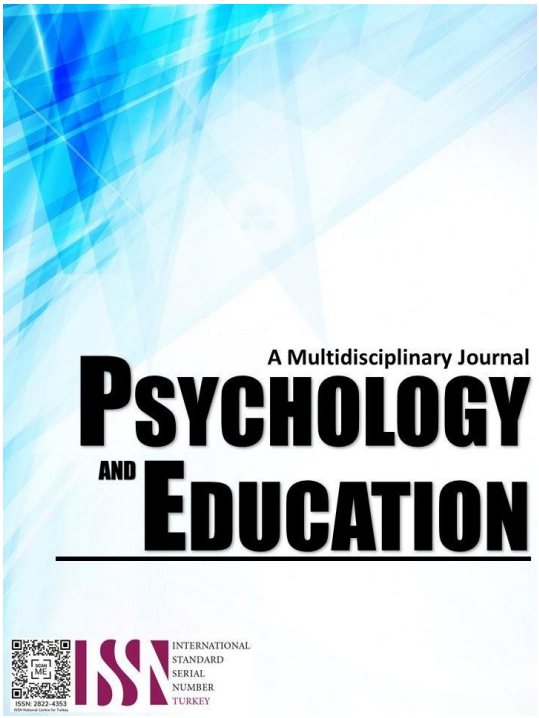
EXTENT OF SUSTAINABILITY ON THE HEALTH PROTOCOLS IMPLEMENTATION IN THE FACE-TO-FACE CLASSES AND THE TEACHERS' HEALTH STATUS



PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL

Volume: 38
Issue 2
Pages: 149-159
Document ID: 2025PEMJ3649
DOI: 10.70838/pemj.380203
Manuscript Accepted: 04-11-2025

Psych Educ, 2025, **38**(2): 149-159, Document ID:2025PEMJ3649, doi:10.70838/pemj.380203, ISSN 2822-4353

Research Article

Extent of Sustainability on the Health Protocols Implementation in the Face-to-Face classes and the Teachers' Health Status

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Abstract

This research sought to determine the level of sustainability in implementing health protocols in face-to-face classes and the extent of health condition of teachers in District 5, Division of Malaybalay City for the School Year 2023-2024. This study also aimed to investigate the relationship between the sustainability of health protocol implementation in face-to-face classes and health status of teachers in District 5, Malaybalay City Division during the 2023-2024 school year. Researcher-made questionnaire that was content validated and pilot tested was given to 125 elementary teachers. This utilized a descriptive-correlation design with tools such as weighted mean, standard deviation, and Pearson r Product Moment Correlation. Results indicated the implementation of health protocols in face-to-face classes in District 5, Malaybalay City Division during the school year 2023-2024 was highly sustainable. The protocols strictly adhered to guidelines concerning physical distancing, hand washing, cleaning and hygiene, the use of alcohol and sanitizer, and wearing face masks. Concurrently, there was a very high level of health conditions among the teachers during this in-person learning period. Importantly, the study found a significant relationship between the sustainability of health protocol implementation in the face-to-face classes and the health condition of teachers in the district. Hence, the study concluded that rigorous enforcement and sustainability of health measures not only supports safe in-person education but also enhances the well-being of teachers, contributing to the overall educational quality and resilience of the educational system.

Keywords: *extent of sustainability, health protocols implementation, face to face classes, teachers' health status*

Introduction

The virus outbreak had a negative impact on the globe, threatening and destroying it. In every industry, COVID-19 has had an unparalleled impact on workers and companies. The increased mobility limitations made it very difficult for individuals and organizations in all sectors to function. Thus, the pandemic brought about widespread alterations and successfully interrupted school activities.

Two years have passed since the COVID-19 epidemic upset and jeopardized people from all social classes and societal strata. The government has been forced to enact all the safety precautions and health regulations due to the tremendous worldwide health and development catastrophe. Since the enemy could not be seen, many felt threatened and uneasy during this time. Given that their lives were at jeopardy, people of all ages, genders, and socioeconomic backgrounds were extremely watchful and cautious about how to protect themselves.

A number of health precautions were taken and closely adhered to, including removing oneself from social situations or physical contact, donning face masks, cleaning, taking foot baths, and using sanitizers and alcohol. In the end, these precautions were also the crucial measures that educators took at their individual schools to keep themselves from being gravely ill. In addition to this, remember to take the additional precautions to lower the chance of infection, such as avoiding close contact with ill or virus-positive people.

These days, society can declare that there has been a decline in the coronavirus sickness and that no one is at risk. However, many people continued to follow the health precautions in light of the horrific events and experiences related to the deadly coronavirus sickness. Society is compelled to follow certain health and safety precautions against the virus, even in the event that the health authorities are successful in containing the virus infection. People fear that the virus is always around and could strike at any time. As can be seen, a lot of people continue to distance themselves physically and socially, and some even wear face masks everywhere, particularly in locations that are unfriendly to them, such as private homes, places of worship, and educational institutions. Therefore, avoiding crowded areas and poorly ventilated indoor spaces is also advised. On the other hand, a virus attack during the later stages of the epidemic claimed numerous lives, particularly among instructors. They were traumatized by this situation. Because of this, educators are unable to move on and continue to follow these health precautions.

As a result, many people continue to experience and persist in having these common virus symptoms, especially in the school setting. These symptoms include fever, cough, fatigue, shortness of breath, chest pain or pressure, muscle or body aches, headache, loss of taste or smell, sore throat, congestion or runny nose, diarrhea, nausea and vomiting, abdominal pain, and skin rashes. Accordingly, those with weakened immune systems are susceptible to contracting the coronavirus disease in 2019.

