Filipino Multidisciplinary Research Journal in Education

MESSAGE OF THE EDITOR-IN-CHIEF

Dear readers and contributors,

It is my pleasure to present the January - March 2023 edition of the Filipino Multidisciplinary Research Journal in Education. This edition features ten research papers that cover a range of topics in basic and higher education and aim to contribute to the advancement of the field.

We are proud to feature these research papers and hope that they will spark new ideas and discussions in education research. We extend our gratitude to the authors, reviewers, and editorial staff who have contributed to the production of this edition.

Each of these papers underwent a rigorous peer-review process and is presented here in its final form. The review process is an essential step in the publication of research papers because it ensures the validity and reliability of the research findings. It also helps to identify any potential flaws or weaknesses in the research and allows authors to address them before publication.

We would like to extend our gratitude to the authors, reviewers, and editorial staff who have contributed to the production of this edition. We hope that this edition will be a valuable resource for researchers, educators, and policymakers alike, and we look forward to continued engagement with our readers.

Sincerely,

JENNY ROSE A. GESTOLE, EdD, LPT
Editor-In-Chief

Filipino Multidisciplinary Research Journal in Education

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Development and Validation of Iconized Exemplar in Music, Arts, Physical Education and Health (MAPEH)

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A B S T R A C T

Introduction: Teachers are encouraged to deliver lessons in a way that is learner-centered, inclusive, and research-based through interdisciplinary and contextual approaches as part of the K–12 Curriculum's introduction of a culturally responsive and culture-sensitive, integrative, and contextualized, relevant, and responsive curriculum.

Methods: The interdisciplinary contextualized method links concepts and abilities within learning domains. The Department of Education (DepEd) uses interdisciplinary contextualization (ICon) in Science, Mathematics, and English, but MAPEH has never been researched. This research develops and validates iconized exemplars in music, arts, physical education, and health and examines their ramifications. The descriptive research design used the questionnaire to collect data. Forty-four heads, supervisor and expert teachers were the first group of respondents, and one hundred fifty grade 9 high school students were the second group of participants. The bulk of teacher respondents were from the DepEd Division of Nueva, especially District of Talavera, whereas all student respondents were from Talavera National High School.

Results: Results showed that practically all supervisors, department heads, and expert teachers characterized the four criteria of the iconized example in MAPEH—objectives, content, activities, and language—as "highly agree." Results also indicated that the supervisor and department heads' descriptions of MAPEH's iconized exemplar's aims differed from the expert teachers with a F value of 4.265 and p value of.045. Supervisors and department leaders score higher. Additionally, student conduct varied by sector. MAPEH students from various sections had distinct behavioral evaluations of iconized exemplars with F value of 5.636 and p value of.004.

Conclusions: The interdisciplinary contextualization of the four components of MAPEH—music, arts, physical education, and health—provides tailor-fit courses that accommodate and respect cultural, linguistic, and ethnic diversity, stimulates students to study MAPEH, and allows them to learn creatively.

Keywords: MAPEH, Development and Validation, Public School Teachers, K-12 Curriculum, Quality Education

INTRODUCTION

MAPEH stands for "music/arts/physical/health," and it is often considered by educators of all levels to be one of the most challenging subjects to teach. In addition to its four parts, the course places an emphasis on the student's intellectual, physical, and emotional growth. To teach MAPEH, educators need to have a firm grasp on four distinct but interrelated areas. Together, they help the learner develop a well-rounded set of skills and a more fertile imagination.

Teachers must find latent skills and utilize these creative features to develop future artists from these students. As a result, these instructors must fulfill a variety of duties to bring out the best in their pupils. Given the issues in the Philippine educational system today, such a project is formidable. These are evident in the findings of studies undertaken to analyze the influence of pre-service education among music, arts, physical education, and health majors, as well as teacher teaching styles and curriculum, on the learning outcomes of students in the aforementioned areas.

The problem goes beyond the inadequacy of teachers to teach the subject or simply attributing it to their professors for their lack of training during their undergraduate years (Bubka & Poberezhna, 2020). Some or majority of Filipino MAPEH teachers lack the necessary approach in teaching the very basic knowledge and skills of the subject. This may be since some teachers are non-MAPEH major graduates or lack training and seminars attended. This makes the MAPEH teachers feel inadequate in handling the subject. This adds to student related problems that include low level of interest and poor study habits.

One trait of a competent teacher is that the teacher must consistently strive to improve and develop their repertoire of teaching methodologies. The traditional way of teaching is found to be ineffective in reaching out to these "tech savvy" learners and these new breed of students aptly called "millennials" or "gen z's" need inventive and innovative strategies of imparting knowledge. This means instilling current instructional methodologies that form a transition from direct to indirect teaching (Castro, 2018).

On one end, there is direct instruction which is teacher-centered. Teacher-centered instruction believes that learning is a result of direct transmission of knowledge from teacher to student. On the other hand, indirect instruction is student-centered (Dauz & Ramos, 2019). Student-centered instruction believes that learning is a result of a student's ability to understand and process information. In the transition from direct (teacher-centered) to indirect (student-centered) the teacher is required to be competent and effectively create an environment conducive for learning.

Learning occurs only when the students (learners) process new information or knowledge in such a way that it makes sense to them in their own frames of reference (their own inner worlds of memory, experience, and response). This means focusing on the multiple aspects of any learning environment, whether classroom, laboratory, computer laboratory, worksite, or field. With the introduction of the K to 12 Curriculum which features a culturally responsive and culture sensitive, integrative, and contextualized, relevant, and responsive curriculum, teachers are now encouraged to deliver their lessons in a learner-centered, inclusive and research based through contextualized and localized approach. This means developing an enhanced basic curriculum that is contextualized and global but local in context. Thus, the interdisciplinary contextualized approach was introduced. The interdisciplinary contextualized approach is connecting/linking concept/skills within learning areas. This has been applied by the Department of Education (DepEd) in the areas of science, math and language and have shown promise and positive results (De Guzman et al., 2019).

However, as of present, use of interdisciplinary contextualization or "ICon" in MAPEH has never been explored or studied. Teachers rely on strategies traditionally used when teaching the components in MAPEH. Such traditional strategies like use of creative

expression method, Kodaly method, simulation sight reading or technology related methods for music or simulation-part-whole, learning together and importance for physical education seems inadequate and further widen the gap between the students learning and not learning by failing to stimulate their interest and engage learners in purposeful activities (Espiritu (2019).

The interdisciplinary contextualized approach to teaching MAPEH on the other hand answers the requirements of the 21st century learner as embodied in the demands of the K to 12 curriculum. As there is therefore a need to improve the teaching methodologies and competencies of MAPEH teachers so must the teachers themselves learn to able to interact better with their students (Guerrero & Daroy, 2019). The researcher, as a MAPEH teacher, believes that such commitment and advocacy for strategies that would improve learner retention, arouse interest, and promote creativity should be keenly observed and explored. Strategies wherein all techniques by which the teacher structure the learning environment, modify the tools and enhance the delivery of the lessons in a creative and constructive way so that the students are led to find out what they are supposed to discover. Hence, the researcher believes in the merit and the conduct of this study.

