gizaw et al., 2024).

Bad oral hygiene has been linked to halitosis, periodontal diseases, dental caries, gingivitis, cardiovascular and respiratory conditions, and chronic renal diseases. Moreover, poor dental health can also help in reducing one's quality of life and restrict activities at home, at the workplace, and in school (Beyene et al., 2021). Despite having gained adequate knowledge about good oral hygiene, exercise, and nutrition, however, dental students are afflicted with symptoms of oral health conditions that lead to severe pain (Alam, 2022). Moreover, inadequate oral hygiene also contributes to unhealthy oral conditions which adversely affect general health and quality of life, thus this is a study being carried out to determine the prevalence of practice of oral hygiene and its related behaviors of school students (Santoso, et al., 2021).

Improved oral hygiene practices and knowledge can effectively prevent early childhood cavities, a global oral health problem, and the student's adherence to oral health habits is strongly influenced by parents' attitudes, beliefs, and cultural factors (Murugan et al., 2025). In addition, the population of individuals maintaining their natural teeth has grown exponentially over the past 50 years because of our progress to determine, prevent, and treat oral diseases, including poor oral hygiene, hereditary susceptibility, smoking, alcohol consumption, and nutritional deficiencies (Bekzod, 2025).

**Body Hygiene.** Good personal hygiene is necessary for health, and also helps to avoid disease transmission such as washing oneself regularly removes sweat, dirt, and bacteria, particularly from the underarms, feet, and genitals, which are prone to infections such as student's foot and lice (Ames et al., 2023). In addition, soap must also be sensitive and fragrance-free for body cleansing in order to preserve the natural bacterial balance. According to Akorede & Atanda (2020) that maintaining body hygiene requires regular washing, especially in sweaty areas, to remove bacteria and prevent odor or infection.

Body hygiene is critical in the prevention of infections such as skin diseases and reproductive problems thus, bad hygiene among students was found to negatively impact physical health (Sukmawati, 2025). Body hygiene involves frequent washing, especially in the armpits, to eliminate bacteria and reduce the risk of body odor or infection; it is also essential and delicate parts should be taken very good care of. Clean water access, early education, and mental health influence hygiene behaviors (Akorede & Atanda, 2020).

It is also said that the simple act of maintaining your body includes bathing, hand washing, brushing teeth, and the list goes on (Holland, 2025). Additionally, deodorant can be applied only at full dryness and body odor can be controlled.

Students were not allowed admission to shower facilities and consequently unable to maintain the proper personal body hygiene of students which limits the transmission of pathogens reduces the spread of infectious diseases (Portillo, et al., 2023). In particular, Patel & Thompson (2022) highlight menstrual hygiene management as one of the key factors in lowering the risk of women developing reproductive tract infections. According to Garcia & Nguyen (2023) hygiene can greatly influence the incidence of skin and respiratory infections, most notably in adolescents, suggesting that targeted hygiene intervention is one way to better health among young

people. Furthermore, Owolabi & Chukwu (2024) illustrate the positive effects of exposure to clean water and better hygiene practices in urban schools, that contribute to the improvement in the well-being of students which underlines the necessity for environmental and infrastructural backing to implement good hygiene practices.

### Food Safety

Food safety is said to be a key to reaching nutrition security and sustainable development for the well-being of students (FAO et al., 2020). Additionally, food safety is a core part of public health worldwide as unsafe food largely contributes to malnutrition and disease burden (Food & Nutrition, 2020). Specifically, the department of agriculture food safety and inspection service sets out research priorities for food contamination prevention and consumer protection, especially for students, in efforts to prevent vomiting and the accumulation of any disease (FSIS, 2025). Meanwhile, the journal of food safety features recent scientific advances to provide applicable safety standards, which can protect consumers' health and well-being, especially students (Wiley, 2025).

Shown that focused training among migrant workers is improving knowledge and adherence to food safety practices and food safety education and training enhance food workers' handling habits and attitude to minimize risks of foodborne illnesses (Aljasir, 2025). Likewise, the review in the food and nutrition journal underscored the effect of educational interventions on food handlers' behavior and the outcome of the consumers' health and wellbeing, particularly the students (Food & Nutrition, 2023).

Smriti et al., (2024) also corroborate the association of ongoing food safety education to better food hygiene behavior among consumers. In addition, the study has shown the importance that (Smith & Johnson, 2024) hands on practical training plays in keeping good food safety habits. Food handlers' knowledge and practices on food handling have been studied based on multiple variables such as education level, socioeconomic status, and regulatory environment (Bekele et al., 2025).

Ethiopia emphasizes the impact of environmental and economic factors on food safety compliance among consumers and handlers (Kwame, 2024). Based on the findings (Wilson et al., 2024) demographic features significantly influence safety attitudes and practices. In addition, the importance of the proper adaptation of training programs to specific food service environments is very important to prevent any food borne diseases for students and community at school (FSIS, 2025).

**Cook and Prepared Food.** It is instrumental to food safety and health, particularly to people who tend to take pre-prepared foods regularly and this research discovered speedy growth of this market but identified knowledge and practice gaps causing increase (WHO, 2024). The department of agriculture emphasizes safe handling, cooking, and storing of food for avoiding illness among the consumers and enhancing the safety consumption of food (USSD, 2024). Food code established standards to reduce food contamination in food retail and also decreased the likelihood of salmonella and other illnesses (FDA, 2022).

Poor food handling is, according to the World Health Organization (2024), one of the major causes of the spread of global foodborne diseases, with disastrous consequences for consumers. Food safety regulations enforcing it at outlets and vendors are important to avoid outbreaks because hygiene practices had uneven hygiene practices that required enhanced training and regulation (WHO, 2020). Moreover, vendor sanitation and awareness play a role in minimizing illness due to foods that are cooked for people, especially students (WHO, 2024). Similarly, the FDA Code provides guidance on safe food preparation for students, teachers, and employees (FDA, 2022).

Food preparation also influences food waste and nutrition in institutional areas and the home which food waste experienced by the reviews was comparatively high, requiring an increased storage of food items and prevention of waste (WHO, 2020). Batch preparation and other home food preparation techniques have been shown to have beneficial health impacts (USDA, 2020). School meal research shows that food preparation quality impacts students' nutrition and satisfaction, with food dating enabling consumers to make safer food choices (USDA, 2025).

**Chill and Cool Storage Food.** Food safety research shows that quick cooling procedures are needed to ensure its safety (Hedeem & Smith, 2020) Furthermore, cooling procedure is used to reduce food temperature, cooling

food from 135°F to 70°F in two hours and from 70°F to 41°F or lower within an additional four hours (Handler, 2020). Reminds that total cooling time shall not exceed six hours and encourages shallow pans and ice baths (Igo et al., 2021). Considers that foods are cooled in shallow containers to minimize the chances for the pathogenic organisms, and that food is put in shallow containers and refrigerated immediately for further rapid cooling (FSIS, 2020).

Besides big portions should be broken into small or thin portions in shallow pans not deeper than 3 inches for rapid cooling (Food Safety Training & Certification, 2021). As stated by Hedeem & Smith (2020) that ice baths, ice wands, or blast chillers to accelerate cooling to be safer for customers. Moreover, it contains the non-checking of temperatures in restaurant cooling procedures as well as the utilization of deep pans (CDC, 2024). Additionally, Webstaurant (2024) claims that food is agitated when cooled, ensuring even temperature is spread from the food being cooled, this further accelerates the time needed to cool down and increase the safety of the process making the food less susceptible to contamination. Moreover, technology of commercial cooling and monitoring are key to the food safety (FoodReady, 2024).

Blast chillers blow cold air to reduce bacterial growth and maintain food quality and enhance the safety of the food to be ingested (Food Standards Australia New Zealand, 2025). Prescribes cooling cooked dangerous food from 60°C to 21°C in two hours and cooling from 21°C to 5°C in four hours and emphasizes keeping cold food at 40°F or lower to prevent bacterial growth, and temperature control (FDA, 2024). Schaffner et al., (2022) outline new rapid cooling technologies that enhance efficiency, significantly improving food safety controls.

**Clean and Hygiene.** Food safety and cleanliness remain an important factor that decreases foodborne disease and public health (Lindberg et al. 2024). In the same way, some of the widely used safe methods for handling food are constantly washing hands and surfaces, properly cleaning fresh fruits and vegetables, separating raw meats from other food items, and heating food to safe temperatures (Johnson et al., 2023). Moreover, they are ensuring correct hygiene in the food prep area so that cross-contamination and the development of bacteria is avoided through proper cleaning, segregation of food types, cooking, and chilling in order to prevent foodborne illnesses (Long, 2024).

The five keys to safer food, namely cleanliness, separation, adequate cooking, proper temperature management, and safe food ingredient sourcing (Raszl, et al., 2025). According to Barnes (2024) regulatory bodies such as the, have supportive but different roles in regulating food safety. Also, the food safety inspection focuses on meat, poultry, and egg products processed, and safe handling and labeling during production (Long, 2025). In contrast, this regulates more general categories such as dairy, seafood, fruits, vegetables, and packaged foods, subjecting them to risk-based inspections (Jakab et al., 2024).

This study focuses on important hygiene practices: constant sanitization of utensils, proper storage of food, consumer education to reduce potential for contamination to a broad regulatory tool for public health (Johnson et al., 2023). Food hygiene is another vital step towards preventing foodborne disease by taking precautions like washing hands and surfaces, washing fruits and vegetables properly, separating raw and cooked foods, and thoroughly cooking food (Johnson et al., 2023). This also encompasses things like cleanliness, separation, cooking, temperature control, and safe source that the WHO proposes (Lopes et al., 2025).