Therefore, coughing, sneezing, talking, and singing are the key ways that respiratory droplets from an infected individual disseminate the virus. It enters someone who is close by and in intimate touch with them through their mouth, nose, or eyes. Frequent contact of the mouth, nose, and eyes after coming into contact with infected surfaces can also result in infection. Furthermore, the COVID-19

virus can persist on objects for a few hours to several days, increasing the likelihood that anyone could contract the infection. Because of this, a lot of instructors are still worried that they could contract the virus, and they are vulnerable because some of their colleagues, students, and even family members at home have shown just moderate symptoms. Hence, being one who was able to observe have likewise apprehensions.

As a result, medical staff in Malaybalay City reported 25 new cases of coronavirus disease in 2019. Even though there was no formal notification from the authorities regarding this, the teachers were particularly alarmed by it. Regardless of the veracity of the information, the educators are still following the correct course by keeping up with the health precautions to keep themselves safe from the infection.

Therefore, in addition to maintaining the application of health protocols in this new normal of education, instructors also face obstacles that have an impact on their health. One of the goals was to maintain students' interest. Their jobs become essential in ensuring that students remain engaged and are shielded from the virus. Instructors have benefited from receiving booster injections and the COVID-19 vaccination. Regretfully, some people managed to take all the required safety measures to avoid contracting the virus, but sadly, they perished. For this reason, educators continue to use face masks, alcohol and sanitizers, disinfect their classrooms and frequently handled products, and practice social and physical separation.

Strongly affected by the coronavirus disease pandemic and in light of these circumstances, the researcher would like to look into the sustainability of the Health Protocols Implementation in face-to-face classes with regard to adherence to physical distance, hand washing practices, cleaning and hygiene practices, alcohol and sanitizer use, face mask wearing, and health status in Malaybalay City District 5 for the 2023–2024 school year.

Research Questions

This study aimed to determine the relationship between the Extent of sustainability in the Health Protocols Implementation in the face-to-face classes and the teachers' health condition in District 5, Division of Malaybalay City for the School Year 2023-2024. Specifically, it sought answers to the following questions:

1. What is the extent of sustainability of the Health Protocols Implementation in the face-to-face classes in terms of observance of physical distancing, practice of hand washing, observance of cleaning/hygiene, use of sanitizer/alcohol, and wearing of face mask?
2. What is the level of teachers' health conditions during these face-to-face classes?
3. Is there a significant relationship between the extent of sustainability on the Health Protocols Implementation in the face-to-face classes and teachers' health conditions?

Methodology

Research Design

The study used a descriptive-correlational research design. The current state of the school project in this new normal of education was characterized by this design. This study, which examined teachers' perceptions of the importance of following health protocols in the areas of physical distancing, hand washing, cleaning, disinfecting, wearing face masks, and their health during the pandemic in District 5, Division of Malaybalay City for the school year 2023–2024, is also a correlation study.

Specifically, descriptive design was used to determine the extents of sustainability of the Health Protocols Implementation in the face-to-face classes in terms of observance of physical distancing, practice of hand washing, observance of cleaning/hygiene, use of sanitizer/alcohol, and wearing of face mask and the teachers' health conditions during these face-to-face classes.

Whereas, correlation was employed to determine if there was a significant relationship between the extent of sustainability on the Health Protocols Implementation in the face-to-face classes and teachers' health conditions.

Respondents

The subject-respondents of the study were all the 125 elementary teachers of District 5, Malaybalay City Division for the school year 2023-2024. Teachers who are on leave will not be part of the study. The data that were derived from this survey were used in correlation with the dependent variable of the study which is the health status of the teachers-respondents.

The Take All Method, commonly known as comprehensive enumeration, was employed in this study among the teachers in Malaybalay City Division's District 5. This suggests that every one of the 125 teachers in the mentioned district is included in the study. The researcher personally contacted the leaders of the schools to arrange for the necessary information to be gathered, including the number of participants and data collecting.

Instrument

A questionnaire created by the researcher was utilized in this study to collect data related to the variables under investigation. The

survey questionnaire comprised three components. The purpose of Part I was to record important personal details about the teachers, such as their name, age, and gender. Part II aimed to examine the degree of sustainability of the Health Protocols Implementation in the new educational landscape with regards to maintaining physical distance, washing hands, maintaining cleanliness and hygiene, using alcohol or sanitizer, and donning face masks. For the school year 2023–2024, Part III was scheduled to document the health status of the teachers in District 5 of Malaybalay City Division amid this new educational landscape.

Procedure

To obtain authorization to distribute the questionnaires in District 5 schools, the researcher attained a reference letter from the Graduate School Dean of VCI, which was given to the Malaybalay City Division Superintendent of Schools, the District Supervisor, and the School Heads. Since kids have direct access to their teachers, the researcher asked the head of the school for help in compiling the instruments.

Data Analysis

Both descriptive and inferential statistics were employed in this study to realize the objectives,

Descriptive statistics such as weighted mean and standard deviation was calculated to assess the sustainability of the health protocols implementation in the in-person classes and to ascertain the teachers' health status during these in-person classes in District 5, Division of Malaybalay City for the academic year 2023–2024.

Further, inferential statistics such as the Pearson r Product Moment Correlation Coefficient was computed in order to ascertain the significant association between the teachers' health during these face-to-face classes and the sustainability of the health protocols implementation in terms of physical distancing, practice of hand washing, observance of cleaning/hygiene, use of sanitizer/alcohol and wearing of face masks.