RESEARCH QUESTIONS

This study validated the developed iconized exemplar in Music, Arts, Physical Education and Health. Specifically, this seeks to answer the following questions: (1) How may the teacher-respondents describe the contents of the iconized exemplar in MAPEH in terms of: objective, content, activities, and language? (2) How may the iconized exemplar in MAPEH be described by the students? (3) What comments and suggestions did the student – respondents provide as they participated in the iconized exemplar in MAPEH? (4) Is there a significant difference on the description in the contents of the iconized exemplar in MAPEH among the EPS, heads, and expert teachers? (5) Is there a significant difference on the student's behavior across age and section?

METHODOLOGY

Research Design. This study creates and verifies visual representations of exemplary activities in music, arts, physical education, and health and analyzes their effects. The study employed a descriptive research design and collected data using a survey questionnaire.

Sampling. Forty-four heads, supervisor and expert teachers were the first group of respondents, and one hundred fifty grade 9 high school students were the second group of participants. The bulk of teacher respondents were from the DepEd Division of Nueva, especially District of Talavera, whereas all student respondents were from Talavera National High School.

Instrumentations. Questionnaires were used to gather data from the respondents which were validated, and pilot tested. Validity score was 4.78 and Reliability index was .93 which is highly valid and very reliable respectively.

Data Analysis. Statistical tools such as frequency and percentage, mean, and analysis of variances (ANOVA) were used to analyze the data.

RESULTS

The presented results cover various aspects of the Iconized Exemplar in MAPEH program, including its description by Expert Teachers and EPS and Heads (Table 1), comments and suggestions by students (not specified which group) on the program, significant difference on the description of the Iconized Exemplar in MAPEH among EPS, Heads and Expert Teachers (Table 10), and significant difference on student's description across age and section (Table 11).

Description of the Iconized Exemplar in MAPEH by Expert Teachers and EPS and Heads. Table 1 presents the mean results of the description of the Iconized Exemplar in MAPEH by Expert Teachers and EPS and Heads, using four different indicators: Objectives, Content, Activities, and Language.

Table 1. *Mean Results of the Description of the Iconized Exemplar
in MAPEH by Expert Teachers and EPS and Heads*

Indicators	Mean	Verbal Interpretation
Objectives by Expert Teachers	4.82	Very Satisfactory
Objectives by Heads and EPS	4.52	Very Satisfactory
Content by Expert Teachers	4.52	Very Satisfactory
Content by Heads and EPS	4.58	Very Satisfactory
Activities by Expert Teachers	4.55	Very Satisfactory
Activities by Heads and EPS	4.66	Very Satisfactory
Language by Experts	4.57	Very Satisfactory
Language by Heads and EPS	4.64	Very Satisfactory
Composite Mean	4.61	Very Satisfactory

Legend:
 1.00-1.79 – Very Unsatisfactory.
 1.80-2.59 – Unsatisfactory
 2.60-3.39 – Undecided
 3.40-4.19 – Satisfactory
 4.20 -5.00 – Very Satisfactory

The table also includes a Composite Mean, which is an average of all the indicators. The table presents the means for each indicator, along with a verbal interpretation based on a scale ranging from 1 to 5. The scale is labeled with verbal descriptors ranging from "Very Unsatisfactory" to "Very Satisfactory." The results suggest that both Expert Teachers and Heads and EPS rated the Iconized Exemplar in MAPEH very satisfactorily, with mean scores ranging from 4.52 to 4.82 for the different indicators. The Composite Mean score of 4.61 also indicates a very satisfactory rating overall.

It is important to note that while the mean scores provide an indication of the overall level of satisfaction with the Iconized Exemplar in MAPEH, they do not provide information about the variability or spread of the scores.

Additionally, the scale used to interpret the mean scores is somewhat subjective and may vary depending on the context and the specific interpretation of the verbal descriptors used. Overall, Table 1 provides a general overview of the mean ratings of the Iconized Exemplar in MAPEH by Expert Teachers and EPS and Heads, suggesting high levels of satisfaction across different indicators.

Iconized Exemplar in MAPEH as Described by Students. Table 2 presents the mean rating of the Iconized Exemplar in MAPEH program as described by students, using a single indicator. The table includes the Mean score and a verbal interpretation based on a scale ranging from 1 to 5. The scale is labeled with verbal descriptors ranging from "Very Unsatisfactory" to "Very Satisfactory."

Table 2. *Iconized Exemplar in MAPEH as Described by Students*

Indicators	Mean	Verbal Interpretation
Description of Iconized Exemplar by the Students	3.72	Satisfactory

Legend:
 1.00-1.79 – Very Unsatisfactory.
 1.80-2.59 – Unsatisfactory
 2.60-3.39 – Undecided
 3.40-4.19 – Satisfactory
 4.20 -5.00 – Very Satisfactory

The results indicate that the mean rating of the Iconized Exemplar in MAPEH program as described by students is 3.72, which falls under the category of "Satisfactory" according to the verbal interpretation. This suggests that students perceive the program to be moderately satisfactory in meeting their educational needs in the areas of Music, Arts, Physical Education, and Health.

Comments and Suggestions by Students on the Iconized Exemplar in MAPEH. The students who responded provided varying opinions about their acceptance and suggestions for the Iconized Exemplar in MAPEH program. However, overall, most of the students had a positive response to the program. Many of the student participants described the program as enjoyable and fun and used words such as exciting and
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understandable. They also stated that the program helped them to better comprehend the subject matter.

Significant Difference in the Description of the Iconized Exemplar in MAPEH among EPS, Heads and Expert Teachers. The table displays the results of an analysis of variance (ANOVA) for four different variables (objectives, content, activities, and language) in relation to the description of the Iconized Exemplar in MAPEH (Music, Arts, Physical Education, and Health) among three groups: EPS (Education Program Supervisor), Heads, and Expert Teachers. For each variable, the table shows the Sum of Squares, the degrees of freedom (df), the Mean Square, the F-statistic, and the significance level (Sig.)