In this study, inspectors are in charge of food hygiene, with inspecting meat and eggs and inspecting dairy, seafood, and fruits and vegetables, respectively, both overseeing practices such as utensil washing and storage (Barnes et al., 2024). Moreover, many food safety software technologies such as food docs and food ready offer automated compliance monitoring and risk management knowledge to companies as well as employee training and education to maintain hygiene. This kind of innovation helps to maintain the handling of food in a safe manner and prevent hazards within an industry (Liivat 2025). Modern day food safety techniques also leverage technology and AI-based systems to mitigate hazard thus improving risk and adapting to a series of new consumer and regulatory requirements that are constantly emerging (Altametrics, 2025).

**Food Handling.** Due to several constraints, vulnerable communities face unique food safety challenges and a greater probability of foodborne disease, underlining the need for improved access to safe and healthy food and assessing existing interventions to reduce food safety hazards among them (Njoagwuani et al., 2023). According

to Huanca et al., (2023) that although handwashing and other food safety practices are better among Chilean cancer survivors, overall diet and food choice need improvement. Moreover, Atim et al., (2024) investigated child feeding practices, where dependence on leftovers and inappropriate food handling necessitate culturally appropriate nutrition education of caregivers.

Additionally, Afrin et al., (2024) explored food safety knowledge and behavior among students in Bangladesh universities to guide focused interventions. Hamed et al., (2020) revealed a marked lack of knowledge regarding proper food safety methods and protocols, emphasizing the need for training and education. Moreover, Farah et al., (2025) described food handlers' knowledge and preventive behavior has reported consistency in the long-term implementation of preventive measures. Chen et al. (2025) observed that male food handlers generally provide decent hygiene, but specific training is needed to close the gaps in food storage and separation, especially within the older workforce.

Atalay et al. (2025) investigated food hygiene practices to the point out their importance in preventing foodborne illness. According to Young et al. (2020) summarized education and training interventions targeting food safety knowledge and food handlers' practices to improve on the topic of food safety knowledge and food handlers' practices in the event of outbreaks, though studies rarely had control groups. With a focus on local fieldwork Tesso et al. (2025) stated that food hygiene practices is a new way of food establishments flourish and communities face health issues.

Abdilahi et al., (2025) studied food safety practices of food handlers working to identify factors associated with foodborne illness in developing countries and identified a total of 306 food handlers. According to Loganathan et al., (2024) found that there are poor food handling and hygiene practices, e.g., the lack of licensing and poor handwashing facilities, in street vending. Similarly, Nascimento et al., (2023) carried out a scoping review of organizational factors influencing the safe handling practices of food service workers beyond knowledge at an individual level. Furthermore, Thomopoulos et al., (2025) voiced concerns about unsafe microwaving of infant food that can lead to potential carcinogen formation, highlighting consumer perceptions of risk and improving risk communication.

Rodrigues et al., (2020) explored both cultural and psychological determinants of food safety behavior by comparing intention determinants found differences, with attitudes prevailing in Brazil and perceived control in the UK, along with the optimistic bias. As stated by Makhunga et al., (2023) documented from South Africa on the urgent necessity to close gaps in food handlers' knowledge of proper cooking, temperature control, and cross-contamination avoidance despite overall positive attitudes and knowledge.

## **Dimension of Wellness**

Well-being of students involves physical, psychological, and social well-being of students and peers (Puja Khatri et al., 2024). According to (Klein & McCarthy, 2022), enjoyable leisure activities, creating social support networks, and building resiliency can reduce levels of distress in students. Also, early wellness programs comprised mental health, academic achievement, and disability services, curriculum seminars, wellness committee activities, and student-proposed activities (Chatterjee et al., 2022). School engagement is also an important predictor of student attainment, school completion, and recently, student well-being (Nelson et al., 2020).

People's beliefs shape people's attitudes towards performing beneficial behaviors to promote their wellbeing, namely, productivity, social interaction, engaging with people and others (Cass et al., 2021). In addition, neglecting healthy habits impacts learning and overall well-being and students need to embrace healthy living because being well contributes to improved health results and minimal chances of falling sick or infected with diseases (Amattayakong et al., 2020). Moreover, students' overall well-being strengthened, resulting in actual changes many students reported they relied on friends and family for inspiration and to get back on track for their mental and emotional wellbeing to be stable (Ward et al., 2022).

Interestingly, mental health services and other aspects of wellness are an integral component of student support services because students who experience more stress than others employ these services to assist themselves

(Edmonds et al., 2022). Likewise, habits of wellness on a daily basis are frequent in general, vary significantly from person to person, and strongly correlate with being good, both individually and collectively. Almost all wellness behavior associated with improved mood, and engaging in more daily wellness behaviors overall heavily related to mood (Copeland et al., 2022). Increasing student well-being occurs through faculty and peer mentoring, best used with frequent interventions, consistency across med school, and informal, intimate environments that bring the faculty and students together more (Rao et al., 2025).

However, keeping med students' wellness in balance has become a growing concern, hence schools incorporated courses of wellness into their curriculum to improve students' well-being (Butcher et al., 2021). Furthermore, they could also lessen stress and other minor ailments among students (Bleck et al., 2023). In connection, factors that help improve wellbeing include the establishment of close and effective relationships with individuals (Campbell et al., 2022). For overcoming the barriers to help-seeking, public health action should be designed in a manner that caters to the development and challenges of young adults (Bantjes et al., 2022). Students' health has a direct correlation with wellbeing and ultimately performance (Bork & Mondisa, 2022).

(Yinghua Wang 2023) The education could continue with the usual normal fun activities and socializing with others as before. Moreover, the students' self-expectations and perception of their own competency also play a vital role (Olivera et al., 2023). Students such as these, with the highest likelihood of developing health problems, may have a lot of trouble with school performance, social life, and future professional and personal opportunities, unfortunately (Chen & Lucock, 2022). Feeling that they belong continues to be a major predictor of their health (Gopalan et al., 2022). Concomitantly, there's a demand that we step up and help their health and wellbeing with services like educational campaigns and psychological support programs (Alsairafi et al., 2021).

All the student wellbeing is of great importance, particularly in school years later on (Zhang et al., 2024). Furthermore, innovation and proactive policies, programs, and practices to enhance student health and wellbeing should be examined immediately (Wilson et al., 2021). The application of mindfulness interventions and ideas of mental wellness based on positive psychology appear to be good methods of improving student health and wellbeing (Asghar et al., 2024).

**Emotional.** A study by Bachman et al. (2025) confirms that higher is linked to greater job satisfaction, leadership effectiveness, and productivity (Alam et al. 2023). Similarly, emotional intelligence also has a significant influence on academic performance and student mental health within schools (Frontiers in Education 2025). Higher emotional intelligence students do well in the examination, whereas highlighted its buffering effect against examination stress (Frontiers in Psychology 2022).

As stated by (Kleef et al., 2022) in such fields as intimate relationships, group decision-making, customer service, negotiation, and leadership the impact on how observers feel, their opinions, and behaviors is enormous. There is also an emotional response necessary to grasp when generating communication aimed at arousing the emotions of the audience after they wash their hands (Rutter et al., 2022)

Scholars have explored the qualities of emotional in strategy and the significance of that type of perspective across several analytical levels (Brundin et al., 2022). Moreover, a great deal of publicity has been given to finding emotions through psychological signals and still the new methods do keep coming in research and design, then building a multimodal data set exploring all the six basic feelings such as happiness, sadness, fear, disgust, surprise, anger, and even neutral emotions (Jiang et al., 2024).

Further, the method of dynamic training for precise emotion recognition and how they gained insights can be enhanced with different analyses of emotions to increase positive emotional reactions and improve general performance (Pomazan et al., 2023). Furthermore, social and emotional learning interventions have been shown to increase learning resilience and increase academic achievement (Casel et al., 2025). Emotion skill is also central in both leadership effectiveness and support for mental health, as suggested by Gerhardt et al., (2024). As a result, emotional intelligent leaders enhance the well-being of their teams; this enhances the teamwork and mental health of the organizations (Kong et al., 2023).

**Physical.** It is crucial for overall health and determines global health policies (Bull et al., 2025). Also, there is stress about how physical activity prevents chronic diseases and improves population health and it also mentions

the economic and health burden of inactivity and the necessity to apply prevention measures (The World Health Organization 2024). On the other hand, highlighting the wide range of benefits from fitness and getting things done by engaging in physical activities (Pate et al., 2022). Meanwhile, the WHO Global Action Plan (2021) outlines global frameworks for advancing physical health and minimizing stress and anxiety. Additionally, Bull et al., (2025) has indicated that lifestyle behaviors greatly influence physical health, particularly among young people after the pandemic.

Physical health is crucial to overall health and shapes policies in global health (Bull et al., 2025). Furthermore, emphasize how physical activity prevents long-term diseases and promotes the health of populations states as well as the economic health cost of inactivity and the need to implement prevention strategies (The World Health Organization 2024). Additionally, WHO Global Action Plan (2021) offers global guidelines to promote physical health and reduce stress and anxiety. Lifestyle habits significantly affect physical health, especially for youth post-pandemic (Bull et al., 2025).

According to Steinacker et al., (2023) describe community-adjusted health systems that contribute to higher productivity among friends and family, improved well-being, and health. As stated by Powell et al (2022) also notes fitness is key to lowering risks for serious diseases, and regular physical activity increases mental well-being and cognitive functions for all ages. Smith et al., (2023) discovered that people who practice regular exercise reduce symptoms of depression and anxiety as well. Furthermore, Lee & Kim (2024) physical fitness enables to improve cognitive functioning among older adults. Nevertheless, Johnson et al., (2025) emphasized physical activity should be included in mental care programs to ensure holistic treatment. Wang and Liu (2025) have shown that combining physical and cognitive training has a strong positive influence on children cognition and mental well-being.