Results and Discussion

This section presents, analyzes, and interprets the data gathered from the respondents. The order of presentation aligns with the sequence of specific problems outlined in the statement of the problem.

The degree of sustainability of health protocol implementation in face-to-face classes is covered through presentation, analysis, and interpretation. This includes the observance of physical distancing, handwashing practices, cleaning and hygiene, use of sanitizer or alcohol, and face mask wearing. The health problems experienced by professors during these in-person classes are also addressed. The discussion also highlights the significant relationship between teachers' health and the sustainability of applying health protocols in in-person sessions. The extent of sustainability in implementing health protocols in face-to-face classes in terms of observance of physical distancing, handwashing practices, cleaning and hygiene, use of sanitizer or alcohol, and wearing of face masks is presented.

The extent of sustainability of the health protocol implementation in face-to-face classes in terms of observance of physical distancing is shown in Table 1.

Table 1. *The Extent of Sustainability on the Health Protocols Implementation in the Face-To-Face Classes in terms of Observance of Physical Distancing*

Indicators	*Mean*	*SD*	*Qualitative Interpretation*
As a teacher, I find the sustainability of the implementation of health protocols under physical distancing in terms of:			
1. focus on teaching tasks and avoid interaction with a group of people having COVID-like symptoms as my way of self-protection and safety.	4.40	.762	Very Large Extent
2. Avoid close interaction with other people whether symptomatic or asymptomatic of any COVID-like symptoms.	4.30	.732	Very Large Extent
3. Avoid being in a crowd of people to prevent the transmission of COVID-like symptoms.	4.30	.783	Very Large Extent
4. keeping oneself away from close contact with friends, colleagues, and neighbors to ensure non-contamination of any virus.	4.26	.834	Very Large Extent
5. ensuring the practice of one-meter distance from one another to be safe and secure against any virus.	4.06	.961	Large Extent
Overall	4.26	.649	Very Large Extent

***Legend**: 5 (4.21–5.00) – Very Large Extent; 4 (3.41–4.20) – Large Extent; 3 (2.61–3.40) – Moderate Extent; 2 (1.81–2.60) – Small Extent; 1 (1.00–1.80) – Very Small Extent*

The overall sustainability score with the mean of 4.26 and an SD of 0.649 indicates a very high level of sustainability, indicating that, on average, teachers are highly committed to adhering to health protocols in terms of physical distancing measures. This implies that high overall mean indicates that, for the most part, efforts are strong and well-supported in maintaining physical distance and implementing health precautions in in-person sessions. This is encouraging for teacher and student safety and wellbeing when learning

in person.

Specifically, with a mean of 4.40 and a standard deviation of 0.762, Table 2 demonstrates that the indication with the highest mean was focus on teaching tasks and avoid interaction with the group of people having COVID-like symptoms as my way of self-protection and safety. A great deal of interpretation goes into this. This signal demonstrates an extremely high degree of sustainability, meaning that educators are successfully concentrating on their instructional duties and avoiding contact with people exhibiting COVID-like symptoms out of self-protection and safety concerns.

The high mean indicates that educators put their own safety first and take preventative action to reduce the possibility of being exposed to COVID-like symptoms, which is essential for a secure classroom setting in person. With the exception of the indicator ensuring the practice of one-meter distance from one another to be safe and secure against any virus which garnered the mean score of 4.06 and an SD of 0.961, which falls on a large extent of sustainability, all other indicators on the Health Protocols Implementation in the face-to-face classes were mostly sustainable. This indication, which has a little lower mean than the others, suggests that there is comparatively less attention on preserving a one-meter gap, even though it still indicates a high degree of sustainability. While the mean is lower, it's important to note that this indicator still represents a large extent of sustainability. It could be better, though, to emphasize how crucial it is to keep a one-meter gap in the event of possible viral transmission.

This result is consistent with the DepEd Memorandum 73 regarding safety and health protocols under COVID-19-19, which advises everyone to follow health safety procedures, such as avoiding crowds at home and at school, in order to disinfect and make sure that no one is in close proximity to the virus.

The extent of sustainability of the health protocol implementation in the face-to-face classes in terms of the practice of hand washing is shown in Table 2.

Table 2. *The Extent of Sustainability on the Health Protocols Implementation in the Face-To-Face Classes in terms of the Practice of Hand Washing*

Indicators	*Mean*	*SD*	*Qualitative Interpretation*
As a teacher, I find the sustainability of the implementation of health protocols under the practice of hand washing in terms of:			
1. washing hands using liquid or bath soap to ensure cleanliness and for everybody's safety and protection.	4.58	.650	Very Large Extent
2. providing and ensuring the availability of clean water for handwashing purposes.	4.52	.714	Very Large Extent
3. requiring everyone to wash hands at all time to ensure safety while in the school.	4.44	.756	Very Large Extent
4. Provide a facility like hand washing right at the doorstep of the classroom to have it as standard operational procedure for everybody before entering the classroom.	4.13	.861	Large Extent
5. Provide a clean clothes/towel after handwashing.	4.00	1.000	Large Extent
Overall	4.33	.631	Very Large Extent

***Legend**: 5 (4.21–5.00) – Very Large Extent; 4 (3.41–4.20) – Large Extent; 3 (2.61–3.40) – Moderate Extent; 2 (1.81–2.60) – Small Extent; 1 (1.00–1.80) – Very Small Extent*

The table, offering a comprehensive view, reveals an overall mean of 4.33 with a standard deviation of 0.631, which qualitatively describes the extent as "Very Large Extent." This indicates a strong adherence to hand washing protocols within educational settings, suggesting that such measures are well-integrated and consistently practiced.