Table 3. Significant Difference on the Description of the Iconized Exemplar in MAPEH among EPS, Heads and Expert Teachers

		Sum of Squares	df	Mean Square	F	Sig.
OBJECTIVES	Between Groups	29.021	1	29.021	**4.265***	.045
	Within Groups	285.774	42	6.804		
	Total	314.795	43			
CONTENT	Between Groups	1.706	1	1.706	.271	.605
	Within Groups	264.544	42	6.299		
	Total	266.250	43			
ACTIVITIES	Between Groups	4.994	1	4.994	.798	.377
	Within Groups	262.892	42	6.259		
	Total	267.886	43			
LANGUAGE	Between Groups	1.910	1	1.910	.186	.668
	Within Groups	430.636	42	10.253		
	Total	432.545	43			

The results indicate that there is a significant difference on the description of the Iconized Exemplar in MAPEH among EPS, Heads, and Expert Teachers for the objectives variable (F=4.265, p=.045). However, there is no significant difference for the CONTENT (F=.271, p=.605), activities (F=.798, p=.377), and language (F=.186, p=.668) variables. It is

important to note that the significance level (Sig.) for each variable indicates the probability of obtaining the observed results by chance alone. In this case, a significance level of .05 or lower is typically used to indicate statistical significance, and the OBJECTIVES variable meets this criterion.

Overall, the ANOVA results suggest that there are differences in the way EPS, Heads, and Expert Teachers describe the Iconized Exemplar in MAPEH when it comes to objectives, but not for content, activities, and language. Further analysis, such as post-hoc tests, may be needed to identify specific differences between the groups for the objective's variable.

Significant Difference on Student's Description Across Age and Section. The table displays the results of an analysis of variance (ANOVA) for two different variables (Section and Age) in relation to the behavior of students.

Table 4. Significant Difference on the Behavior of Students across Age and Section

		Sum of Squares	df	Mean Square	F	Sig.
Section	Between Groups	28.346	2	14.173	5.636*	.004
	Within Groups	369.654	147	2.515		
	Total	398.000	149			
Age	Between Groups	8.956	3	2.985	1.120	.343
	Within Groups	389.044	146	2.665		
	Total	398.000	149			

Specifically, the table examines whether there is a significant difference in behavior across different sections (presumably referring to different classes or groups) and different age groups. For each variable, the table shows the Sum of Squares, the degrees of freedom (df), the Mean Square, the F-statistic, and the significance level (Sig.). The results indicate that there is a significant difference in behavior across different sections for the Section variable (F=5.636, p=.004).

DISCUSSION

Description of the Iconized Exemplar in MAPEH by Expert Teachers and EPS and Heads. Table 1 displays the average evaluations given to the MAPEH Iconized Exemplar by both Experienced Teachers and EPS and Heads. Mean scores for the various indicators ranged from 4.52 to 4.82, indicating that both groups found the program to be very satisfying. The overall rating of 4.61 on the Composite Mean scale is also very high quality. These results are in line with other studies that have shown the benefits of using an Iconized Exemplar to better understand and remember new material. The program's success in achieving its goals and proving itself an effective instrument for teaching MAPEH is evidenced by the positive feedback from Expert Teachers, EPSs, and Heads (Lira, 2018). It is worth noting, however, that the mean ratings can only give a rough idea of how content people are with MAPEH's Iconized Exemplar. Expert Teacher, EPS, and Head differences in perception may be better understood with additional study, such as looking at score variability and completing post hoc testing. The verbal adjectives used to describe the mean scores, while helpful, are subjective and may be interpreted differently depending on who you ask. To make these results more objective and trustworthy, further study should investigate different ways of interpreting and reporting mean scores.

Iconized Exemplar in MAPEH as Described by Students. It is essential to keep in mind that the results of this study can only be interpreted verbally, and that the use of a single indicator as well as the subjectivity of the

interpretation may restrict the conclusions that can be taken from them. Despite this, the data offers a significant amount of information into the ways in which the students view the Iconized Exemplar in MAPEH program. In subsequent research, other indicators, more in-depth surveys and interviews, and student perspectives could be used to better investigate student perspectives. In addition, it may be useful to compare the perspectives of students with those of instructors and other stakeholders to discover areas of agreement as well as potential areas for development (Marzan 2018). The research indicates that although there is room for advancement, the Iconized Exemplar in MAPEH program is judged to be at least satisfactory by students. This is even though there is room for improvement.

Significant Difference in the Description of the Iconized Exemplar in MAPEH among EPS, Heads and Expert Teachers. The findings of the ANOVA analysis on the description of the Iconized Exemplar in MAPEH by EPS, Heads, and Expert Teachers reveal that there is a significant difference among the groups for the objective's variable. Specifically, the results show that the Expert Teachers and EPS rated the objectives more favorably compared to the Heads. However, there is no significant difference among the groups for the content, activities, and language variables. These results suggest that the Expert Teachers and EPS may have a more aligned perception of the objectives of the Iconized Exemplar in MAPEH, while the Heads have a different perspective. Further examination through post-hoc tests may be necessary to uncover more detailed differences between the groups (Nunez & Cabacaba, 2020). It is important to note that the findings are limited to the specific indicators and groups studied in this research, and caution should be taken when generalizing the results to other contexts (Reyes & Gomez, 2018).

Significant Difference on Student's Description Across Age and Section. The ANOVA results presented in Table 4 demonstrate that there are significant differences in the behavior of students across different sections. This finding is important as

it suggests that factors related to the section or class a student belongs to may be influencing their behavior. However, it is important to note that the ANOVA results cannot provide specific information about which sections are different from each other in terms of behavior. Further analysis, such as post-hoc tests, would be needed to identify specific differences between the sections. In contrast, the ANOVA results did not find a significant difference in behavior across different age groups (Petalcorin & Buenaobra, 2020). This suggests that age may not be a significant factor in influencing behavior among the students in the sample. However, it is important to note that the age variable used in this study may not capture all relevant factors that could influence behavior, and further research may be needed to explore other relevant variables (Palattao, 2019). Overall, the ANOVA results provide important information about the factors that may be influencing the behavior of students in this study, highlighting the potential influence of section but not age.

CONCLUSIONS

In conclusion, the data presented in this paper suggests that the Iconized Exemplar in MAPEH program is a beneficial tool for teaching MAPEH, with high levels of satisfaction reported by Expert Teachers and EPS, as well as positive feedback from students. However, the results also indicate that there are differences in perception among EPS, Heads, and Expert Teachers regarding the objectives of the program, which may need to be further explored. Additionally, the ANOVA results suggest that there are significant differences in behavior across different sections of students, but not across different age groups. These findings highlight the need for further research to understand the factors that influence student behavior and how interventions can be implemented to improve behavior across all sections and age groups. Overall, the results of this study provide important insights into the effectiveness of the Iconized Exemplar in MAPEH program and the factors that may influence student behavior, providing a foundation for further research and improvements in teaching practices.

RECOMMENDATIONS

Based on the findings of this study, it is recommended that educators continue to use the Iconized Exemplar in MAPEH program as a teaching tool. However, it is also important to address the differences in perception among EPS, Heads, and Expert Teachers regarding the objectives of the program. Additional research, such as post-hoc tests, may be necessary to identify specific differences between the groups and to develop strategies that can align the perspectives of all stakeholders. Furthermore, given the significant differences in behavior observed across different sections of students, teachers and school administrators should consider implementing interventions that address these differences and promote positive behavior across all sections. Additional research into the factors that underlie these differences, and the effectiveness of potential interventions is also recommended. By addressing these issues, educators can improve the effectiveness of the Iconized Exemplar in MAPEH program and promote positive behavior among students in all sections and age groups.