**Social.** In Scandinavian, it stresses social competency development in pupils and community involvement, and it may have great value for teachers to put emphasis on using experience when selecting teaching materials, while Sørensen et al. (2024). Likewise, Vizcaya & Laguerta (2025) students find it difficult to do research in social studies, and thus there needs to be better pedagogical support at the school level. Perrotta et al. (2023) showed that the effort to promote historical empathy, to improve social understanding and engagement, is growing in how the process of study habits and social media consumption affect academic achievement in social studies.

Proper use of social media supports collaboration and access to resources, which results in an increase in academic achievements (Adeyemi, 2025). Smart Insights (2025) discusses digital learning's impact on changing pedagogies and can enhance students' social abilities or socializing with peers. Bordoh (2023) suggests that teachers' motivational and empathetic methods maximize social-emotional engagement. Interdisciplinary studies also highlight the incorporation of social and emotional learning into social studies (Lee & Park 2025).

Sørensen et al., (2024) it presented additional research connecting psychological and educational viewpoints in relation to one another in socializing. Curriculums also foster civic responsibility and social competence, which can significantly enhance and help students (Sage, 2025). Moreover, Tarman and Kilinc (2023) further developed theoretical and practical perspectives on social awareness in education, as well as numerous problems and awareness. Similarly, Bordoh (2023) identified that students face barriers that necessitate affective teacher education and problem-based learning methods. Sibanda et al. (2025) emotional learning initiatives are needed in order to build emotional intelligence and academic achievement among students.

Studies prove that emotional and social learning improves emotional regulation, behavior and participation in school despite resource limitations in the schools (Taha, 2025). Research finds well-implemented way of socializing also improves social and emotional skills in children from kinder through 12th grade, which in turn leads to higher academic achievement and fewer behavioral difficulties (Institute, 2023). Additionally, socializing in physical education, enhances teamwork, self-awareness, and creativity among younger students (Sindiani, 2025). Greenberg (2023) states that effective socializing requires specific training and support for teachers to nurture a positive learning environment.

**Intellectual.** Mental health well-being and positive social relationships and settings that promote person growth (Totsika et al., 2022). Moreover, psychosocial supports improve emotional, social, and physical functioning

thereby contributing to a better quality of life (Alexander, McCarthy, & Davis, 2023). Furthermore, recent research highlights a need for comprehensive and personalized care that considers intellectual capacity to promote optimal mental wellbeing for students (Foster, Taylor, & Andrews, 2023).

According to Totsika et al., (2022) that social information processing interventions are effective interventions for improved emotional regulation and social skills in persons with intellectual disability. However, intellectual disability affects cognitive and mental processes through an interplay of biological, psychological, and environmental processes (Reppermund et al., 2024). Like the general population, individuals with intellectual disabilities experience a high prevalence of comorbid mental illness, particularly among children, which renders diagnosis and therapeutic intervention more complicated (Carter, Johnson, & Baker, 2020).

With diverse cognitive and adaptive needs, treatment interventions are essential for improving intellectual health (Reppermund et al., 2025). Achieving these goals means addressing mental as well as intellectual health needs holistically in order to lower the overall prevalence and burden of mental health problems (Smith, Harris, & Green, 2024). Furthermore, this extended perspective enables care models that place emphasis on emotional well-being, social connections, and satisfaction in life rather than individual clinical symptoms solely (Chen, Patel, & Cross et al., 2022).

Mental imagery-based therapies offer matched interventions according to individual cognitive patterns, thus enhancing outcomes (Nelson, Brooks, & James, 2024). Moreover, intellectual disability is characterized by extensive impairment in intellectual functioning and adaptive behavior affecting life skills (Reppermund et al., 2024). Furthermore, mental health tends to need personalized care plans that incorporate cognitive, emotional, and social support (Totsika et al., 2022). Social inclusion and stigma reduction are central to enhancing mental well-being and quality of life (Murphy, Jahoda, & Willner, 2022). Empowering environments that support people with learning disabilities facilitate better mental health outcomes (Johnson, Williams, & Thompson, 2023).

### **Correlation Between Measures**

Hygiene knowledge and food safety practices are significantly linked to students' overall wellness. Proper cooking and food preparation help prevent foodborne illnesses, supporting students' physical health and nutrition (WHO, 2024; FDA, 2022). Effective chilling and cool storage reduce bacterial growth and illness risk, which helps maintain regular school attendance and well-being (Hedeem & Smith, 2020). Correct food handling and cleanliness, including proper storage, separation of foods, and sanitation, minimize contamination and disease, contributing to students' physical comfort and emotional security (Johnson et al., 2023; Lindberg et al., 2024). Overall, strong food hygiene knowledge and practices enhance students' physical and emotional wellness and support a healthy school environment.

Proper food safety knowledge among students plays an important role in supporting their wellness by reducing the risk of foodborne illnesses and keeping what the students consume safe (Masiku, 2024). Students who follow safe food handling practices are less likely to experience stomach problems that disrupt their daily activities and increase the chances of being safe while consuming foods (Afrin, 2024). In addition, Purnasari (2023) emphasizes that avoiding foodborne illnesses supports students' physical and mental, maintaining food safety is essential for overall student wellness and daily functioning (Ramli, 2022).

The proceeding presentations and discussion of various literature significantly help shed information on the significance of beyond cleanliness: the correlation between hygiene knowledge practices, food safety, and dimension wellness in students in school community. Additionally, the referenced material helped the researchers identify the relationship between hygiene knowledge practices, food safety, and dimension wellness in students in school community among caregiving students at Mawab District.

### **Theoretical Framework**

This section of the study contains a review of articles and findings related to hygiene knowledge practices, food safety, and dimension wellness of students. Various variables and indicators used in the study in this section are presented as well.

The present study has the background from Albert Bandura (1986) Social Cognitive Theory (SCT) and the framework consists of more than just knowledge measurement, it is capable of explaining how the students learn or keep hygiene and food safety behaviors in the social context for the better well-being of students. From a theoretical perspective, behavioral compliance to hygiene actions in relation to food safety will primarily be enhanced by addressing the factors that could influence their behavior with the application of social cognitive theory (SCT) and revealing how personal cognitive variables such as knowledge, self-efficacy, and risk perceptions impact food safety knowledge and hygiene compliance (Zhang et al., 2023). The current investigation also utilized cognitive theories to investigate the food handlers' knowledge and attitudes on safe handling practices concerning food safety in kitchen environments. (Ahmed et al., 2021).

However, it is in this case that the usefulness of the theory in bettering well-being by attaching knowledge and behavior with health promotion strategies through social cognitive theory including the values of self-efficacy and social support and relatedness for food safety and hygiene education (Schink et al., 2023). Consequently, Food Safety and Hygiene practices at the Academy of the Philippines (FoodSHAP) identified food safety education as an important predictor towards hygienic behavior and knowledge among hospitality learners, as a proxy of healthiness in foodservice contexts (Ang et al., 2022). Furthermore, this study was grounded on the Knowledge-Attitude-Practice (KAP) model by Rogers (1950), a framework (which describes the Knowledge (K) component in that) that measures students' knowledge concerning specific hygiene behaviors such as handwashing technique and oral, body and menstrual hygiene. It then moves to the attitude (A) portion, in which the students' feelings and beliefs about these behaviours are examined. Practice (P), most crucial and final of all, is where their kids' real activities, like how frequently they wash their hands, brush teeth or take frequent baths, which the research would test for, will inform the test, the researchers said. This work concluded that knowledge attitude and practice are closely tied with cleanliness and that get higher information and positive attitude (Nidaye et al., 2020). Research on the knowledge, attitude and practice (KAP) of final-year students in hand hygiene in health sciences in Herat, Afghanistan, revealed that the students had high knowledge level (84.61 percent), positive attitude (81.25 percent) and self-rated good hygiene (92.85 percent). This study established that KAP theory depends on education, attitude and institutional support as contributors for performing good hygiene behavior. (Masudi et al., 2023).

This study describes how Rosenstock et al. (1950) Health Belief Model (HBM) describes health-related behaviors. The model enables us to describe how beliefs form health lifestyles. This essentially means that students' personal perceptions on wellness directly influence students to be good in hygiene behaviors towards food safety such as washing the hands, food preparation, cooling food, and food handling. It specifically looks at how likely the student is to get a foodborne illness and how seriously harmful he believes the illness is. According to this model, food safety measures are positively correlated with constructs of HBM. With the HBM-based instructional program, attitudes and behaviors to food safety were significantly improved (Manar et al. 2023). Health Belief Model study the determinants of food hygiene behavior in the study and the effectiveness of the model to predict various health attributes of food safety and hygiene behavior specific to each individual (Saeed et al. 2021).

Smuts in (1926) laid the foundation of Holistic Health Theory, a theory that believes that the parts of a whole are interrelated and that we can understand it only if its components are considered as part of a whole. According to Smuts, living organisms and systems are more than just their parts. By stressing its interconnectedness, this perspective illustrates the interrelatedness of physical, mental, social, and emotional dimensions of health that explain the whole set of the wellness of students. From a health standpoint, it is a dynamic state of balance and harmony related to mental, emotional, social, and physical components. The holistic framework is further augmented with mind-body approaches incorporating meditation, physical exercise, nutrition, and conventional medicine with stronger stress on preventive treatment for general health (Xiahe 2024). A concept analysis frames wellness as a continuum that does not only incorporate holistic and multidimensionality but also links wellness with holistic views on lifestyle, behavior, and health promotion (Eriksson et al. in 2023).