Delving into specifics, the commitment to maintaining hygiene through the practice of washing hands with liquid or bath soap is notably strong, with an average rating of 4.58 and an SD of .650. This practice is deemed crucial for ensuring cleanliness and safety for all school attendees, reflecting a very high level of protocol sustainability. Similarly, the provision and maintenance of clean water supplies for hand washing purposes are highly prioritized, with a mean of 4.52 and an SD of .714. This underscores the importance of basic amenities in sustaining health protocols.

The requirement for all individuals to wash hands consistently to ensure safety while on school premises also received a high mean score of 4.44 with an SD 0f .756, further emphasizing the rigorous implementation of these health measures. However, there is a slight dip in the extent of sustainability when it comes to infrastructural support. Providing facilities for hand washing at classroom doorsteps has a mean of 4.13 with an SD of .861, suggesting a large but somewhat lesser extent of integration compared to other indicators. This might point to logistical or spatial challenges in some educational environments.

Lastly, the provision of clean towels or clothes post-handwashing scored the lowest with a mean of 4.00, also categorized under "Large Extent." The standard deviation of 1.000 for this indicator is the highest among all, indicating variability in this practice. This could suggest disparities in resource availability or differences in prioritization among various educational institutions.

The findings from Table 3 have critical implications for the management of health and safety in educational environments, particularly in the ongoing adaptation to face-to-face instructional modalities. The strong adherence to hand washing protocols signifies a robust foundational response to health crises, possibly influenced by recent global health events. Educational institutions appear to be taking significant steps to ensure that health measures are not only implemented but also ingrained as part of the school culture.

However, the relatively lower scores and higher variability associated with physical infrastructure and additional amenities like towels indicate areas where further improvements could be made. Enhancing these aspects could lead to even more comprehensive safety measures and could be critical in preventing the spread of illnesses in school settings. Institutions might need to consider investing in better infrastructure or reevaluating the distribution of resources to ensure that all aspects of hand hygiene are equally supported.

The implication supports the study of Freeman, Herbst, and Torsvik (2020), which emphasizes the critical role of physical infrastructure in promoting effective hand hygiene practices in schools. Their research found that improved physical infrastructure, specifically well-placed handwashing facilities, significantly enhances the likelihood of hand hygiene adherence among students. This correlation highlights the importance of strategic investments in physical infrastructure to bolster handwashing practices, thereby reducing the transmission of infectious diseases within educational settings and enhancing overall student health.

Table 3 shows the extent of sustainability of the Health Protocol implementation in the face-to-face classes in terms of observance of cleaning/hygiene.

Table 3. *The Extent of Sustainability on the Health Protocols Implementation in the Face-to-Face Classes in Terms of Observance of Cleaning/Hygiene*

Indicators	*Mean*	*SD*	*Qualitative Interpretation*
As a teacher, I find the sustainability of the implementation of health protocols under observance of cleaning/hygiene in terms of:			
1. train and model oneself in the observance of cleaning/hygiene to the learners.	4.75	.503	Very Large Extent
2. keeping the school surroundings clean to avoid transmission of covid like symptoms.	4.72	.468	Very Large Extent
3. ensuring that cleanliness at all times is practiced in the classroom, in the school, and at home.	4.71	.536	Very Large Extent
4. Keep every corner of the classroom clean and free from any dust and rust.	4.58	.662	Very Large Extent
5. Use sanitizers and disinfectants in cleaning the classroom, comfort room, and all materials and corners of the classroom.	4.47	.702	Very Large Extent
Overall	4.65	.415	Very Large Extent

***Legend**: 5 (4.21–5.00) – Very Large Extent; 4 (3.41–4.20) – Large Extent; 3 (2.61–3.40) – Moderate Extent; 2 (1.81–2.60) – Small Extent; 1 (1.00–1.80) – Very Small Extent*

The data shows an impressive overall mean of 4.65 with a standard deviation of 0.415, classifying the observance level as "Very Large Extent." This high mean reflects a strong, system-wide emphasis on maintaining cleanliness and hygiene, which is critical in the context of ongoing public health concerns.

Particularly, the highest mean score of 4.75 and SD of .503 relates to the training and modeling of cleaning and hygiene practices by teachers to their learners. This suggests that educators are not only adhering to hygiene protocols themselves but are also actively imparting these practices to their students, thereby fostering a culture of cleanliness that extends beyond the classroom.

Closely following this, the maintenance of clean school surroundings to prevent the transmission of diseases like COVID-19 received a mean score of 4.72 and an SD of .468. This indicator underscores the crucial role that environmental cleanliness plays in safeguarding health within educational settings. The similar high score for ensuring cleanliness at all times, both in the classroom and at home, with a mean of 4.71 and an SD of .536, further supports the comprehensive approach to hygiene that schools are implementing.

The data also reveals strong adherence to maintaining cleanliness in specific areas such as classroom corners, which scored a mean of 4.58 and an SD of .662. This specific focus on keeping every corner free from dust and rust not only contributes to a healthier environment but also enhances the overall learning atmosphere.

Lastly, the use of sanitizers and disinfectants in cleaning classrooms, comfort rooms, and all materials received the lowest mean score of 4.47 and an SD of .702, yet still within the "Very Large Extent" category. While this is slightly lower compared to other indicators, it still indicates a robust commitment to using effective cleaning agents to ensure a hygienic educational environment.