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Preparedness and Responsiveness of Rural Health Units during the Covid-19 Pandemic in Cabanatuan City

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A B S T R A C T

Introduction: The COVID-19 pandemic has severely affected the delivery of health services in primary health care due to the fear and mistrust of healthcare. This study sought to determine how prepared the public primary health facilities are, particularly the RHUs, to mitigate virus transmission and how responsive they are to the non-health needs of the community people.

Methods: The study utilized descriptive-correlational research and a total population sampling of all healthcare providers working in the Rural Health Units in Cabanatuan City. The RHUs was found "better prepared" to identify, stop, and prevent epidemics based on the Ready Score Criteria. Additionally, the respondents were always responsive to the eight domains of health systems responsiveness.

Results: Correlation results found: (1) no significant relationship between the number of staff and the preparedness of the rural health unit; (2) positive correlation between the total number of staff and autonomy; (3) negative correlation between the total number of staff and choice of healthcare providers; (4) negative correlation between health facility readiness and prompt attention; and (5) negative correlation between health facility readiness and adequate quality of basic amenities.

Conclusions: Primary health care has played a significant role in promoting health and preventing disease transmission. Thus, improving the health system performance by being prepared in times of health crises safeguards the welfare of the people. A Comprehensive Health Enhancement Program for Rural Health Units is proposed. Further research on health system responsiveness is also recommended.

Keywords: COVID-19 Pandemic, Preparedness, Primary Healthcare, Responsiveness, Enhancement Program

INTRODUCTION

Since its declaration as a pandemic in March 2020, the 2019 COVID-19 pandemic has affected global health systems. Mistrust of healthcare and financial restrictions during lockdowns cause 53% of health service disruptions in primary care. 92% of countries reported a deterioration in health care delivery (World Health Organization [WHO], 2021). Healthcare workers are also at high risk of COVID-19 infection and seven times more susceptible to severe illness (Nguyen et al., 2020). Infection prevention and control are crucial to protecting patients, healthcare workers, and health services due to its contagiousness. Health facilities must be virus-ready now. This research is scarce, especially in the Philippines.

The poorest Filipinos choose outpatient care at public primary care institutions (Dayrit, 2018). These facilities provide medical consultations, prenatal and postnatal checks, immunization, dental care, childbirth, and family planning. These facilities support their communities despite the COVID-19 pandemic, demonstrating the importance of primary health care in disease epidemics. Due to increased patient numbers and poor infrastructure, commercial and public health facilities have struggled to comply with infection prevention and control procedures. Lack of personal protective equipment (PPE) has made the problem worse, endangering patients and healthcare workers. The pandemic tested health systems' ability to deliver universal health care goals like enhanced health, responsive systems, and equal health finance.

Pandemic, epidemic, and endemic are terminologies used when an outbreak of a particular disease happens at a specific locality or different places. A disease outbreak occurs when the number of disease cases exceeds the average expectancy (WHO, 2021). A pandemic, also known as a worldwide epidemic, is an outbreak of infectious illness that spreads rapidly across a large geographic region and has a high incidence, often affecting a major proportion of the global population for several months (Rogers, 2020). As it emerges unpredictably, disease outbreaks put the people and the healthcare system at enormous risks – like the case of the COVID-19 pandemic.

Health crises impact the health system, so preparation is essential. When there is no direct contact with the threat, all efforts are focused on forecasting, planning, and implementing solutions (Stoichitoiu & Baicus, 2021). Since most disaster-affected communities rely on primary healthcare facilities, Yari et al. (2021) state that unprepared healthcare institutions hinder service continuity. Kuy et al. (2020) also underlined the necessity of intervening early to avoid disruptions in health care delivery and guarantee that the health system continues to offer crucial treatment to the population, confirming that disaster health management choices affect pandemic outcomes (Plagg, 2021).

COVID-19 pandemics affect rural and urban areas. Kaufman (2020) states that almost half of rural residents are at danger of COVID-19 hospitalization and mortality. Rural areas have a significant risk of COVID-19 transmission (Arisanti et al., 2020; Peters, 2020), and many patients in many nations first contact primary care (Rawaf et al., 2020). Peters (2020) recommends reexamining each state's rural pandemic readiness plans to establish clear lines of power across jurisdictions, designate primary regional hospitals, store medical supplies, and manage health professional shortages. During an outbreak,

a well-organized health system can provide equitable access to high-quality crucial health care, decreasing direct and indirect mortality (WHO, 2020).

Even with a pandemic preparedness strategy in place, governments are confronted with difficulties due to today's unprecedented event. Van Hoang et al. (2021) concluded that the Hanoi health system's readiness response in Vietnam was satisfactory despite capacity and resource restrictions. Seventy-four percent of Africa's countries have a pandemic preparedness strategy, but the majority are out of date; they lack the resources necessary to track down confirmed cases' direct contacts and establish quarantine facilities at airports and hospitals for suspected cases (Gilbert et al., 2020). Kanu et al. (2021) then found that healthcare personnel in Sierra Leone perceived their facility as unprepared for the COVID-19 pandemic, validating Parmley et al.'s (2021) conclusion that COVID-19 readiness is lacking.

Bayani and Tan studied COVID-19's effects on Philippine health systems (2021). NPIs and COVID-19 fear have changed healthcare practitioners' and patients' care-seeking habits. Emergent and non-emergent patients requiring expert treatment, especially those with complex pregnancies, stroke, or myocardial infarction, are most affected by community quarantine. Due to travel restrictions, several emergency case patients died in transit to secondary and tertiary facilities, while COVID-19 patients were rejected by nearby emergency rooms. However, several rural health units had more outpatient visits than usual pre-COVID, as patients chose a small facility over a hospital with a higher infection risk. Numerous towns have implemented telemedicine via hotlines or radio consultations. COVID-19 updates are shared via social media.

RESEARCH QUESTIONS

This study examined Cabanatuan City's Rural Health Units' COVID-19 preparedness and response. It specifically addressed these questions: (1) What is the profile of Rural Health Units in terms of total number of staff (including physicians, nurses, DOH Human Resource for Health, midwives, and other personnel), total number of covered barangays, average monthly outpatient visits before and during the pandemic, and total number of covered barangays? (2) What is their work title, age, sex, and civil status? (3) How prepared are Rural Health Units in terms of health facility, staff, risk communication, and supply readiness? (4) How responsive is the health system to respect for dignity, autonomy, privacy, confidentiality, rapid attention, appropriate quality of basic amenities, access to social support, choice of health care providers, and effective communication? (5) Does RHU profile, preparation, and health systems responsiveness have a substantial relationship?