Ajzen (1985) The Theory of Planned Behavior (TPB) was developed as an extension of the Theory of Reasoned Action to better predict human behavior by significantly predicting food safety and hygiene practices with behavioral intentions that can help in designing interventions to improve these practices in various settings, such as hospitals, schools, and homes especially wellness and well-being. Its principal components are attitudes

toward the behavior, subjective norms, and perceived behavioral control. The enhanced student health can be achieved by considering behaviors that are significant in relation to food safety and cleanliness practices and predicting them. According to their findings, attitudes, subjective norms, and perceived behavioral control accounted for 57% of variance in the intentions of food processing workers to produce safe food, and thus TPB holds great promise for projecting safe work practices for food processing with respect to improving hygiene for students' well-being. (Nickell and Hinsz, 2023). In one study using TPB within a school nutrition context, attitudes of school nutrition staff toward appropriate food safety and hygiene practices; social pressures (subjective norms as applied to them), and the assumption that hygiene practices are effective in promoting students' health affected nutrition staff intentions toward the mentioned practices. (Roberts et al., 2020).

### Conceptual Framework

Presented in Figure 1 is the conceptual framework of the study. The independent variables were hygiene knowledge practices and food safety. Firstly, hygiene knowledge practices and the following indicators: handwashing, oral hygiene, and body hygiene; handwashing, it is washing your hands after using it to hold or touch anything at the surface; oral hygiene, it is where maintaining good hygiene for your mouth to reduce the chances of mouth diseases; and body hygiene, refers to the cleaning of your body by removing dirt and germs in your body.

Secondly, food safety was assessed with the following indicators: cook and prepared food, cooking and preparing of food to be safe to consume food; chill and cool storage of food, it is where cooling your food to maintain freshness and to still be edible; clean and hygiene, refers to the cleaning of your area after your cleaning; and food handling, it is where you handle your food with carefulness and safety.

Lastly, the dependent variable were wellness of students with the following indicators: emotional, it is where expressing your emotions rather than building it up and keeping silent; physical, it is where being physically active and productive and being healthy; social, socializing with others can be very good for you as it can help with your wellness and overall health; and intellectual, it is where you have intelligence about your health and how to improve it.

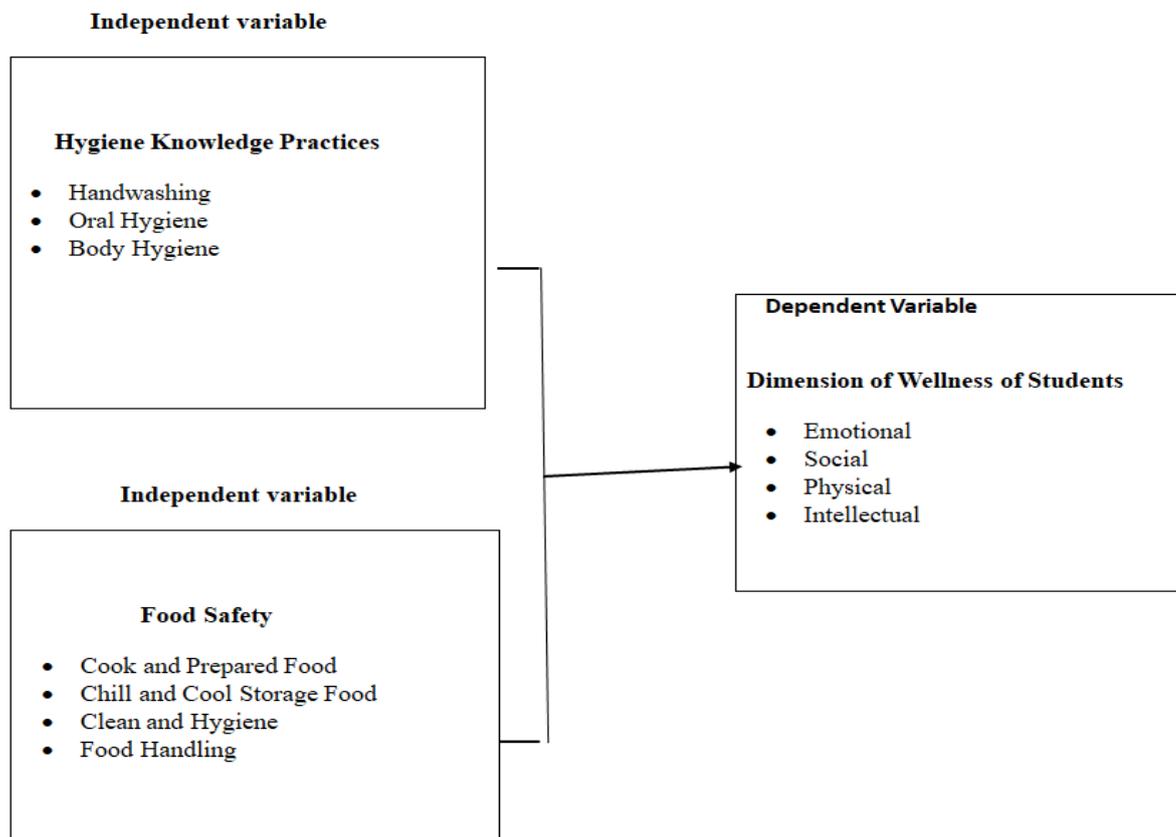


Figure 1. The Conceptual Framework of the Study

## Significance of the Study

This study may benefit several individuals, including school administrators, the Department of Education, teachers, canteen staff, students, and future researchers. School administrators can benefit from the findings of this study by developing healthier learning environments, making well-informed decisions about health policies, implementing methods to lower illness and improve student performance, enhancing student support systems, and cultivating a healthier school culture. The Department of Education may improve student wellness programs, assist schools in creating healthier cultures, establish standards for good diet and hygiene practices, inform health regulations, and promote healthier school settings. Teachers can have the opportunity to teach students how to be hygienic and how to safely prepare food.

In addition, students may benefit from learning healthy habits that enhance their well-being, making educated decisions, increasing their energy and academic performance, developing lifelong healthy habits, and knowing how to manage their personal health in the classroom are all beneficial to students. Canteen staff can benefit from this study on how to prepare food safely and being clean and hygienic when making the food of many students. Future researchers might benefit by building on findings, pinpointing intervention areas, investigating long-term effects, comparing results across contexts, and creating fresh approaches to encourage healthy behaviors in Senior High School students are all ways that future researchers may help.

## Definition of Terms

In order for the reader to have a better understanding of the terminologies used in the study, the following terms are defined operationally and conceptually.

**Hygiene Knowledge Practices.** Operationally, this hygiene knowledge and practice also referred to identify proper handwashing techniques, knowing when to wash hands, and observing actual hand hygiene behaviors; also, the definition of hygiene knowledge practices. Conceptually, made up of skills, knowledge, and techniques which demonstrate the value of hygiene knowledge practices. (Mohamed et al. 2024).

**Food Safety.** In order to maintain food quality and avoid contamination and foodborne illness, it refers to procedures such as appropriate food production, transportation, storage, and preparation. Operationally, it is made up of skills, techniques, knowledge, prevention, and strategies about keeping the food safe and preserved. Conceptually, food safety seeks to reduce consumer risks but does not ensure zero risk (Yasmin, 2021).

**Dimension Wellness of Students.** As used in this study, a holistic balance across life domains affecting learning and development, where students can be and do what they value. Conceptually, it encompasses the physical, psychological, and social wellness of students (Puja Khatri et al., 2024).

## METHOD

Discussed in this chapter were the research steps and procedures that were employed in this study. This chapter presented the research designs, research locale, sample, research instruments, data collection, and statistical tools.

### Research Design.

This study was a quantitative, non-experimental research design that uses correlation techniques to describe the hypothetical existence of relationships between two defined variables and determine the direction and degree of the situation exists. The purpose of this was to describe the situation as it existed at the time of the study to investigate the causes of the particular phenomenon. The descriptive correlation method was considered appropriate. A correlational design describes a study design for examining the relationships between two or more variables. It is also a correlational research design that investigates relationships between variables without the researcher, and this research refers to a non-experimental research method that studies statistical analysis (Devi et al., 2022). Claims that correlational research examines correlations between variables without the researchers'

assistance or control. Positive, negative, or zero correlations are commonly investigated through surveys, naturalistic observation, or secondary data (Bhandari, 2023).

This survey dealt with quantitative data about the phenomenon. The quantitative aspect was an appropriate schedule for gathering data and designed for the respondents to answer the questions. The process of gathering the data was based on the use of questionnaires. The focus of the study was to determine beyond cleanliness: the correlation between hygiene knowledge practices, food safety, and dimension wellness of students in school community the among Mawab district at Lorenzo S. Sarmiento Sr. National High School.

### Research Locale

This study was centered around secondary schools in the municipality of Mawab, located in Davao de Oro because the research was limited to this specific area and a particular group of respondents, the results might not be widely applicable to other regions or education systems. Although some similarities may exist in other locations, it was important to consider the findings mainly within this context.

Figure 2 features a map of the Philippines showing its 17 regions, with Mawab situated in Region XI, commonly known as the Davao Region. The figure also includes a more detailed map indicating where the respondents are based within Mawab. Mawab was a landlocked town in the province of Davao de Oro, which itself lies along the coast. It is roughly 103 kilometers from Davao City, the main city in Region XI, and about 21.1 kilometers from the provincial capital. The area of Mawab covers 136.10 square kilometers (52.55 square miles), making up close to 3% of Davao de Oro’s total land area. The 2020 Census reports that the municipality has a population of 39,631. Mawab has six high schools comprising both public and private institutions. However, this study was conducted specifically at Lorenzo S. Sarmiento Sr. National High School, located within the municipality of Mawab, Davao de Oro.