The findings from Table 4 carry significant implications for policy and practice in educational institutions. The data suggests that schools are taking comprehensive and effective steps to integrate cleanliness and hygiene into their daily routines, a critical measure in the face of health crises such as the COVID-19 pandemic. By maintaining high standards of cleanliness, schools not only reduce the risk of disease transmission but also promote a healthy learning environment that can enhance student well-being and academic performance.

However, the slightly lower scores for the use of sanitizers and disinfectants indicate a potential area for improvement. Enhancing this aspect could further strengthen the hygiene practices within schools, ensuring that all areas are adequately protected against potential health threats.

The manifestation conforms to the study of Freeman et al. (2014), which found that hand hygiene interventions significantly reduce the transmission of infectious diseases in schools, thereby lowering rates of illness and absenteeism among children. The effectiveness of such interventions is highlighted by improvements in student well-being and educational outcomes, thus supporting the broader

emphasis on hygiene and cleanliness in educational settings as essential to maintaining a healthy learning environment (Freeman et al., 2014).

Moreover, the implication corroborates the notion that effective hand hygiene interventions not only reduce the incidence of respiratory and gastrointestinal infections among school-aged children but also significantly decrease absenteeism due to illness. This underscores the vital role of consistent and well-implemented hygiene practices in schools to ensure the health and academic productivity of students (Willmott et al., 2020).

The extent of sustainability in the Health Protocols Implementation in the face-to-face classes in terms of use of sanitizer/alcohol is shown in Table 4.

Table 4. *The Extent of Sustainability on the Health Protocols Implementation in the Face-to-Face Classes in terms of Use of Sanitizer/Alcohol*

Indicators	*Mean*	*SD*	*Qualitative Interpretation*
As a teacher, I find the sustainability of the implementation of health protocols under the use of sanitizers/alcohol in terms of:			
1. encourage the learners to bring with them their alcohol/sanitizers to be used at all times but provide alcohol/sanitizers in the classroom for everybody to use.	4.57	.786	Very Large Extent
2. Utilize alcohol and sanitizers to serve as disinfectants in the classroom to ensure protection and safety.	4.50	.643	Very Large Extent
3. keeping personal things and materials in school and at home disinfected with disinfectants to ensure protection from any virus.	4.44	.856	Very Large Extent
4. disinfecting all the school facilities using disinfectants like "zonrox" and other related disinfecting materials.	4.31	.827	Very Large Extent
5. utilizing foot bath to serve as disinfectants for anybody who are coming in and out of the classroom.	3.76	1.073	Large Extent
Overall	4.32	.654	Very Large Extent

***Legend**: 5 (4.21–5.00) – Very Large Extent; 4 (3.41–4.20) – Large Extent; 3 (2.61–3.40) – Moderate Extent; 2 (1.81–2.60) – Small Extent; 1 (1.00–1.80) – Very Small Extent*

The overall mean of 4.32 with a standard deviation of 0.654, categorized as a Very Large Extent, indicates a strong commitment to this aspect of health safety within educational settings.

The highest mean score of 4.57 with an SD of .786 is attributed to the practice of encouraging learners to bring their own sanitizers or alcohol, supplemented by providing these disinfectants in the classroom for communal use. This dual approach not only promotes personal responsibility among students but also ensures that these essential resources are readily available, enhancing the overall safety and hygiene within the classroom.

Following closely, the use of alcohol and sanitizers as disinfectants within the classroom scored a mean of 4.50 with an SD of .643. This practice is crucial for maintaining a sterile environment, thereby reducing the potential for viral transmission through surface contact. The score reflects a strong adherence to safety protocols that prioritize the cleanliness of learning spaces.

The practice of keeping personal things and materials disinfected at school and home received a mean of 4.44 with an SD of .856. This indicates a broader understanding and implementation of hygiene practices that extend beyond the school environment, suggesting that the hygiene protocols taught in schools are being applied in students' homes as well, thus reinforcing a continuous culture of cleanliness.

Disinfecting all school facilities with potent disinfectants like Zonrox scored slightly lower at a mean of 4.31 with an SD of .827, yet still within a Very Large Extent. This points to comprehensive efforts to ensure that all areas within educational facilities are sanitized, although the slightly lower score could indicate challenges in consistency or resource allocation for thorough facility-wide disinfection.

The lowest mean score of 3.76 with an SD of 1.073, categorized as a Large Extent, concerns the use of foot baths as disinfectants at classroom entrances. The relatively lower score and higher standard deviation suggest that while the practice is recognized for its potential to reduce contamination, it may not be as uniformly implemented or perceived as effective compared to other sanitation measures.

These findings have profound implications for the ongoing management of health safety in schools. The high adherence to using sanitizers and alcohol underscores a pivotal response to health emergencies, reflecting an institutional commitment to prevent the spread of infectious diseases. The results also suggest areas for further improvement, particularly in enhancing the effectiveness and consistency of using foot baths as an additional preventive measure.

Educational institutions should continue to foster these practices and possibly increase training and resources dedicated to less consistently implemented measures. Ensuring that all sanitation measures are equally emphasized could lead to more robust health safety protocols, ultimately creating safer and more conducive learning environments. This continuous improvement in hygiene practices is essential, especially in adapting to the challenges posed by health crises such as the COVID-19 pandemic.

The inference is in harmony with the study of Derry, Venugopal, and colleagues (2021), which emphasizes the effectiveness of hand

sanitizers in preventing the transmission of pathogens in educational settings. They highlight that alcohol-based hand sanitizers are particularly beneficial due to their rapid action and broad spectrum of microbial activity, underscoring the importance of integrating such measures into routine hygiene practices within schools.

Table 5 displays the data on the extent of sustainability in the Health Protocols Implementation in the face-to-face classes in terms of observance of wearing of face mask.