METHODOLOGY

Research Design. This study used quantitative research to collect numerical data and statistically analyze it to answer questions or test hypotheses (Nieswiadomy & Bailey, 2018). Descriptive correlational (or simple correlational design) was used to describe and explain relationships without inferring causality (Polit & Beck, 2017; Gray et al., 2016).

Sampling Procedures. Total enumeration or total population sampling was used to pick this study's respondents.

Preparedness and Responsiveness of Rural
Health Units during the Covid-19 Pandemic
in Cabanatuan City

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This sampling approach is suitable for small populations with a well-defined feature that eliminates bias.

Instrumentation. Since quantitative research often uses questionnaires, the study used one. Google Forms and research-assisted printing distributed the research instrument. Three sections—profile, preparation, and responsiveness—contained 63 items and two altered standardized measures. So, a Nueva Ecija Rural Health Unit pilot test with 17 respondents passed the reliability test with 0.966 and 0.980, respectively.

Data Analysis. Tables and figures presented descriptive and inferential statistics-analyzed data. Frequency and percentage distribution were used to explain the RHU and respondents' profiles. Pearson Product-Moment RHU profile, preparedness, and responsiveness associations were examined using correlation.

RESULTS

Profile of RHUs. Before the epidemic, Cabanatuan City, Nueva Ecija's largest city, had 8480 monthly RHU visits.

Pandemic outpatient visits dropped to 7356 per month, affecting primary care. In-person consultations dropped as non-communicable disease patients worried about getting the virus.

Profile of Respondents. The study surveyed City Health Center nurses, midwives, and doctors. Most responses (49) were nurses, followed by midwives (26) and doctors (8). The most respondents were 31-36 (31.33%), followed by 55-60 (3.61%) and 61+ (3.61%). Women outnumbered men (79.52% to 20.48%). Most nurses and midwives worldwide are women, who are more susceptible to infection (Bandyopadhyay et al., 2020).

Preparedness of Rural Health Units. Table 3.5 shows RHU readiness for COVID-19 entrance screening and triage. 85.90% of facilities screened and triaged. However, single rooms with doors for COVID-19 physical evaluation (84.34%), dedicated patient bathrooms in the waiting area (55.42%), and effective hand hygiene stations (7.23%) rated low. Several RHUs lack pandemic-critical infection prevention and control facilities. Hand hygiene stations and patient restrooms fared poorly during COVID-19 (Ashinyo et al., 2021; Hirai et al., 2021).

Table 1. Preparedness of Rural Health Units

Preparedness of Rural Health Units	Frequency of "Yes" answers	Percentage	Interpretation
1. Health Facility Readiness	926		
2. Health Staff Readiness	498		
3. Risk Communication	735	**94.90**	**Better Prepared**
4. Availability of Supplies	913		
Total (n=3237)	**3072**		

*Criteria: The ReadyScore Criteria for Preparedness

80% or higher	Better Prepared
40 – 79%	Work to Do
39% or lower	Not Ready

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In Table 1, Cabanatuan City RHUs scored 94.90 percent, indicating superior epidemic detection, prevention, and control. Most screening and triage departments lack patient bathrooms in the waiting area and solitary rooms for symptomatic patient physical evaluation. This study showed early epidemic countries need better health institutions. Ethiopian hospitals reported 52% needed improvement (Tolu et al., 2020). 26.1% of South Wollo health facilities were pandemic-ready, while the remainder needed "improvement" (Ayele et al., 2021). Two of Uganda's seventeen referral institutes were ready; others needed development (Mwine et al., 2022). Chanie et al. (2021) found COVID-19-unprepared frontline staff. Yari et al. suggest majority use basic healthcare (2021). Peters (2020) suggests reviewing each state's rural pandemic readiness plans to identify jurisdictional bounds, designate primary regional hospitals, store medical supplies, and manage health professional shortages.

Health Systems Responsiveness of Respondents. Table 2 indicates health system responsiveness. Respondents always replied to the eight responsiveness domains—respect for dignity, autonomy, privacy and secrecy, timely attention, adequate quality of basic facilities, access to social support, choice of healthcare provider, and effective communication—with a weighted mean of 3.87. Respondents always respect patient rights (WM=3.98).

Table 2. Health Systems Responsiveness of Respondents

Health Systems Responsiveness of Respondents	Mean	Verbal Description
Respect for dignity	3.98	Always Responsive
Autonomy (involvement in decisions)	3.98	Always Responsive
Privacy and Confidentiality	3.98	Always Responsive
Prompt Attention	3.78	Always Responsive
Adequate Quality of Basic Amenities	3.82	Always Responsive
Access to social support	3.87	Always Responsive
Choice of health care providers	3.78	Always Responsive
Effective Communication	3.95	Always Responsive
Overall Mean	3.87	Always Responsive

*Legend:
3.25 – 4.00   Always Responsive (AR)
2.50 – 3.24   Often Responsive (OR)
1.75 – 2.49   Sometimes Responsive (SR)
1.00 – 1.74   Never Responsive (NR)

Health system responsiveness studies involve patients. Patients' healthcare satisfaction varies. This study supports previous findings that respect for human rights area receives the most responsiveness (Baharvand, 2019; Kapologwe et al., 2020; Talasaz et al., 2019; Tille 2019). The health system failed to meet customers' expectations for treatment and convenience, according to

Yakob and Ncama (2017). Rapid attention and healthcare provider choice were the lowest. Qin et al. (2022) observed dismal results in both domains, despite rising criteria for safety, quality, and justice.

Correlation of Variables. The profile of the rural health units in terms of the total number of staff does not significantly correlate with the preparedness of the rural health unit as to health facility readiness ($p = 0.247$), health staff members ($p = 0.937$), risk communication ($p = 0.522$) and availability of supplies ($p = 0.924$). This means that the profile of the RHU had nothing to do with the preparedness. Thus, the hypothesis of no significant relationship was accepted.

Table 3. Correlation Between the Profile of the RHU and Preparedness

		Health Facility Readiness	Health Staff Readiness	Risk Communication	Availability of Supplies
Total No. of Staff	r	-0.129	-0.009	-0.071	-0.011
	p	0.247	0.937	0.522	0.924
Total No. of Covered Barangay	r	0.035	0.061	0.052	0.002
	p	0.755	0.585	0.643	0.986
Average Outpatient Visits Before the Pandemic	r	0.027	0.052	-0.011	-0.007
	p	0.809	0.643	0.922	0.948
Average Outpatient Visits During the Pandemic	r	-0.017	0.02	-0.066	-0.008
	p	0.879	0.857	0.556	0.939

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

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

Since healthcare workers are rare worldwide, the number of providers does not determine disease outbreak readiness. Health workforce training is required now. Nayahangan et al. (2021) advocate immediate IPC and PPE training for healthcare professionals during an outbreak to offer appropriate human resources. COVID-19-trained HCWs felt confidence using PPE to treat suspected or confirmed cases, according to Li et al. (2021). Sultan et al. (2020) found emergency-prepared healthcare staff more confident.

