



MINDFULNESS, ACCESS TO HYGIENE SUPPLIES AND ASSESSMENT OF THE SCHOOL'S HYGIENE POLICY IMPLEMENTATION: DETERMINANTS OF HYGIENE AND SAFETY PRACTICES

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ABSTRACT

Cleanliness and being able to spot hazards are important for health and safety. This study examined how mindfulness, hygiene supplies, and the implementation of school hygiene policies influence hygiene and safety practices among Technical-Professional Track students. Many schools have hygiene programs, but few studies have looked at how mindfulness, hygiene supplies, and policy implementation together affect students' behavior. This study used a descriptive-correlational method and a questionnaire that underwent factor analysis. Descriptive statistics, such as frequency, percentage, and mean, were used to describe mindfulness, access to supplies, policy implementation, and hygiene and safety practices in *mise en place* and service. Multiple regression analysis was used to see if these factors could predict students' hygiene and safety practices. The results showed that the model was statistically significant, indicating that the predictors explained a meaningful portion of the differences in students' hygiene and safety practices. Mindfulness and the enforcement of hygiene policies were important predictors, but access to supplies was not. This means that awareness and strong policy enforcement are more important than simply giving students resources. The results of the study further aligned with the United Nations Sustainable Development Goals, particularly SDG 3 (Good Health and Well-being) and SDG 4 (Quality Education). By encouraging healthy practices and ensuring safe learning environments, it contributes to an educational framework that integrates life skills with technical training. The study recommends that schools monitor hygiene supplies and ensure policies are enforced to help students maintain good hygiene and safety habits.

Keywords: *hygiene and safety practices, hygiene policy implementation, mindfulness, hygiene supplies, mise en place, service*

INTRODUCTION

Hygiene and safety are vital to students' well-being and future job preparation; however, evidence from around the world shows that such practices are not always followed. According to the World Health Organization, safe learning environments are fundamental to skills development for future employment. In the Philippines, there has been progress in access to hygiene facilities and safe practices under the WASH in Schools program (UNICEF, 2021). The Strengthened Senior High School Curriculum also integrates aspects of hygiene and sanitation into its Technical-Professional Track, considering students' future employability (DepEd, 2025). However, students in vocational electives with longer hours often struggle to maintain good hygiene and safety habits.

Studies show that knowing about hygiene and safety does not always lead to good habits. Hussain (2021) reported that only 40% of students felt confident handling workplace safety issues. UNICEF (2023) and WHO (2024) also reported that one in three children lacks basic hygiene services at school, with 28% of schools lacking sanitation facilities and 42% lacking hygiene services. These problems affect millions of students worldwide.

This study aimed to examine how mindfulness, access to hygiene supplies, and the school's hygiene policies influence students' hygiene and safety habits in the Technical-Professional Track. By focusing on high-risk, skill-based learning settings, the research identified the main factors that shaped student behavior. The results helped guide targeted actions to improve well-being, support accountability, and make sure practices met industry standards. The study was based on the idea that good education integrates social and emotional growth with technical skills. It highlighted the need to encourage mindfulness, provide steady access to hygiene resources, and enforce school rules to keep students safe and ready for their careers.

Research Questions

This study sought to determine the influence of mindfulness, access to hygiene supplies, and assessment of the school's hygiene policy implementation on the hygiene and safety practices among students in the Technical-Professional Track. Specifically, it addressed the following research questions:

1. What is the participants' level of mindfulness in the following aspects:
 - 1.1 Personal Hygiene;
 - 1.2 Safety risks;
 - 1.3 Safety Protocols; and
 - 1.4 Hazard Identification?

2. What is the participants' level of access to hygiene supplies?
3. What is the participants' assessment of the school's hygiene policy implementation?
4. What is the participants' level of hygiene and safety practices in the following:
 - 4.1 *Mise en place*; and
 - 4.3 Service?
5. Do the participants' mindfulness, access to hygiene supplies, and assessment of the school's hygiene policy implementation significantly influence with their hygiene and safety practices?
6. What policy brief can be offered to the school administration?

METHODOLOGY

Research Design

This study used a descriptive-correlational research design to examine how mindfulness, access to hygiene supplies, and the school's hygiene policy implementation relate to students' hygiene and safety practices in the Technical-Professional Track. This design was suitable because it describes current conditions and analyzes relationships between variables without changing them (Creswell & Creswell, 2018).