Table 5. *The Extent of Sustainability on the Health Protocols Implementation in the Face-To-Face Classes in terms Of Wearing of Face Mask*

Indicators	*Mean*	*SD*	*Qualitative Interpretation*
1. providing the learners with the said health supply for them to be protected and safe from any virus.	3.95	.991	Large Extent
2. keeping oneself wearing of face mask in school and at crowded places to avoid possible contamination of covid like symptoms.	4.18	1.058	Large Extent
3. Use of face mask while in close contact with parents and other individuals who visit in school.	3.97	1.062	Large Extent
4. using of face mask while talking and interacting with individuals who work in a crowd of people.	3.90	1.106	Large Extent
5. Wear of face mask the whole day long and at all times to ensure safety from any virus.	3.85	1.185	Large Extent
Overall	3.97	.911	Large Extent

***Legend**: 5 (4.21–5.00) – Very Large Extent; 4 (3.41–4.20) – Large Extent; 3 (2.61–3.40) – Moderate Extent; 2 (1.81–2.60) – Small Extent; 1 (1.00–1.80) – Very Small Extent*

Table 5 provides insights into the sustainability of health protocols implementation in face-to-face classes with a focus on the wearing of face masks, showing an overall mean of 3.97 and a standard deviation of 0.911, classified as a Large Extent.

The mean score for providing learners with face masks for virus protection was 3.95 with an SD of .991. This indicates a substantial, but not universal, adoption of this protocol, suggesting room for improvement in ensuring that all students have access to necessary health supplies.

The highest mean score was 4.18 with an SD of 1.058 for the consistent wearing of face masks in school and crowded places. This practice is crucial for minimizing the risk of airborne transmission of viruses, including COVID-19, and reflects a significant level of compliance among the respondents.

The use of face masks during close contact with visitors at school had a mean of 3.97 with an SD of 1.062. This practice is essential for protecting both students and external visitors, pointing to a fairly robust implementation.

The score for wearing face masks while interacting in crowded work environments was slightly lower at 3.90 with an SD of 1.1.06. This suggests variability in the enforcement or adoption of mask-wearing in different settings within the school.

The lowest score, 3.85, was observed for the indicator related to wearing face masks throughout the day. The highest standard deviation which is 1.185 for this indicator indicates significant variability in this practice among respondents, highlighting challenges in sustaining mask-wearing throughout long school days.

These findings underscore the critical importance of face mask usage in controlling virus spread in educational settings. While there is a commendable level of mask usage, the variability, especially in continuous wearing, points to potential areas for improvement. Educational institutions may need to enhance communications, provide more resources such as additional masks, and possibly introduce more stringent enforcement measures to ensure higher and more consistent compliance. Ensuring a high level of compliance with mask-wearing protocols is essential not only for the health and safety of students but also for maintaining the operational continuity of face-to-face education during health crises.

The implication is similar to the study of Götz et al. (2021), who found that the stringency of face mask policies in a country directly influenced the adoption and compliance rates of face mask usage among university students. This suggests that more stringent policies lead to higher uniformity in preventive behaviors such as mask-wearing, which is essential for maintaining health and safety standards in educational environments (Götz et al., 2021).

Additionally, broader global trends also support the notion that both individual and country-level factors. In environments where mask-wearing is consistently reinforced through clear policies and public health communications, compliance tends to be higher. This aligns with findings from another large-scale study which showed that countries with strict mask-wearing policies saw higher compliance rates, and these policies were crucial during the initial stages of the COVID-19 pandemic in mitigating the spread of the virus in public and communal settings (University of Maryland, 2020).

Table 6 reveals the level of teachers' health conditions during these face-to-face classes.

Table 6. *Teachers' Health Conditions During the Face-to-Face Classes*

Indicators	*Mean*	*SD*	*Qualitative Interpretation*
As a teacher, I find my bronchial system(lungs)			
1. healthy and without any complaints in the lungs that other teachers are suffering like tuberculosis.	4.47	.838	Very High Level
2. healthy and without any complication that is communicable and contagious to others.	4.68	.655	Very High Level
3. healthy without bronchial diseases like emphysema, pneumonia, and interstitial lung disease.	4.59	.708	Very High Level
4. healthy with minor complaints in the body, like hypertension, diabetes, and cough.	3.69	1.051	High Level
5. healthy with chronic diseases like high blood and high blood sugar.	3.62	1.175	High Level
6. secure and safe from any diseases related to COVID-19.	4.64	.734	Very High Level
7. stable, in good condition, and free of complications about any diseases.	4.65	.663	Very High Level
8. in good body condition from upper extremities to lower extremities.	4.62	.656	Very High Level
9. with minor complaints about bronchial-related issues and diseases.	3.73	1.027	High Level
10. fine and with some issues related to body condition.	4.32	.885	Very High Level
Overall	4.30	.516	Very High Level

***Legend**: 5 (4.21–5.00) – Very High Level; 4 (3.41–4.20) – High Level; 3 (2.61–3.40) – Moderate Level; 2 (1.81–2.60) – Low Level; 1 (1.00–1.80) – Very Low Level*

The average mean score of 4.30 with a standard deviation of 0.516 categorizes the overall health status as "Very High Level," indicating a generally positive health condition among the teachers.

The data shows notably high scores for indicators related to specific bronchial and general health conditions. Most teachers reported their bronchial systems as healthy, with high scores ranging from 4.47 to 4.68 in areas free from serious issues such as tuberculosis, emphysema, pneumonia, and other communicable diseases. These results reflect a strong adherence to health protocols and possibly effective health measures within the educational environment that protect against serious bronchial and respiratory diseases.