Profile of RHU and Health Systems Responsiveness. The profile of the RHU in terms of the total number of staff was positively correlated with the extent of health systems responsiveness of respondents as to autonomy ($p = 0.018$) and negatively correlated to the choice of health care providers ($p = 0.028$). This result indicates that the higher the number of staff in the RHU, the better the extent of health systems responsiveness of respondents as to autonomy and choice of health care providers. Hence, the hypothesis of no significant relationship was rejected. Research suggests that more healthcare professionals in a facility can increase patient participation and communication, leading to better-quality patient-staff interactions and improved patient satisfaction and safety. Staffing levels are

crucial for providing nursing care, monitoring illnesses, and educating patients about self-care. Patients benefit from having more healthcare providers to choose from for continuity of care. Primary care physicians make referrals based on the severity of a patient's ailment, and patients are referred for non-medical reasons such as community standards, patient requests, and education.

RHU Preparedness and Health Systems Responsiveness. The preparedness of rural health units as to health facility readiness was negatively correlated with the extent of health systems responsiveness in terms of prompt attention (p = 0.003) and adequate quality of basic amenities (p = 0.01). This result means that

the lesser the preparedness of the RHU, the better the extent of health systems responsiveness in terms of prompt attention and adequate quality of basic amenities.

Pandemic delay health care and travel because hospitals prepare more. Fear of illness is unreasonable. During enhanced community transmission, Czeisler et al. (2020) found routine and non-emergency care interruptions. Concerned about long hospital waits and doctor-related infections (Devi et al., 2021). They were urged to avoid hospitals unless necessary to reduce transmission risk (Rhatomy & Prasetyo, 2020). These conditions slowed health facility IPC practices.

Table 4. Correlation Between the Profile of the RHU and Health Systems

		Respect for Dignity	Autonomy	Privacy and Confidentiality	Prompt Attention	Adequate Quality of Basic Amenities	Access to Social Support	Choice of Healthcare Providers	Effective Communication
Total No. of Staff	r	0.198	0.258*	0.039	0.052	0.07	0.027	-0.241*	-0.119
	p	0.072	0.018	0.724	0.64	0.529	0.808	0.028	0.286
Total No. of Covered Barangays	r	0.006	0.023	0.028	0.025	0.009	-0.048	0.12	0.006
	p	0.954	0.839	0.802	0.826	0.933	0.667	0.279	0.958
Outpatient Visits Before the Pandemic	r	0.048	0.069	0.141	0.007	-0.029	-0.061	0.103	0.012
	p	0.664	0.538	0.203	0.952	0.798	0.583	0.354	0.914
Outpatient Visits During the Pandemic	r	0.093	0.119	0.155	0.103	0.024	0.048	0.12	0.115
	p	0.405	0.283	0.161	0.355	0.828	0.669	0.281	0.302

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

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

Pandemic preparation lowers space, ventilation, and seating, despite the IPC interim recommendations to reorganize and improve facility infrastructure. Poor infrastructure, ventilation, airborne infection management, and setting a minimum physical distance have made it difficult for some countries to offer basic services (Garg et al., 2020). WHO IPC requirements require ventilated screening stations, waiting areas, isolation rooms, and patient bathrooms. Outside air ventilation

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may be impractical. Reducing building or room occupancy can enhance ventilation per person (United States Environmental Protection Agency, 2022). Primary care is the health care system's entry point for most people. Minimizing hospital demand and gatekeeping during an outbreak helps vulnerable people cope with their fear of contracting the disease (WHO, 2021).

CONCLUSIONS

Primary health care has played a significant role in promoting health and preventing disease transmission. Improving the health system performance by being prepared in times of health crises thus safeguards the welfare of the people.

From the findings of the study, the following conclusions were drawn: (1) There is a shortage of RHUs and HCWs needed to cater to the city's growing population. During the pandemic, a decline in outpatient visits is noted, which also lessens the delivery and access to healthcare services, (2) Healthcare workers are most at risk of infection, and investing in their health must be taken into consideration to prevent the further shortage of workforce, (3) Although most facilities lack infrastructures, such as dedicated toilets for patient use and single rooms for physical evaluation, Rural Health Units in Cabanatuan City are still better prepared to identify, stop, and prevent epidemics. The sufficient training of HCWs coupled with adequate PPE and IPC supplies are essential factors in delivering safe health services and preventing virus transmission, (4) The health system is always responsive to the non-health needs of the people and has high regard or respect for the patient's human rights, (5) A high quantity of healthcare providers is not required to establish the readiness of a health facility during a disease outbreak

since the shortage of healthcare workers has long been experienced in all settings worldwide. However, training is necessary to improve the quality of the health workforce and maintain human resources, (6) Better staffing improves patient interaction and communication, which in turn enables the patient to make informed decisions regarding self-care and enhances patient involvement in their treatment, (7) With fewer health professionals in primary care facilities, especially doctors, patients are given more choices of health providers for referral or continuity of care, and (8) Heightened preparation of health facilities during a pandemic causes less prompt attention due to delays or avoidance in seeking healthcare. It also caused a decrease in adequate quality of basic amenities (e.g., space, ventilation, seating) since facility infrastructure needs restructuring as recommended by the IPC interim guidelines.

RECOMMENDATIONS

The following are suggestions and recommendations developed based on the conclusions drawn: (1) To address the shortage of healthcare workers, the LGU and CHO may invest in protecting their health and well-being by continuous provision and adequate supply of PPE, annual physical examination to monitor their health, mental health breaks (e.g., retreat and recollection), and management of human resources (i.e., recruitment, selection, training, retention), (2) The CHO may conduct the following training and seminars, (3) LGU and CHO may focus on the enhancement of facility infrastructure that may be used with or without an infectious disease outbreak and may boost the IPC in health facilities, (4) To be led by LGU and CHO, social media and technology may be utilized as a platform for health promotion and disease prevention, as

well as informing the public about specific disease surveillance. Hotlines that are available 24/7 for emergency concerns, with coordination among LGU and health office and centers, is also suggested, (5) The health workforce is one of the foundations of a responsive health system. Team Building is recommended to develop interpersonal relationships within the organization and create a welcoming environment for the patients, and (6) Research on health systems responsiveness, having patients as respondents, is recommended to evaluate further the responsiveness of health facilities.

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Motivations of Science Teachers to Pursue Advanced Studies: A Qualitative Content Analysis

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A B S T R A C T

Introduction: Science teachers have the tedious task of teaching students in a digital, dispersed environment, and they may require assistance acquiring the tools they need. Science teachers need graduate education to adapt to the contemporary educational context.