Participants and Sampling Procedure

The study focused on Grade 11 students in the Technical-Professional Track. To participate, students needed to be enrolled in this track at a public senior high school in Bukidnon for the 2025–2026 school year, agree to join the study, and take laboratory-based or practical technical-vocational courses that follow hygiene and safety rules. Students were excluded if they were not in Grade 11 or the Technical-Professional Track, did not agree to participate, or were not taking laboratory-based or hands-on courses.

The study used purposive sampling to include students who met the criteria. This method is often used in educational research to select samples that fit the study's goals and context (Ahmad & Wilkins, 2024).

Research Instrument

This study used a researcher-developed questionnaire to collect information on mindfulness, access to hygiene supplies, adherence to school hygiene policies, and hygiene and safety habits. This questionnaire was based on established tools, including the Five Facet Mindfulness Questionnaire (Baer et al., 2012), questionnaires for hygiene supply access, DepEd WinS (2019) checklists for policy implementation, and hygiene and food safety scales by Wandolo (2016).

The 26-item questionnaire used a 5-point Likert scale, from strongly agree (5) to strongly disagree (1), to measure students' beliefs, attitudes, and behaviors (Bhandari & Nikolopoulou, 2023).

Data Gathering Procedure

Prior to data collection, approval was obtained from school administrators, and ethical clearance was secured. Parental consent and student assent were obtained to ensure voluntary participation. Confidentiality and anonymity of responses were strictly maintained throughout the research process.

Data was collected from two public schools in the Division of Bukidnon. Survey questionnaires were used, and the responses were tallied. The results were analyzed and explained using the data in the table.

Statistical Analysis of Data

Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to address research problems 1 to 4. Meanwhile, multiple regression analysis was used to address problem 5. This was used to test whether participants' mindfulness, access to hygiene supplies, and assessment of the school's hygiene policy influenced students' hygiene and safety practices. Before running the analysis, normality was checked, and the residuals were found to be normally distributed, supporting the reliability of the regression results.

RESULTS AND DISCUSSION

Participants' Level of Mindfulness Across Four Dimensions: Personal Hygiene, Safety Risk, Safety Protocols, and Hazard Identification

Table 1
Summary Table of Mindfulness

Dimensions	Mean	Interpretation	SD
Personal Hygiene	4.03	High	0.66
Safety risk	4.05	High	0.69
Safety protocols	3.89	High	0.65
Hazard identification	3.97	High	0.73
Mindfulness	3.98	High	0.68

The summary table shows that participants are generally mindful ($M = 3.98$, $SD = 0.68$) about personal hygiene, safety risks, safety protocols, and hazard identification. Safety risk awareness had the highest average score ($M = 4.05$), showing that participants are alert to possible dangers and can help reduce incidents. Meanwhile, Personal hygiene ($M = 4.03$) and hazard identification ($M = 3.97$) also had high scores. This suggests that participants keep things clean and notice risks, which helps prevent

contamination and accidents. Adherence to safety rules was also rated high ($M = 3.89$), but it was the lowest among the areas measured. This implies that some learners are more consistent than others in following safety standards, depending on task complexity and familiarity with standard operating procedures.

Participants' Level of Access to Hygiene Supplies

Table 2 depicts the frequency, percentage, and mean distribution of participants regarding levels of access to hygiene supplies. From the data, a mean of 3.88 is considered high, but the 1.35 standard deviation indicates variability in the responses. So, while the majority of students claim to have enough, some still face challenges accessing them due to issues with availability, consistency, or convenience.

Table 2
Frequency, Percentage, and Mean Distribution of the Participants' Level of Access to Hygiene Supplies

Range	Description	Interpretation	Frequency	Percentage
4.51-5.00	Strongly Agree	Very High	19	13.01
3.51-4.50	Agree	High	65	44.52
2.51-3.50	Neutral	Moderate	53	36.30
1.51-2.50	Disagree	Low	8	5.48
1.00-1.50	Strongly Disagree	Very Low	1	0.68
Total			146	100.0
Overall Mean			3.88	
Interpretation			High	
SD			1.35	

From the distribution, the table shows that 44.52% of students agreed and 13.01% strongly agreed that they have good access, for a total of 57.53% with high or very high access. Meanwhile, 36.30% said their access to hygiene supplies was moderate, and 6.16% said it was low or very low. Most students, then, think they have sufficient access to hygiene supplies, and a considerable proportion have moderate access.