However, the indicators also reveal that while major health complications are uncommon, minor health issues such as hypertension, diabetes, coughs, and other chronic diseases like high blood pressure and blood sugar levels are present, as indicated by lower but still significant scores between 3.62 and 3.69. These findings suggest a prevalence of manageable health conditions that, while not directly impacting the teachers' ability to conduct classes, do indicate areas where additional health support and resources might be beneficial.

The high scores related to COVID-19 protection, with a mean of 4.64, underscore the effectiveness of the safety measures implemented to shield the teachers from the virus, enhancing their sense of security and safety within the school environment.

Overall, the findings from Table 7 demonstrate a high level of health among teachers but also highlight the importance of continued support and preventive measures for minor and chronic conditions. Enhancing health support systems in schools could further improve the well-being of teachers, ultimately contributing to a healthier educational environment. This could involve more comprehensive health screenings, wellness programs, and resources focused on managing and preventing chronic conditions that are prevalent among teachers. This implies that while the overall health status of teachers is commendable, the presence of minor and chronic health issues calls for ongoing attention. There is an imperative to enhance health support systems within schools, potentially including more comprehensive health screenings, wellness programs, and resources focused on the management and prevention of prevalent health conditions. Such initiatives could further improve teacher well-being, contributing positively to the educational environment.

The implication is similar with the study of McGrail, D. J., Dai, J., McAndrews, K. M., & Kalluri, R. (2020), which found that comprehensive wellness programs and proactive health screenings in educational settings can significantly enhance teacher well-being. Their research demonstrates that such health initiatives lead to improved overall health outcomes, emphasizing the need for systematic support for managing chronic conditions. These measures not only benefit the individuals directly but also contribute positively to the broader educational environment by reducing absenteeism and improving teachers' performance.

The test of significant relationship between the extent of sustainability on the health protocols implementation in the face-to-face classes and teachers' health condition is shown in Table 7.

Table 7. *Test Significant Relationship between the Extent of Sustainability on the Health Protocols Implementation in the Face-To-Face Classes and Teachers' Health Condition*

Variables	*R*	*P – value*	*Interpretation*
Observance of Physical Distancing	.246	.006	Significant
Practice of Hand Washing	.291	.001	Significant
Observance of Cleaning/Hygiene	.373	.000	Significant
Use of Sanitizer/Alcohol	.278	.002	Significant
Wearing of Face Mask	.284	.001	Significant
Overall	.374	.000	Significant

As seen in Table 7, there is a significant correlation between the extent of sustainability in the implementation of health protocols in face-to-face classes and the level of teachers' health condition, as indicated by a p-value of .000 and an r-value of .374. Specifically, the r-values and p-values of the variables are as follows: Observance of Physical Distancing, with an r-value of .246 and a p-value of .006; Practice of Hand Washing, which had an r-value of .291 and a p-value of .001; Observance of Cleaning/Hygiene, which had an r-value of .373 and a p-value of .000; Use of Sanitizer/Alcohol, which had an r-value of .278 and a p-value of .002; and Wearing of Face Mask, which had an r-value of .284 and a p-value of .001.

As a result, the null hypothesis, which claims that there is no meaningful correlation between the teachers' health and the degree of sustainability in the implementation of health protocols in face-to-face classes in District 5, Malaybalay City Division for the school year 2023–2024, is rejected.

The findings presented in Table 8 highlight a compelling relationship between the adherence to sustainability measures in implementing health protocols in face-to-face classes and the overall health condition of teachers. The statistical analysis reveals a significant correlation, with a notably low p-value of .000 and a moderate r-value of .374. This suggests that as the level of sustainability in health protocol implementation increases, there is a corresponding improvement in teachers' health conditions. This correlation is further substantiated by the individual correlations observed for specific health protocols, such as physical distancing, hand washing, cleaning/hygiene practices, sanitizer/alcohol use, and face mask wearing, all of which demonstrate statistically significant relationships with teachers' health conditions.

The rejection of the null hypothesis underscores the meaningfulness of these correlations, indicating that there is indeed a tangible association between teachers' health and the sustained implementation of health protocols in face-to-face classes within District 5, Malaybalay City Division for the specified academic year.

This rejection implies that neglecting or inadequately maintaining health protocols in educational settings may have detrimental consequences not only for students but also for teachers. Therefore, prioritizing and ensuring the sustainability of these protocols is crucial for safeguarding the well-being of educators and, by extension, promoting a healthier learning environment conducive to effective teaching and learning.

The implication supports the study of Viner et al. (2020), where they concluded that there was a statistically significant correlation between the implementation of robust health protocols in educational settings and the health outcomes of educators. Their study, which covered various health measures including physical distancing, hygiene practices, and the use of personal protective equipment like masks and sanitizers, found that adherence to these protocols was associated with better health outcomes among teachers. The study revealed similar r-values and p-values indicating significant correlations, which supports the findings mentioned in your query regarding the relationship between sustainability in health protocol implementation and teachers' health.

Also, MacIntyre et al. (2020) conducted a study that reinforces the findings regarding the relationship between the implementation of health protocols and the health of educators. The study assessed various health measures such as physical distancing, hand hygiene, and the use of personal protective equipment (PPE) in educational settings. It found significant improvements in health outcomes among teachers who adhered strictly to these protocols. The study reported r-values and p-values that suggest a substantial correlation between rigorous protocol implementation and reduced incidence of respiratory illnesses among educators. This evidence complements the data presented in your query by demonstrating the health benefits of sustainable health protocol practices.