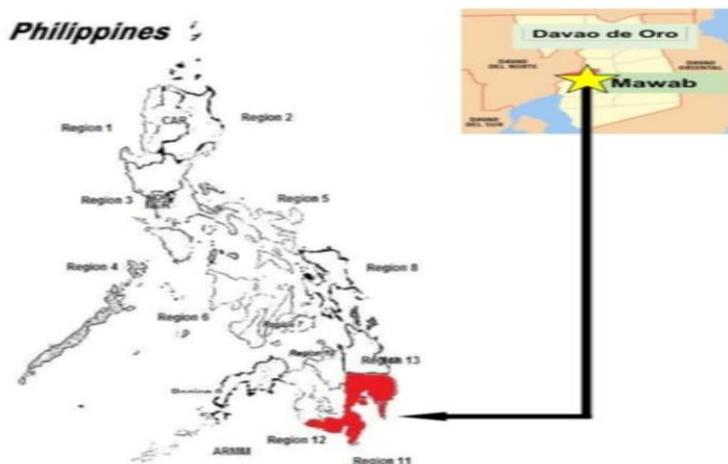


Figure 2. Map of the Philippines Highlighting Mawab, Davao de Oro

### Population and Sample

Simple random sampling was employed in selecting respondents. The respondents for this survey are chosen using simple random selection. The subjects include 183 Senior High School Caregiving Students from Mawab District at Lorenzo S. Sarmiento Sr. National High School. These individuals are considered ideal respondents for our research.

According to Kline (2016) stated that a sample size of 100 to 200 is sufficient for a simple research model with normal data distribution. In the case with Mawab at Lorenzo S. Sarmiento Sr. National High School, out of 204 individuals, a random sample of 183 respondents is selected. The chosen number of caregiving students, 183, was deemed statistically significant for representating the broader population of caregiving students in Lorenzo

S. Sarmiento Sr. National High School. The sample size is computed using the Raosoft sample size calculator. Shown in Table 1 will be the respondents of the study, which will be the caregiving students among Mawab, Davao de Oro, Philippines, for the school year 2025-2026.

Table 1. Population and Sample Size of Respondent

Sections	Population	Respondents
A	51	46
B	43	39
C	55	49
D	55	49
<b>TOTAL</b>	204	183

The distribution of the respondents, as shown in Table 1, was as follows: 46 caregiving students from section A from Lorenzo S. Sarmiento Sr. National High School; 39 caregiving students from section B from Lorenzo S. Sarmiento Sr. National High School; 49 caregiving students from section C from Lorenzo S. Sarmiento Sr. National High School; and 49 caregiving students from section D from Lorenzo S. Sarmiento Sr. National High School. The total number of caregiving students involved in our study is 183.

### Research Instruments

According to Blomgren et al. (2024) an instrument that will be used in the study was adapted from the descriptive standardised survey using the Hand Hygiene Knowledge Questionnaire among nursing students and nurses at a university (WHO); the second independent variable questionnaire was used by Alkhalidy A, et al. (2022) developing, translating, and validating a survey instrument for food safety questionnaires. Student wellness survey questionnaire a comprehensive survey of high school students assessing social, emotional, physical health, and safety, grounded in the Social Emotional Learning (SEL) (CASEL 2021). The first set of the questionnaire dealt with hygien knowledge practices. It is composed of four (3) indicators, such as handwashing, oral hygiene, and body hygiene. The contents of the instrument were presented to the group of experts for participation and rating.

In evaluating the level of hygiene knowledge practices, the following five (5) orderable gradations with their perspective range of means and descriptions will be considere.

Range of Mean	Descriptive Equivalent	
4.20 – 5.00	Very High	This means that the hygiene knowledge practices was very positive.
<b>Interpretation</b>		
3.40 – 4.19	High	This means that the hygiene knowledge practices was positive.
2.60 – 3.39	Moderate	This means that the hygiene knowledge practices was moderately positive.
1.80 – 2.59	Low	This means that the hygiene knowledge practices was less positive.
1.00 – 1.79	Very Low	This means that the hygiene knowledge practices was not positive.

The second set of instruments dealt with food safety. It is composed of four (4) indicators such as cook or prepared food, chill or cool storage of food, clean or hygiene, and food handling. For the food hygiene, the following five (5) orderable gradations with their respective range of means and descriptions will be considered.

Range of Mean	Descriptive Equivalent	
4.20 – 5.00	Very High	This means that the food safety was very positive.
<b>Interpretation</b>		
3.40 – 4.19	High	This means that the food safety was positive.
2.60 – 3.39	Moderate	This means that the food safety was moderately positive.
1.80 – 2.59	Low	This means that the food safety was less positive.
1.00 – 1.79	Very Low	This means that the food safety was not positive.

The third set of instruments was embarked with the dimension wellness of students, it was composed of four (4) indicators: emotional, social, physical, and intellectual. For the wellness of students, the following five orderable gradations with their respective range of means and descriptions will be considered.

Range of Mean	Descriptive Equivalent	
4.20 – 5.00	Very High	This means that the dimension in wellness of students was very positive.
<b>Interpretation</b>		
3.40 – 4.19	High	This means that the dimension in wellness of students was positive.
2.60 – 3.39	Moderate	This means that the dimension in wellness of students was moderately positive.
1.80 – 2.59	Low	This means that the dimension in wellness of students was less positive.
1.00 – 1.79	Very Low	This means that the dimension in wellness of students was not positive.

It was evaluated by experts with an overall rating of 4.86 .

### Data Collection

The following steps were followed as part of the procedure for gathering data. The researcher requested the validation of research questionnaires and validated them. They asked for an endorsement from their research teacher, Noli P. Julosan, PhD, to conduct the study. Next, a letter to conduct the study was secured from Lorenzo S. Sarmiento Sr. National High School from the Assistant School principal II, Ma’am Roberta A. Javier, as well as the School Assistant School Principal of Lorenzo National High School and was forwarded to caregiving students who participated in the data collection.

Next, informed consent was given and the data was collected in a face-to-face procedure. Upon giving the form, the researchers was explained to the respondents the details of the study, specifically its purpose as well as the nature of their participation. All questions about their participation in the study and how the data will be collected

and use utilize were addressed fully. Upon the voluntary acceptance of the respondents to take part in the study, the form was collected and kept for data gathering purposes. Moreover, there were no other personal information collected from the respondents aside from the essential information that were needed in the study. All data was kept confidential by the researcher and utilized only during the conduct of the study. After which, the forms were stored to avoid unnecessary utilization of information.

Then, the questionnaires was distributed to the respondents, aided by an important person who facilitates distribution beyond our institution. During the conduct of the data gathering, the instructions was clearly explained to each of them and ensure that their responses will be kept confidential by the researcher, as their names would not appear in any part of the study or in the form they submitted. Each of them was given enough time to answer all the questionnaires and checked if all items will be filled out by the respondents. Lastly, the researchers colleted all the survey questionnaire and prepared them for statistical treatment. This was done by the researcher and validated by the statistical form Lorenzo S. Sarmiento Sr. National High School for processing. The interpretation of the data was done by the researcher. With the data, conclusions wa continued, and recommendations were formulated based on the study.

### Statistical tool

The following statistical tools was employed for data analysis and interpretation in this study:

**Mean.** This statistical measure was utilized to evaluate the extent of hygiene knowledge practices and food safety, as well the dimension in wellness of students in school community across the Mawab District.

**Spearman's rho correlation.** This tool was applied to assess the significance and the strength of the relationship of hygiene knowledge practices and food safety as correlates to dimension in wellness of students in school community.

**Multiple regression analysis.** This analysis was performed to determine how hygiene knowledge practices and food safety as correlates to dimension in dimension wellness of students in school community among Mawab District.

**Ethical Considerations.** Several ethical considerations with significant Implications were addressed in this quantitative study, primarily related to the research methodology. These concerns pertain to the right to conduct the study, as well as ensuring participant confidentiality and anonymity. Following a thorough review of the study protocol and adherence to standardized guidelines especially regarding population and data handling the researchers were ensured full compliance with ethical standards throughout the research process. These included, but will not limited to:

**Voluntary participation.** Students was invited to participate freely without any fear of sanctions, penalties, or loss of benefits. They was clearly informed about the study's objectives and potential advantages. The participants rights to contribute knowledge voluntarily will be respected and formally acknowledged.

**Privacy and confidentiality.** The researchers safeguarded the personal information of all respondents, maintaining confidentiality and protecting sensitive data within the scope of the study. Informed consent process. The research instruments avoided complex technical language that would hinder understanding, thereby helping respondents clearly comprehend the benefits and scope of the study, including any actions taken by the school principal as a result.

**Recruitment.** The study detailed how respondents was selected, including the distribution methods for questionnaires and criteria for choosing participants.

**Risk assessment.** No significant physical, psychological, or socioeconomic qrisks will be identified for study participants.

**Benefits.** Findings from this study was expected to aid students by providing valuable information regarding hygiene knowledge practices, food safety, and dimension wellness of students.

**Fabrication.** There was no indication or evidence of any fabricated data or false statements within the study findings.

**Falsification.** The research was contained no deliberate alteration or manipulation of data to fit pre-existing theories or exaggerated claims.

**Conflict of Interest (COI).** The study were free from conflicts of interest; no secondary motives such as financial or academic rewards influenced the professional judgment or validity of the research.

**Deception.** No deceptive practices or misleading content that would harm respondents that will be present in the study.

**Permission from the Organization/Location.** The research was conducted with formal approval from the relevant authorities in Davao de Oro. A formal letter of consent was sent to all concern parties before data collection begins.