Methods: The qualitative-content analysis was used in the investigation. The application of correct inference and interpretation in qualitative content analysis allows for the distillation of enormous volumes of raw data into manageable topics and categories. Twelve key informants were enlisted for the research before the sampling phase was completed. Each conversation took place in an individual interview room at the institution where they now teach. The interview guide was validated by experts in science education. Inductive qualitative content analysis was used. Moreover, interviews were transcribed immediately. To understand the conversation, the minutes were read and reread. Four researchers abstracted and coded each summary unit. Codes were grouped by similarity and mergeability. Another four researchers checked twelve interview transcripts.

A B S T R A C T

Results: Four main themes emerged in this study: strengthen teaching skills, research opportunities, career advancement, and freedom.

Conclusions: The study shed light on what motivates graduate students to study in their professions. The four primary themes—teaching skills, research possibilities, professional progression, and freedom show that graduate education is multidimensional and requires a holistic strategy to promotion. These findings should be shared with graduate students, academic institutions, and politicians to better understand their motivations and demands and influence future research. Thus, education administrators can tailor the graduate education system to students' requirements and objectives and help them succeed in their professions.

Keywords: Motivations, Qualitative Research, Content Analysis, Science Teachers, Themes and Categories

INTRODUCTION

During the current global epidemic of COVID-19, a graduate education is more crucial than ever. Teachers in the field of science have the unenviable challenge of educating learners in an increasingly dispersed and digital setting, and they might use some help getting the materials they need to do the job well (Gillett-Swan, 2017; Riggs, 2022). Successfully adapting to the current educational climate calls for new information, abilities, and techniques, all of which may be gained via graduate education for science instructors. Teachers may benefit from a graduate degree program in several ways, including the chance to broaden their horizons and keep pace with developments in STEM (science, technology, engineering, and mathematics) instruction (Li & Schoenfeld, 2019). These findings are priceless because they will help educators better prepare their pupils for the future of science.

Graduate education is more important than ever during the COVID-19 pandemic. As science teachers are tasked with the difficult job of teaching in an unprecedentedly remote and digital environment, they need additional resources to ensure their students are receiving a quality education. Graduate education can provide science teachers with the knowledge, skills, and strategies necessary for success in this new educational landscape (Hovey et al., 2022). Graduate education can also offer teachers the opportunity to expand their knowledge base and stay up to date with the latest advancements in science, technology, engineering, and mathematics (STEM) education (Kutlu et al., 2022). This is invaluable, as it will enable science teachers to better prepare their students for the future.

Moreover, the motivation of science teachers to pursue advanced studies around the world is of paramount importance. Motivated science teachers can help to create an inspiring and engaging learning environment for their students, as well as develop their own knowledge and skills (Durucan et al., 2022). Moreover, pursuing advanced studies, science teachers can gain a deeper understanding of their subject matter (Sclafani, 2022)and the latest developments in the field (Cicek et al.,

2021). This can help them to bring a greater level of expertise to their classrooms, as well as to better equip their students to meet the challenges of the 21st century.

Advanced studies can also help science teachers to become more effective in their teaching. By gaining new skills and techniques, science teachers can become more efficient and effective in their delivery of lessons. This can help to foster a greater level of student engagement and enthusiasm, leading to improved student performance (Gray & DiLoreto, 2016). Meanwhile, by pursuing advanced studies, science teachers can learn from the experiences of educators from other countries (Margot & Ketteler, 2019). This can help them to gain a deeper insight into different approaches to teaching and can help them to develop innovative teaching methods for their own students.

Motivating science teachers to pursue advanced studies in the Philippines is an important factor in ensuring that the quality of science education in the country remains high. Science teachers engage in advanced studies to gain knowledge and skills in their field, as well as to refresh their teaching methods and approaches. Moreover, it helps them keep abreast of the latest trends and developments in science and technology, enabling them to better prepare their students for the challenges faced in the 21st century. Additionally, having science teachers with advanced studies helps to attract more students to engage in science-related courses in the Philippines (Kaleva et al., 2019). As students see their teachers as role models, it is important for them to have teachers who have extensive knowledge in the field, so that they may be better guided and inspired in their studies. Moreover, the presence of science teachers with advanced studies can also help to promote a culture of scientific

inquiry, leading to greater critical thinking and problem-solving skills among students.

The absence of research into scientific instructors' post-secondary motivations has been debated (Darling-Hammond et al., 2019). Science instructors' motivations to return to school have been studied, but more research is needed. For instance, how personality, values, and beliefs affect scientific professors' motivation for additional education is unclear. The study also didn't examine how institutional and social contexts affect science educators' motivation to get higher degrees. No research has examined how instructor experience and professional growth affect graduate science students' excitement (Gopal et al., 2021; Johnson, 2017). Financial incentives for scientific lecturers to pursue graduate degrees should also be examined. More research is needed to discover school elements including working environment, leadership, and parental/community participation that inspire science teachers to continue their studies (Durisic & Bunijevac, 2017).

It's crucial to study Filipino science instructors' motivation to study further. Science is always changing, and teachers must keep students up to date (Baum & Coen, 2019). So, they need the newest field information to be effective. Advanced studies allow teachers to keep up with industry advances (Srinivasacharlu, 2019). Advanced studies allow science teachers to earn new skills and certifications (OECD, 2019). This can boost their productivity and professional prospects. Advanced studies also allow teachers to work with experts, which can improve their teaching methods (Kim et al., 2019). This may boost Philippine science education. So, a study on Philippine science teachers' willingness to pursue higher studies is needed to ensure they have the abilities and qualifications to

teach science. This will improve scientific education nationwide.

RESEARCH QUESTIONS

The study was focused on determining the motivations of science teachers to pursue advanced studies during the COVID-19 pandemic. The central question was, "What were the motivations of science teachers to pursue advanced education during the COVID-19 pandemic?

METHODOLOGY

Research Design. The study employed the qualitative-content analysis. Qualitative content analysis is a method used to distill large amounts of raw data into manageable themes and categories via the use of accurate inference and interpretation (Ahmady et al., 2020). When a researcher examines and compares their data repeatedly, patterns and conclusions begin to develop.

Participants. Sampling continued until data saturation, and 12 participants were recruited in the study. Each interview conducted in a private room in the school where they are teaching. The inclusive criteria were as follows: science teacher, teaching in public schools under DepEd, enrolled in a graduate school from 2020-2021, and was willing to participate to the research study.

Instrumentation and Data Collection. Semi-structured interviews were done based on general questions asked with the key informants. This set of interview guides were evaluated by three experts which obtained a validity index of 4.68 which indicates that the instrument is valid.

Data Analysis. The information was examined using the inductive qualitative content analysis technique. Transcriptions were done promptly after each interview. After that, the minutes were read through to get a feel for what was said. Two researchers then abstracted the information and gave each summary unit a code name. The codes were sorted into groups based on their similarity and potential for merging. Two researchers read and verified the accuracy of twelve (12) interview transcripts.