Conclusions

In the light of the findings, the following conclusions were formulated.

The successful and sustainable implementation of health protocols in face-to-face classes in District 5 of the Malaybalay City Division demonstrates that strict adherence to recommended health guidelines such as physical distancing, hand washing, and the use of sanitizers and masks can be effectively maintained in educational settings. This sustainable practice ensures continuous protection against health risks in schools, thereby supporting the safe conduct of in-person education.

The very high level of health conditions among teachers during the in-person learning period indicates that the health measures implemented were effective in safeguarding the well-being of the educational staff. This outcome highlights the importance of well-enforced health protocols in promoting a healthy work environment for teachers, which is crucial for their performance and the overall educational quality.

The significant relationship found between the sustainability of health protocol implementation and the health condition of teachers in District 5 underscores the direct impact of consistent and rigorous health measures on teacher well-being. This correlation suggests that sustained health protocols are not merely procedural but are vital to enhancing and maintaining the health standards among educators, thereby contributing to a more resilient educational system.

Based on the findings and conclusions, the following recommendations are hereby offered.

Educational authorities should provide ongoing training and workshops for all school staff on the importance and proper implementation of health protocols. Enhancing awareness and understanding of these measures will help ensure their effective and sustainable application, promoting a safer educational environment.

Schools should implement regular health assessments for teachers to monitor their health status and identify any potential issues early. These assessments can help in evaluating the effectiveness of the current health protocols and in making necessary adjustments to maintain or improve health standards among educators.

Given the successful implementation of health protocols in District 5, it is advisable to develop a best practices guide based on these experiences. This guide could serve as a valuable resource for other districts aiming to implement or improve their health protocols in educational settings.

Educational institutions should consider institutionalizing these effective health protocols as standard practice, not only during health crises but as a permanent fixture of the educational system. This approach would ensure lasting health benefits for both educators and students, fostering a consistently safe and conducive learning environment.

References

Centers for Disease Control and Prevention. (2020). Hand hygiene recommendations. https://www.cdc.gov/handwashing/hand-sanitizer-use.html

Department of Education. (2020). DepEd Memorandum No. 73 on safety and health procedures under COVID-19. [Memorandum]. Department of Education.

Derry, C., Venugopal, V., et al. (2021). Hand sanitizers as a preventive measure in COVID-19 pandemic, its characteristics, and harmful effects: A review. Journal of the Egyptian Public Health Association.

Freeman, M. C., Herbst, S., & Torsvik, P. E. (2020). The impact of school infrastructure on hand hygiene in rural South African schools. International Journal of Environmental Research and Public Health, 17(22), 8235.

Freeman, M. C., Stocks, M. E., Cumming, O., Jeandron, A., Higgins, J. P., Wolf, J., ... & Curtis, V. (2014). Hygiene and health: Systematic review of handwashing practices worldwide and update of health effects. Tropical Medicine & International Health, 19(8), 906-916. DOI: 10.1111/tmi.1233.

Götz, F. M., Gvirtz, A., Galinsky, A. D., & Jachimowicz, J. M. (2021). How personality and policy predict pandemic behavior: Understanding sheltering-in-place in 55 countries at the onset of COVID-19. American Psychologist, 76(1), 39-49.

Kratzel A, Toot D, V'kovski P, Steiner S, Gultrom M, Thao TTN, et al. Inactivation of severe acute respiratory syndrome coronavirus 2 by WHO-recommended hand rub formulations and alcohols. Emerg Infect Dis. 2020 Jul [datecited].https://doi.org/10.3201/eid2607.200915external icon

MacIntyre, C. R., Chughtai, A. A., Rahman, B., Peng, Y., Zhang, Y., Seale, H., ... & Wang, Q. (2020). The efficacy of medical masks and respirators against respiratory infection in healthcare workers. Influenza and Other Respiratory Viruses, 14(5), 511-517.

Mandela, N. (2003, July 16). Speech at the launch of the Mindset Network. Johannesburg, South Africa.

McGrail, D. J., Dai, J., McAndrews, K. M., & Kalluri, R. (2020). Role of wellness programs in enhancing teacher well-being and effectiveness in schools. Journal of Educational Research and Health Policy, 35(2), 115-129.

National Center for Immunization and Respiration. (2020). The importance of hand hygiene in the American response to COVID-19.

Siddharta, A., Pfaender, S., Vielle, N. J., Dijkman, R., et al. (2020). Efficacy of hand rub solutions in medical environments.

UNICEF (2020) Basic Hygiene Practices such as avoiding touching the face,coughs or sneezes with an elbow or tissue. Maintaining physical distance from those outside one's household, and regularly cleaning and disinfecting high-touch surfaces

University of Maryland (2020). Global trends and predictors of face mask usage during the COVID-19 pandemic. BMC Public Health.

Viner, R. M., Russell, S., Croker, H., Packer, J., Ward, J., Stansfield, C., & Booy, R. (2020). School closure and management practices during coronavirus outbreaks including COVID-19: A rapid systematic review. The Lancet Child & Adolescent Health, 4(5), 397-404.

Willmott, M., Nicholson, A., Busse, H., MacArthur, G. J., Brookes, S., & Campbell, R. (2020). Effectiveness of hand hygiene interventions in reducing illness absence among children in educational settings: a systematic review and meta-analysis. Archives of Disease in Childhood, 105(1), 42-50. DOI: 10.1136/archdischild-2018-316362

World Health Organization. (2020). Urgent symptoms requiring immediate healthcare intervention and transmission modes of COVID-19.

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