**Authorship.** The researchers were Grade 12 students specializing in TVL Caregiving Strand at Lorenzo S. Sarmiento Sr. National High School. This research underwent multiple layers of review and conform to the ethical protocols establish by the School Ethics Review Committee. The data that was gathered was analyzed for consistency to ensure the reliability of the research questionnaire.

## RESULTS

This part of the paper presented the data and analysis of findings obtained from the responses in the questionnaire based on the research objectives presented in the first chapter of this paper. Tables were arranged under the following subheadings: Level of Hygiene Knowledge Practices, Level of Food Safety, Level of Dimension Wellness of Students, Significant Relationship between Hygiene Knowledge Practices and Dimension Wellness of Students, Significant Relationship between Food Safety and Dimension Wellness of Students, Multiple Regression Analysis on the Influence of the domain of Hygiene Knowledge Practices towards Dimension Wellness of Students, and Multiple Regression Analysis on the Influence of the domain of a Food Safety towards the Dimension Wellness of Students among Senior High School Students at Lorenzo S. Sarmiento Sr. National High School with their corresponding indicators.

### Level of Hygiene Knowledge Practices

Table 2 shows the level of Hygiene Knowledge Practices in terms of content handwashing, oral hygiene, and body hygiene. The overall mean is 4.51, described as very high, with a standard deviation of 0.54. The very 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 Hygiene Knowledge Practices are very much positive in terms of hand washing, oral hygiene, and body hygiene.

The cited overall mean score was the result obtained from the following computed mean scores from highest to lowest: 4.55 or very high for hand washing with a standard deviation of 0.57; 4.55 or very high for oral hygiene with a standard deviation of 0.63; and 4.41 or very high for body hygiene with a standard deviation of 0.54.

Table 2. Level of Hygiene Knowledge Practices Indicators

Indicators	Mean	SD	Descriptive Equivalent
Hand Washing	4.55	0.57	Very High
Oral Hygiene	4.55	0.63	Vey High
Boyd Hygiene	4.41	0.63	Very High
<b>Overall</b>	<b>4.51</b>	<b>0.54</b>	<b>Very High</b>

*Hand Washing*, which has the highest core among all the indicators. It is all about being clean and safe about your hands to avoid any bacteria and diseases. By washing the student’s hands and using sanitizers they do not have to worry about using their hands to eat or touch their face and body. Thus, considering the health and cleanliness of the students. It helps students to improve their health while also improving their academic performance. This contributes to the successful realization of the expected outcomes.

In *Oral Hygiene*, refers to the daily practices on keeping the students mouth clean and healthy, such as brushing, flossing, and regular dental checkups. It is important because good oral hygiene prevents cavities, any bacteria that could be in your mouth and bad breath by removing plaque and harmful bacteria from the teeth and gums. Maintaining oral hygiene also supports overall health, since poor oral care can lead to infections and other health problems. By maintaining the cleanliness and hygiene for the students mouth they can enjoy eating on lunch and recess time and can also speak confident in front without worrying about bad breath.

*Body Hygiene*, it is keeping the students body clean and healthy from any dirt, germs, sweat and more. Bathing regularly, washing hands, and wearing clean clothes can help the students be more hygienic. It is important because good body hygiene. Practicing proper body hygiene also helps prevent the spread of infections to others and supports overall health and comfort. By maintaining body hygiene of student as they can feel more confident, fresh, and promote a cleanliness for themselves.

### Level of Food Safety

Shown in Table 3 are the mean scores for the indicators of Food Safety, with an overall mean of 4.33 and described as very high with a standard deviation of 0.52. The very high level could be attributed to the very high rating given by the respondents in all indicators. This indicates that the respondent's responses to the level of food safety are very much positive in terms of cook and prepared food, clean and hygiene, chill and cool storage of food, and food handling.

The cited overall mean score was the result obtained from the following computed mean scores from highest to lowest: 4.46 or very high for clean and hygiene, reach with a standard deviation of 0.60; 4.33 or very high for cook and prepared food with a standard deviation of 0.61; and 4.32 or very high for food handling with a standard deviation of 0.66.

Table 3. Level of Food Safety Indicators

Indicators	Mean	SD	Descriptive Equivalent
<b>Cook and Prepared Food</b>	4.33	0.61	Very High
<b>Chill and Cool Storage of Food</b>	4.20	0.66	Very High
<b>Clean and Hygiene</b>	4.46	0.60	Very High
<b>Food Handling</b>	4.32	0.66	Very High
<b>Overall</b>	<b>4.33</b>	<b>0.52</b>	<b>Very High</b>

*Clean and Hygiene*, while preparing food for students, keeping hands, utensils, surfaces, and ingredients clean to prevent contamination of other foods or any contamination of their foods. This is important because proper food hygiene helps reduce the spread of bacteria and germs such as food borne diseases that can cause food poisoning and illness. Washing hands and using clean tools safety of meals. Practicing good hygiene during food preparation keeps food safe to eat and helps protect the health of students.

*Cooking and Prepared Food*, it means handling and heating food correctly to make it safe and ready to eat for students so that they will consume food safely. This is important because proper cooking kills or reduce the chances of harmful bacteria and germs that can cause foodborne illnesses and diseases. Preparing foods the right

way also improves its taste, texture, and nutritional value. By cooking and preparing food carefully, students can be sure about consuming meals.

*Food Handling*, it refers to properly preparing meals such as, washing hands, using cleaning the utensils before, separating raw and cooked foods, and storing ingredients safely to prevent it to go bad. This is important because correct food handling prevents contamination and reduces the risk of foodborne illnesses. Safe handling also helps maintain the freshness, and nutrition of food. By practicing proper food handling, people protect their health and ensure the food they prepare is safe to eat.

*Chill and Cool Storage Food*, it plays a vital role in keeping the student’s food fresh and reducing the chances of getting bad fast, especially in hot weather. Foods, such as fruits, vegetables, and lightly prepared meals, helps make the snacks and lunches of students to keep it safe and fresh. Eating foods that was not chilled and has stayed on the table, it could lead to fast rooting. Overall, including chill or cool food is important for maintaining foods of the students to stay fresh, healthy, and improve overall well-being.

### Level of Dimension Wellness of Students

Table 4 presents the mean scores of the Dimension Wellness of Students in terms of emotional, social, physical, and intellectual. The overall mean is 4.24 with an equivalent description of very high and with a standard deviation of 0.52. This implies that the respondents’ responses to the level of students’ wellness are very much positive in terms of emotional, social, physical, and intellectual.

The cited overall mean score was the result obtained from the following computed mean scores from highest to lowest: 4.24 or very high for social with a standard deviation of 0.60; 4.26 or very high intellectual with a standard deviation of 0.63; 4.22 or very high emotional with a standard deviation of 0.66; and 4.20 or very high for physical with a standard deviation of 0.67.

Table 4. Level of Dimension of Wellness of Students Indicators

Indicators	Mean	SD	Descriptive Equivalent
Emotional	4.22	0.66	Very High
Physical	4.20	0.67	Vey High
Social	4.29	0.60	Very High
Intellectual	4.26	0.63	Very High
Overall	<b>4.24</b>	<b>0.52</b>	<b>Very High</b>

*Social*, refers to how people interact, communicate, and work with others in daily life can improve the students’ wellness. It is important because positive social behavior helps build strong relationships, encourages cooperation, reduces conflict and relieves stress for the students. Good social skills allow people to share ideas, support one another, and work together effectively. By practicing respectful and kind social behavior, individuals create a positive environment and strengthen their sense of community.

*Intellectual*, it is the growth of the mind through learning, thinking, problem-solving, and understanding new ideas which can also enhance the student’s wellness by thinking how they can improve. It is important because it helps individuals make informed decisions, solve problems effectively, and adapt to new situations. Developing intellectual skills also enhances creativity, critical thinking, and knowledge, which are essential for personal growth and success in school, work, and everyday life. By focusing on intellectual development, people improve their ability to learn, think clearly, and contribute meaningfully to society.

*Emotional*, it is about understanding, managing, and expressing your emotions in a healthy way. It is important because it helps people cope with stress, build strong relationships, and make thoughtful decisions which can improve your wellness by taking good care of the student’s emotion or by expressing. Good emotional health also improves self-confidence, resilience, and overall happiness. By taking care of emotional well-being, individuals can handle challenges better, maintain positive connections with other students, and lead a more balanced and fulfilling life.

*Physical*, this refers to the condition and well-being of the body, maintained through regular exercise, proper nutrition, adequate rest, and good hygiene which can improve the wellness of students. It is important because a healthy body helps people perform daily activities efficiently, prevents illnesses, and increases energy and strength. Maintaining physical health also supports mental, emotional well-being, and maintain good wellness of students as a strong body contributes to a positive mood and reduced stress. By taking care of physical health, individuals can enjoy a longer, more active, and productive life.

**Significance on the Relationship Between Hygiene Knowledge Practices and Dimension Wellness of Students**

One crucial purpose of this study is to determine whether hygiene knowledge practices have a significant relationship with dimension wellness of students. Spearman’s rho correlation was used to determine the correlation between the two variables. The results of the computation are shown in Table 5.

Likewise, the results revealed that Hygiene Knowledge Practices and Dimension Wellness of Students have a significant relationship. This result is due to a p-value of <.001, which is less than the 0.05 p-value. Hence, this leads to the decision that the null hypothesis, which stated that there is no significant relationship between hygiene knowledge practices and dimension wellness of students, is rejected. Moreover, Spearman’s rho correlation, which is 0.430, further means that there is a moderate correlation between the hygiene knowledge practices and dimension wellness students.