These results resonate with studies indicating that easy access to hygiene supplies is responsible for the persistence of good hygiene behavior and the decline in illnesses. Enough water, handwashing stations, disinfectants, and sanitizers have indeed been associated with the ability to follow hygiene rules and reduce infection, especially in schools and training centers (UNICEF, 2023). Furthermore, improved hygiene varies in attendance and safety among students (Chittleborough et al., 2023).

Participants' Assessment of the School's Hygiene Policy Implementation

Table 3
Frequency, Percentage, and Mean Distribution of the Participants' Assessment of the School's Hygiene Policy Implementation

Range	Description	Interpretation	Frequency	Percentage
4.51-5.00	Strongly Agree	Very High	30	20.55
3.51-4.50	Agree	High	83	56.85
2.51-3.50	Neutral	Moderate	29	19.86
1.51-2.50	Disagree	Low	4	2.74
1.00-1.50	Strongly Disagree	Very Low	0	0.00
Total			146	100.00
Overall Mean			4.07	
Interpretation			High	
SD			0.66	

Table 3 presents the frequency, percentage, and mean distribution of participants' assessments of the school's hygiene policy implementation. The overall mean is 4.07, interpreted as high, with a standard deviation of 0.66. This indicates that most participants think the school's hygiene policies are well implemented, and their responses were consistent. This suggests that many believe the school is committed to promoting hygiene and enforcing its policies.

These findings align with recent studies showing that safer behavior, better hygiene, and improved health are associated with explicit and consistent school hygiene policies. According to studies, schools with regular monitoring, clear policies, and student involvement have lower risks of infection and contamination and higher hygiene standards (Chittleborough et al., 2023; Wolf et al., 2022).

Overall, the results imply that the school's hygiene policy is clear and most students follow it. This means the school has a system that supports safe behavior. Making enforcement more consistent and transparent may help keep these practices in place and give all students the same experience.

Participants' Level of Hygiene and Safety Practices during *Mise en Place* and Service

Table 4 presents the summary table of the level of hygiene and safety practices during *mise en place* and service. The overall mean score was 4.14 ($SD = 0.57$), showing that Technical-Professional Track students generally meet hygiene and safety standards in both areas.

Service practices had a slightly higher mean score ($M = 4.18$, $SD = 0.61$) than *mise en place* ($M = 4.10$, $SD = 0.67$). This means students follow hygiene rules more closely during service tasks such as waste management, cleaning workstations, and doing safety

checks at the end of tasks. The results suggest that routines and teacher supervision help students maintain good hygiene, especially when tasks are closely watched.

Table 4
Summary Table of the Level of Hygiene and Safety Practices

Dimensions	Mean	Interpretation	SD
<i>Mis en place</i>	4.10	High	0.67
Service	4.18	High	0.61
Level of hygiene and safety practices	4.14	High	0.57

According to global standards, using hygiene and safety measures during both preparation and service is important to reduce risks and keep work safe (Wolf et al., 2022). The high compliance found in this study suggests that participants know and use the correct procedures because of good instruction and clear policies. Ongoing training, monitoring, and support are recommended to maintain and further improve compliance.

Influence of the Participants' Mindfulness, Access to Hygiene Supplies, and Assessment of the School's Hygiene Policy Implementation on Hygiene and Safety Practices

Table 5 presents the regression analysis of the influence of the participants' mindfulness, access to hygiene supplies, and the school's hygiene policy implementation on hygiene and safety practices. Evidence shows that the whole model is statistically significant ($F = 63.520$, $p = .000$). Thus, H_01 is rejected. Results confirm that participants' mindfulness, access to hygiene supplies, and the assessment of the school's hygiene policy implementation significantly influence the participants' hygiene and safety practices with a strong correlation ($R = 0.757$) and an R^2 of 0.573, indicating that the three independent variables collectively explain 57.3% of the variance in hygiene and safety practices, while the remaining 42.7% is attributed to other factors not included in the model such as motivation, leadership, and peer influence.