Table 5. Significance on the Relationship Between Hygiene Knowledge Practices and Dimension Wellness of Students

		Hygiene Practices	Knowledge	Dimension Wellness of Students
<b>Hygiene Knowledge Practices</b>	Spearman’s rho correlation	-----		
<b>Dimension Wellness of Students</b>	Spearman’s rho correlation	0.430	<.001	---- ----

*\*Significant at 0.05 significant level*

**Significance on the Relationship Between Food Safety and Dimension Wellness of Students**

One crucial purpose of this study is to determine whether food safety has a significant relationship with dimension wellness of students. Spearman’s rho correlation was used to determine the correlation between the two variables. The results of the computation are shown in Table 6.

Likewise, the results revealed that Food Safety and Dimension Wellness of Students have a significant relationship. This result is due to a p-value of <.001, which is less than the 0.05 p-value. Hence, this leads to the decision that the null hypothesis, which stated that there is no significant relationship between food safety and dimension wellness of students, is rejected. Moreover, Spearman’s rho correlation, which is 0.564, further means that there is a moderate correlation between the food safety and dimension wellness students.

Table 6. Significance on the Relationship Between Food Safety and Dimension Wellness of Students

			Food Safety	Dimension Wellness of Students
Food Safety	Spearman's correlation	rho	----- -----	
Dimension Wellness of Students	Spearman's correlation	rho	0.564 <.001	---- ----

\*Significant at 0.05 significant level

### Multiple Regression Analysis on the Influence of the Domain of Hygiene Knowledge Practices on Students Wellness

The data shown in Table 7 are the regression coefficients to test the significant influence of hygiene knowledge practices and dimension wellness of students at Lorenzo S. Sarmiento Sr. National High School. Using the Multiple Regression Analysis, the data revealed that the influence of hygiene knowledge practices and dimension wellness of students at Lorenzo S. Sarmiento Sr. National High School and has a f-value of 22.97 and a corresponding significance p-value of < .001, which is significant.

This means that the level of hygiene knowledge practices influences the dimension wellness students since the probability is less than 0.05. The coefficient of determination ( $R^2$ ), which is 0.278, connotes that 27.8% of the variation in the level of hygiene knowledge practices influences the dimension wellness students. The remaining 72.2% is chance variation, which suggests that other factors beyond the scope of this study may also be attributed to dimension wellness of students.

Table 7. Multiple Regression Analysis on the Influence of the Domain of Hygiene Knowledge Practices on Dimension Wellness of Students.

Hygiene Knowledge Practices	Coefficient	t-value	p-value	Decision $\alpha=0.05$
Hand Washing	0.168	1.745	.083	$H_o$ is not rejected
Oral Hygiene	-0.043	-0.460	.646	$H_o$ is not rejected
Body Hygiene	0.431*	4.869	< .001	$H_o$ is rejected
<b>Dependent Variable: Dimension Wellness of Students</b>				

\*  $p < 0.05$      $R = 0.527$  \*     $R^2 = 0.278$      $F - value = 22.97$      $p < .001$

The indicator hand washing has a coefficient of 0.168\*; a t-value of 1.745; and a p-value of 0.083, which is greater than the level of significance at 0.05. Therefore, this implies that content handwashing has no significant influence on dimension wellness of students, as experienced by senior high school students at Lorenzo S. Sarmiento Sr. National High School.

Also, oral hygiene has a coefficient of -0.043\*; a t-value of -0.460, and a p-value of 0.646, which is greater than the level of significance at 0.05. Therefore, this indicates that the oral hygiene, has no significant influence to dimension wellness of students.

Lastly, body hygiene has a coefficient of 0.431\*; a t-value of 4.869; and a p-value of <.001 which is greater than the level of significance at 0.05. Therefore, this implies that body hygiene has a significant influence on dimension wellness students, as assessed by senior high school students at Lorenzo S. Sarmiento Sr. National

High School. Overall, this leads to the decision that the null hypothesis of body hygiene that there is a no domain in Hygiene Knowledge Practices that would significantly influence Dimension Wellness of Students, is rejected.

### Multiple Regression Analysis on the Influence of the Domain of Food Safety and Dimension Wellness of Students

Data shown in Table 8 are the regression coefficients to test the significant influence of food safety and dimension wellness of students. Using the Multiple Regression Analysis, the data revealed that the influence of food safety and dimension of wellness of students has f-value of 20.22 and corresponding significance p-value of <.001 which is significant.

This means that the level of food safety influences the dimension wellness of students since the probability is less than 0.05. The coefficient of determination ( $R^2$ ) which is 0.312 indicates that 31% of the variation in the level of food safety influences the dimension wellness of students. The remaining 69% is chance variation which suggests that other factors beyond the scope of this study may also be attributed to dimension wellness of students.

Table 8. Multiple Regression Analysis on the Influence of the Domain of Food Safety on Dimension Wellness of Students.

Food Safety	Coefficient	t-value	p-value	Decision $\alpha=0.05$
Cook and Prepared Food	0.309*	3.417	<.001	$H_o$ is rejected
Chill and Cool Storage Food	0.082	1.011	.314	$H_o$ is not rejected
Clean and Hygiene	0.083	0.877	.382	$H_o$ is not rejected
Food Handling	0.186*	2.107	.037	$H_o$ is rejected
<b>Dependent Variable: Dimension Wellness of Students</b>				

\*  $p < 0.05$      $R = 0.559$  \*     $R^2 = 0.312$      $F - value = 20.22$      $p < .001$

The indicator of cook and prepared food has a coefficient of 0.309\*; a t-value of 3.417; and a p value of <.001 which is less than the level of significance at 0.05. Therefore, this indicates that control is the domain of food safety which has a significant influence to domain wellness of students.

Similarly, chill and cool storage food has a coefficient of 0.082\*; a t-value of 1.011; and a p value of .314 which is less than the level of significance at 0.05. Therefore, this also implies that chill or cool storage of food has no significant influence to dimension wellness of students.

Additionally, clean and hygiene got a coefficient of 0.083\*; a t-value of 0.877; and a p value of .382 which is greater than the level of significance at 0.05. Therefore, this implies that there is no significant influence.

Finally, food handling got a coefficient of 0.186\*; a t-value of 2.107; and a p value of .037 which is less than the level of significance at 0.05. Therefore, this implies that food handling has a significant influence on dimension of wellness of students as experienced by senior high school students. In conclusion, this leads to the decision that the fourth null hypothesis, which stated that there is no domain in food safety that would significantly influence dimension wellness of students, is also rejected.

## DISCUSSION

As discuss on the previous chapter, the data on hygiene knowledge practices, food safety, and dimension wellness of students are presented in this chapter and the said discussions are based on the findings appeared in the previous section. This section also offers additional research and related work on the study's findings, as well as

the conclusions reached, and the helpful and pertinent recommendations made by the researchers in light of those findings.

### **Level of Hygiene Knowledge Practices**

In the preceding chapter, the findings regarding the hygiene knowledge practices were presented at Lorenzo S. Sarmiento Sr. National High School. It revealed that the level of hygiene knowledge practices with the indicator's handwashing, oral hygiene, and body hygiene explained that there was a positive impact to the wellness of students, suggesting a significant presence of different factors that are present in students having knowledge about hygiene practices.

The respondents at Lorenzo S. Sarmiento Sr. National High School exhibited positive perceptions and elevated capabilities in fulfilling students in school community. These encompass challenges related to handwashing, oral hygiene, and body hygiene. This was positive level of hygiene knowledge practices on student's community.

Hygiene knowledge practice can be described as a practice to assist an individual in avoiding diseases, it is also advantageous by practicing through hygiene knowledge, which is to reduce the occurrence of diseases and enhance the condition of health (Kumar et al., 2020). Moreover, practicing cleanliness and hygiene, good health and regular hygiene will play a significant role in reducing the global burden of infectious diseases, which are largely due to bacterial causes, that can easily spread through direct and indirect contact which kill approximately 17 million individuals every year (Lai & Kaur, 2020).

### **Level of Food Safety**

In the previous chapter, the study reported the level food safety. It revealed that food safety will be described as very high. All four indicators for this variable were also described as very high, suggesting a significant correlation with the wellness of students.

The respondents at Lorenzo S. Sarmiento Sr. National High School exhibited positive impact and relationship of capabilities in fulfilling students in school community. These encompass challenges related to cook or prepared of food, chill or cool storage of food, clean or hygiene, and food handling. This was positive level of hygiene knowledge practices on student's community.

Extensive reviews in food science and food safety provide extensive discussions of microbiological hazards in food chains, which have impacts on consumers' health and safety (Ift, 2024). Shown that focused training among migrant workers is improving knowledge and adherence to food safety practices and food safety education and training enhance food workers' handling habits and attitude to minimize risks of foodborne illnesses (Aljasir, 2025). Likewise, the review in the food and nutrition journal underscored the effect of educational interventions on food handlers' behavior and the outcome of the consumers' health and wellbeing, particularly the students (Food & Nutrition, 2023).

### **Level of Dimension Wellness of Students**

Presented in the previous chapter were the result of the level of dimension wellness of students as described as very high. All four indicators for this variable were also described as very high. It implies that dimension wellness of students is much felt among students.

The respondents at Lorenzo S. Sarmiento Sr. National High School exhibited positive impact and relationship of capabilities in fulfilling students in school community. These encompass challenges related emotional, physical, social, and intellectual. This was positive level of hygiene knowledge practices on student's community.

Moreover, well-being of students involves physical, psychological, and social well-being of students and peers (Puja Khatri et al., 2024). In congruence to the study of Klein & McCarthy (2022), which states that enjoyable leisure activities, creating social support networks, and building resiliency can reduce levels of distress in students. Also, early wellness programs comprised mental health, academic achievement, and disability services,

curriculum seminars, wellness committee activities, and student-proposed activities (Chatterjee et al., 2022). School engagement is also an important predictor of student attainment, school completion, and recently, student well-being (Nelson et al., 2020).

### **Significance on the Relationship Between Hygiene Knowledge Practices and Dimension Wellness of Students**

The study's results unveiled a significant relationship between the hygiene knowledge practices and the dimension wellness of students. The p value indicated a correlation between these two variables. This correlation suggests that hygiene knowledge practices increase that the corresponding build a dimension wellness of students.

The findings of the study revealed a significant relationship between students' hygiene knowledge practices and their overall result of dimension wellness of students. The p-value indicated a statistically significant correlation between the two variables, suggesting that increased awareness and proper practice of hygiene are associated with improved dimension wellness of students.

Hygiene knowledge and practices have a significant relationship with the overall wellness of students. Proper hygiene behaviors contribute to disease prevention, improved physical health, and better daily functioning in school environments (Kumar et al., 2020; Singh et al., 2023). Handwashing is a key practice that reduces the transmission of infectious diseases and supports students' health and school attendance (Eshetu, 2020; Alozie et al., 2023). Likewise, good oral hygiene promotes overall health and quality of life, while poor oral practices can cause discomfort and health problems that affect learning (Beyene et al., 2021; Gizaw et al., 2024). Maintaining body hygiene also helps prevent skin infections and supports physical comfort and self-confidence among students (Ames et al., 2023; Sukmawati, 2025). Overall, these indicators show that strong hygiene knowledge and consistent hygiene practices are essential in enhancing students' wellness and well-being.

### **Significance on the Relationship Between Food Safety and Dimension Wellness of Students**

The results of the study revealed a significant relationship between students' food safety practices and their overall dimension wellness of students. The findings indicate that higher adherence to proper food safety behaviors corresponds to improved dimension wellness of students, thereby rejecting the null hypothesis and confirming a meaningful association between these variables. This suggests that students who consistently apply safe food handling and hygiene practices are more likely to maintain better wellness, highlighting the importance of food safety knowledge and practices in supporting students' overall well-being.

The findings of the study revealed a significant relationship between students' food safety their overall dimension wellness of students. The p-value indicated a statistically significant correlation between the two variables, suggesting that increased awareness and proper food safety are associated with improved dimension wellness of students.

Hygiene knowledge and food safety practices are significantly linked to students' overall wellness. Proper cooking and food preparation help prevent foodborne illnesses, supporting students' physical health and nutrition (WHO, 2024; FDA, 2022). Effective chilling and cool storage reduce bacterial growth and illness risk, which helps maintain regular school attendance and well-being (Hedeem & Smith, 2020). Correct food handling and cleanliness, including proper storage, separation of foods, and sanitation, minimize contamination and disease, contributing to students' physical comfort and emotional security (Johnson et al., 2023; Lindberg et al., 2024). Overall, strong food hygiene knowledge and practices enhance students' physical and emotional wellness and support a healthy school environment.

### **Multiple Regression Analysis on the Influence of the Domain of Hygiene**

#### **Knowledge Practices on Dimension Wellness of Students**

The regression analysis investigating the influence of hygiene knowledge practices on dimension wellness of students indicates that one out of three domains, namely learning body hygiene have a significant impact on

wellness of students. On the other hand, handwashing and oral hygiene were found to be insignificant in influencing the dimension wellness of students.

The findings of the study revealed a significant relationship between students' hygiene their overall dimension wellness of students. The p-value indicated a statistically significant correlation between the two variables, suggesting that increased awareness and proper hygiene are associated with improved dimension wellness of students.

The findings of the study revealed a significant relationship between students' hygiene knowledge practices and their overall dimension wellness of students. The p-value indicated a statistically significant influences correlation between the two variables, suggesting that increased awareness and proper practice of hygiene are associated with improved dimension wellness of students.

Hygiene knowledge and practices directly influence the physical, emotional, and social wellness of students. Handwashing influences physical wellness by preventing infectious diseases such as diarrhea and respiratory infections, which reduces illness-related absenteeism and supports regular school participation (Eshetu, 2020; Alozie et al., 2023). Oral hygiene influences both physical and emotional wellness, as poor oral health causes pain, discomfort, and systemic conditions that lower quality of life and affect students' concentration and confidence in school (Beyene et al., 2021; Gizaw et al., 2024). Body hygiene influences physical and social wellness by preventing skin infections, body odor, and hygiene-related stigma, thereby improving students' comfort, self-esteem, and social interactions (Ames et al., 2023; Sukmawati, 2025). Overall, adequate hygiene knowledge and proper hygiene practices enhance students' overall wellness by maintaining health, supporting emotional stability, and promoting positive social engagement.

## **Multiple Regression Analysis on the Influence of the Domain of Food**

### **Safety and Dimension Wellness of Students**

The regression analysis investigating the influence of food safety on dimension wellness of students indicates that one out of three domains, namely learning body hygiene have a significant impact on wellness of students. On the other cook or prepared food, chill or cool food, clean or hygiene, and food handling were found to be insignificant in influencing the dimension wellness of students.

The findings of the study revealed a significant relationship between students' food safety their overall dimension wellness of students. The p-value indicated a statistically significant correlation between the two variables, suggesting that increased awareness and proper food safety are associated with improved dimension wellness of students.

Promoting healthy dietary choices also promote lifelong wellness habits which would continue beyond the university years. In general, awareness of food safety contributes towards holistic student wellness (Fernandez, 2024). Food safety extends overall student wellness as well, in that it makes people's learning spaces safer, especially students at school area (Torres, 2021). Food safety indirectly nurtures academic and emotional well-being (Okafor, 2024) The impact of food safety on student wellness can also be maximally enhanced through educational interventions. Educational interventions are an effective means by which the role of food safety in student wellness can indeed be enhanced (Hernandez, 2020). Educational interventions are one of the best ways to use food safety to make the effects of how healthy students are going to be healthier and increases their wellness (Hernandez, 2020). Continuous safe practices benefit the overall quality of life and daily living, it is highly essential to make the food safety education work with the students' overall health (Choi, 2024).

## **CONCLUSION**

Conclusions are drawn based on the results of the study. The study concludes that the level of influence of hygiene knowledge practices was very high, as well as its indicators, namely, handwashing, oral hygiene, and planning, and body hygiene. Furthermore, the study also concludes that the level of influence of food safety was very high, along with its indicators, namely, cook or prepared food, chill or cool storage of food, clean or hygiene

and food handling. Moreover, the overall level of dimension wellness of students was very high, encompassing the three domains: emotional, physical, social, and intellectual. Furthermore, the findings contradict the theoretical assumption that there is no significant relationship between the hygiene knowledge practices and food safety on dimension wellness of students. Moreover, it was analyzed through Spearman's rho product moment correlation that hygiene knowledge practices have a very high with the wellness of students, while food safety shows very high correlation with the dimension wellness of students. Contrary to the assumption, the study concludes that hygiene knowledge practices and food safety have significant relationship and influence to dimension wellness of students.

## RECOMMENDATIONS

Based on the findings and the results of the study, the following recommendations have been formulated by the researchers on how hygiene knowledge practices and food safety was improved to successfully foster dimension wellness of students within the school community.

To enhance hygiene knowledge practices and food safety, DepEd can expand WASH programs with modules on handwashing before meals and daily oral hygiene routines checks to reduce infections, as the results of the indicators it shows that handwashing and oral hygiene same with chill or cool food storage and clean or hygiene has not rejected the null hypothesis, hence it can have a great opportunity to fix these two problems inside the school community. It can also establish FSP programs to ensure that what the students consume are safe in terms of cooking or preparing it, chilling or cooling the left-over foods, handling the foods well and also being clean of the area when making the food. Providing support for these collaborative platforms will allow students to share effective knowledge about hygiene practices and food safety.

School administrators at Lorenzo S. Sarmiento Sr. National High School should actively promote and expand the FSP and WASH program within school area. Additionally, ensuring cleanliness of surfaces, chill perishable foods below 5°C, cook meats to 75°C, and train staff on safe handling to prevent contamination, especially as the null hypothesis for chill or cool food storage and clean or hygiene has not been rejected same with handwashing and oral hygiene. These practices directly boost wellness by minimizing foodborne illnesses. Having knowledge about hygiene practices can improve the well-being of students to improve their wellness. Which students and teachers can gain a huge benefit from this study to consume food without worrying about the safety. By addressing the hygiene knowledge practices and food safety students will be better equipped to handle unforeseen obstacles, resulting in improved overall wellbeing and effectiveness in improving the student's wellness.

Students can have knowledge about hygiene-food safety links, improving students' intellectual grasp and emotional confidence in health routines. Students gaining knowledge about hygiene practices and food safety can help by knowing what are the hygiene practices before cooking or knowing what are the necessities need to be safe when preparing food.

Canteen Staff can also benefit as they can they can learn new things to be more hygienic and also having knowledge about how to safely prepare food for the students and teachers.

Teachers can also get knowledge about hygiene practices and food safety by teaching it to students on how to be hygienic and also how to safely prepare foods.

These recommendations aim to create a supportive and growth-oriented environment for students, fostering continuous improvement in both hygiene knowledge practices and food safety. Through collaborative learning, reflective practices, and exposure to diverse knowledge about hygiene and food safety, students can enhance their knowledge and practices for the benefit of student's health and overall wellness.

Lastly, future research could explore alternative factors beyond hygiene knowledge practices and food safety that could potentially influence wellness of students. Researchers could use our study for upcoming studies related to wellness students. Furthermore, expanding the scope of hygiene knowledge practices and food safety

to the dimension of wellness of students in school community in a broader context could be a valuable avenue for future research.

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