Table 5
Regression Analysis of the Influence of the Participants' Mindfulness, Access to Hygiene Supplies, and Assessment of the School's Hygiene Policy Implementation on Hygiene and Safety Practices

	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	T	
(Constant)	.758	.252		3.003	.003
Mindfulness	.514	.073	.467	7.037**	.000
Access to Hygiene supplies	-.039	.025	-.093	-1.536	.127
Hygiene Policy Implementation	.365	.061	.423	5.986**	.000

Model Summary

R = 0.757 R² = 0.573 Adj. R² = 0.564 F = 63.520** p = .000

***significant at 0.01 level*

Overall, the results show that mindfulness and policy implementation are the main factors influencing hygiene and safety practices. Improving these areas leads to better outcomes, whereas access to hygiene supplies does not significantly affect hygiene and safety habits among Technical-Professional students. The researcher believes that supporting mindfulness, following procedures, and providing materials all help improve hygiene and safety behaviors.

Policy Brief that can be Offered to the School Administration

Title: Strengthening Access to Hygiene Supplies in Technical-Professional Education Through Hygiene Policy Implementation

Introduction / Purpose:

Hygiene and safety are crucial for students' health, well-being, and career preparation in technical-professional education. Even with the Department of Education's (DepEd) Water, Sanitation, and Hygiene in Schools (WinS) program, students still struggle to get hygiene supplies, follow routines, and see policies enforced regularly. Studies show that mindfulness activities and strong policy enforcement help students develop better hygiene and safety habits. But providing supplies alone is not enough without also supporting behavior and policy changes. This policy brief shares research-based ways to improve hygiene and safety for Technical-Professional Track students by focusing on policy enforcement, mindfulness, and regular monitoring.

Key Messages / Options:

- Support schools in putting hygiene policies into action and tracking them to meet DepEd WinS standards and ensure they are followed regularly.
- Ensure there are enough hygiene supplies such as water, soap, and sanitizers. These supplies should be easy to access and well maintained so students can keep up good hygiene habits.
- Create clear routines for regularly reviewing policies, gathering feedback, and checking progress, involving both teachers and students.

Policy Options Table:

Option	Advantages	Disadvantages	Feasibility
Enhanced Policy Monitoring and Evaluation (WinS-based)	Ensures consistent implementation; improves accountability; aligns with DepEd standards	Requires additional monitoring effort and coordination	Highly feasible

Methodology:

This policy brief is based on a descriptive-correlational study with Grade 11 Technical-Professional Track students. The researcher used a validated questionnaire to measure mindfulness, access to hygiene supplies, how school hygiene policies are put into practice, and hygiene and safety habits. This study used descriptive statistics and multiple regression analysis to find what most affects student hygiene behavior.

Other Considerations:

Good hygiene and safety programs need clear policy guidelines, regular monitoring, teacher training, and open communication with students. Important things to track are how well students follow hygiene rules, how often policies are reviewed, if supplies are available and used, and if mindfulness strategies are included. Challenges may include not enough resources, uneven policy enforcement, and not enough teacher training. Helpful factors are the DepEd WinS framework, support from school leaders, and greater awareness of health and safety standards.

Conclusions and Recommendations

This study looked at how mindfulness, access to hygiene supplies, and school hygiene policies influence hygiene and safety practices among students in the Technical-Professional Track. The findings indicate that the study's purpose was successfully achieved, as it clearly identified the key factors influencing students' hygiene and safety practices, with mindfulness and school hygiene policies emerging as the strongest predictors.

The research used the Mindfulness-to-Meaning Theory (MMT) and Bronfenbrenner's Socio-Ecological Model (SEM) as its foundation. The results support the Mindfulness-to-Meaning Theory, showing that students who are more aware, flexible in their thinking, and better at managing emotions are more likely to act safely and adapt to situations. The findings also support the Socio-Ecological Model, highlighting that environmental factors such as school policies are important for students' hygiene and safety habits.

The results show that school administrators and policymakers should make hygiene and safety policies clear, communicate them effectively, and regularly review them. Teachers are encouraged to include mindfulness, hygiene, and safety in their lessons and training. Curriculum developers should add these skills to learning goals and assessments. Furthermore, students are encouraged to be conscious of their actions while performing their tasks and encouraged to participate in safety training. Future research should explore more factors that influence behavior and use long-term or experimental studies to better understand lasting changes.

Compliance with Ethical Standards

The study followed the ethical principles in the Belmont Report, as cited by Amdur and Bankert (2011), and used set protocols and procedures throughout. The principle of respect for persons was upheld by giving participants clear information about the study's goals, methods, possible risks, and benefits, so they could choose to participate freely. Since the participants were minors, informed assent was obtained. The principle of beneficence was respected by making certain that the survey questionnaire was distributed only after obtaining permission from the appropriate institutional authorities and the school's Research Ethics Committee. Participants retained the right to withdraw from the study at any time without any consequences. Justice was ensured by getting written assent and using fair recruitment methods. By following these standards, the researcher protected participants' rights and welfare, as described in the Belmont Report.

The survey was done in person to see how mindfulness, access to hygiene supplies, and the school's hygiene policy affected hygiene and safety practices among Technical-Professional Track students. The researcher reported the study results accurately, objectively, and without exaggeration or misrepresentation, while recognizing any limitations or uncertainties present in the data. Only the researcher could access, read, and analyze the data collected from the interview.

REFERENCES

- Ahmad, M. and Wilkins, S. Purposive sampling in qualitative research: a framework for the entire journey. *Qual Quant* 59, 1461–1479 (2024).
<https://doi.org/10.1007/s11135-024-02022-5>
- Baer, R. A., Carmody, J., & Hunsinger, M. (2012). Weekly change in mindfulness and perceived stress in a mindfulness-based stress reduction program. *Journal of Clinical Psychology*, 68(7), 755–765. <https://doi.org/10.1002/jclp.21865>
- Bhandari, P., & Nikolopoulou, K. (2023). What is a likert scale? | guide & examples. Scribbr. <https://www.scribbr.com/methodology/likert-scale/>
- Chittleborough, C. R., Nicholson, A. L., Young, E., Bell, S., & Campbell, R. (2023). Implementation of hygiene infrastructure in schools and its impact on hand hygiene behavior. *International Journal of Environmental Research and Public Health*, 20(3), 1847. <https://doi.org/10.3390/ijerph20031847>
- Creswell, J.W. and Creswell, J.D. (2018). *Research Design: qualitative, quantitative, and mixed methods approaches*. Sage, Los Angeles.
<https://www.scirp.org/reference/referencespapers?referenceid=2895169>
- Department of Education. (2019). WASH in schools: Three-star approach.
<https://wins.deped.gov.ph/>
- Department of Education. (2025). Strengthened SHS Program.
<https://www.deped.gov.ph/strengthened-shs-program/>
- Hussain, Z. (2021). Measure of awareness on occupational health and safety vulnerability in technical and vocational education and training Institutions. Semantic Scholar. <https://doi.org/10.17762/TURCOMAT.V12I9.3410>

- UNICEF. (2021). WASH in Schools (WinS) Programme in the Philippines: Better Alignment of Policy and Management Changed the WinS Landscape. <https://clearinghouse.unicef.org>
- UNICEF. (2023). Water, sanitation and hygiene in schools: Global progress report. United Nations Children's Fund. <https://www.unicef.org/reports/water-sanitation-and-hygiene-schools-2023>
- Wandolo, M. A. (2016). Food safety and hygiene practices: a comparative study of selected technical and vocational education and training and university hospitality schools in Kenya. <https://ir-library.ku.ac.ke/handle/123456789/15055>
- Wolf, J., Hunter, P. R., Freeman, M. C., Cumming, O., Clasen, T., Bartram, J., & Prüss-Ustün, A. (2022). Impact of water, sanitation, and hygiene interventions on health outcomes: Updated systematic review. *The Lancet Global Health*, 10(5), e690–e705. [https://doi.org/10.1016/S2214-109X\(22\)00084-6](https://doi.org/10.1016/S2214-109X(22)00084-6)
- World Health Organization. (2024). Global school-based student health survey. www.who.int. <https://www.who.int/teams/noncommunicable-diseases/surveillance/systems-tools/global-school-based-student-health-survey>

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