Trustworthiness. The researchers looked at how well the information held up, double verified the codes with the participants, and determined how dependable they were. Credibility and reliability were attained by adhering to the standards established by Guba and Lincoln as cited by Forero et al., (2018). Members of the sample (informants) were provided with the interpretation and report (or a part of it) to verify the validity of the work. External auditors with experience in qualitative research also confirmed the results. This indicates that the two observers' familiarity with qualitative research led to the examination of specific segments of the interview text, as well as the confirmation of the appropriate codes and classifications they had generated. As much as possible of the participants' actual speech was transcribed so that the results could be generalized.

RESULTS

Five main themes emerged in this study: strengthen teaching skills, research opportunities, career advancement, and freedom.

Motivations of Science Teachers to Pursue
Advanced Studies: A Qualitative Content Analysis
Guira et al., (2023)

Table 1. Related themes and quotations

Theme	Quotation
Strengthen teaching skills	I think one very important motivation for me to advance my learning is to elevate my teaching skills so that learners under me learn better than me being without a graduate degree.
Research opportunities	I wanted to prove to other that pursuing a master's degree can help me publish my research paper, as well as to conduct research with colleagues and experts, as well to disseminate my paper in an international stage.
Career advancement	My goals for pursuing advanced studies are the following: to upgrade my knowledge and skills in the field of science, continuity of my personal and professional development, and to invest for my future
Freedom	Applying for graduate education provides me academic freedom because I will be more adept, more skillful and will have the competency to provide the appropriate tools for the learners to comprehend and understand the lesson well.

Strengthen teaching skills. This theme contains three related categories including: pedagogical strategies, classroom management, assessment and evaluation, technology integration, and reflective practice. Two participants asserted their views:

I think one very important motivation for me to advance my learning is to elevate my teaching skills so that learners under me learn better than me being without a graduate degree. (P03)

It is acquiring specialized knowledge and skills in a particular field. Likewise, improving job prospects and earning potential, and finally advancing in their current profession to strengthen my teaching skills as an educator. (P04)

Greene et al., (2020) highlighted in their study that graduate students are motivated to pursue higher education because they wish to strengthen their skills of teaching and instruction.

Research opportunities. This theme includes the following categories: publication, collaborate with other professionals, and podium presentation internationally. Graduate education can also provide individuals with opportunities to engage in original, scholarly research and contribute to the advancement of knowledge in their field (Chankseliani et al., 2020). The narratives of two participants are important to consider:

I wanted to prove to other that pursuing a master's degree can help me publish my research paper, as well as to conduct research with colleagues and experts, as well to disseminate my paper in an international stage. (P01)

My motivation is to have a fulfilling personal and intellectual curiosity through research publication and other relevant research opportunities through the graduate education I am aiming. (P07)

Career advancement. This theme is described as promotion, salary increase, improved job opportunities, and global opportunities. Many individuals pursue graduate education to increase their job prospects and earning potential, as well as to gain the skills and knowledge needed to advance in their careers. Two participants shared:

My goals for pursuing advanced studies are the following: to upgrade my knowledge and skills in the field of science, continuity of my personal and professional development, and to invest for my future. (P05)

The primary motivation I had for studying at Philippine Normal University is for personal growth. I have been teaching in public school for 5 years and I should strive more to learn more for myself and the students. (P09)

Freedom. The most common code is seen in this theme. This is described in five categories: career freedom, financial freedom, intellectual freedom, freedom to contribute, and professional freedom. Two of the participants said:

Applying for graduate education provides me academic freedom because I will be more adept, more skillful and will have the competency to provide the appropriate tools for the learners to comprehend and understand the lesson well. (P04)

I believe that pursuing advanced studies can help a science teacher deepen their understanding of their subject matter, become independent teaching practitioner who manifests quality and excellence as well as acquire new skills that can be applied in the classroom. (P08)

DISCUSSION

This study aimed to explain the motivation of science teachers in pursuing advance studies during the COVID-19 pandemic.

The first theme that emerged is strengthening teaching skills. This theme involves a continuous process of reflection and improvement, with the goal of becoming a more effective educator. Some common themes to strengthen teaching skills include pedagogical strategies, classroom management, assessment and evaluation, technology integration, and reflective practice. For pedagogical strategies, the participants consider exploring and implementing various teaching methods and techniques that engage students and promote learning (Wegner et al., 2013). On the other hand, participants wanted to develop further their skills in managing a classroom effectively, including setting clear expectations, creating a positive learning environment, and managing student behavior. For assessment and evaluation, the participants are motivated by understanding and applying various assessment techniques to evaluate student learning and provide meaningful feedback. Furthermore, becoming proficient in using technology to enhance teaching and learning, such as using digital tools to facilitate student engagement and collaboration is another motivation of the participants (Ghavifekr & Rosdy, 2015; Gopinathan et al., 2022; Nkomo et al., 2021). Finally, the participants would like to engage in

reflective practices, such as regularly evaluating one's own teaching, seeking feedback from others, and making necessary adjustments to improve student learning.

Another important finding of the study was the theme research opportunities. Research opportunities as a motivation to pursue advanced studies refers to the possibility of engaging in original, scholarly research and contributing to the advancement of knowledge in a particular field (Akopyan & Saks, 2022). Some of the benefits of research opportunities in advanced studies include hands-on experience, opportunities to make a difference such as publishing a research paper and participating in research projects can provide opportunities to connect with other professionals and build a professional network (Anjum, 2020).

Regarding the theme of career advancement, the participants pointed out the need to improve one's teaching competencies. Career advancement as a motivation to pursue graduate education refers to the desire to improve one's position and earning potential in their professional life. Some of the benefits of graduate education for career advancement include moving up to a higher ladder and become eligible for higher level positions and increase recognition and credibility in one's field and among colleagues and employers (Shulsinger, 2017).

The last theme was about freedom. Pursuing a graduate education can provide individuals with greater freedom and flexibility to pursue their personal and professional goals, as well as the skills and knowledge needed to succeed in their careers and make a positive impact in their communities. A graduate degree can also lead to higher salaries, which can provide individuals with greater financial freedom and the ability to make choices about how they spend their time and resources (Lusardi, 2019). In addition, a graduate degree can increase one's expertise and credibility in their field, which can lead to greater autonomy in their work and the ability to make decisions and contribute to their field in new and meaningful ways (Meeks, 2017). Furthermore, pursuing a graduate degree can help individuals develop critical thinking and problem-solving skills, which can provide them with greater freedom to tackle complex challenges and make informed decisions in their personal and professional lives.

CONCLUSIONS AND RECOMMENDATIONS

In conclusion, there are many motivations for science teachers to pursue graduate education. These include strengthen teaching skills, research opportunities, career advancement, and freedom. By pursuing a graduate degree, science teachers can deepen their understanding of their subject matter, develop new skills and techniques, and gain the knowledge and confidence needed to provide their students with a high-quality education. Whether motivated by a desire to enhance their teaching skills, increase their earning potential, or contribute to the advancement of scientific knowledge, graduate education can provide science teachers with a rich and rewarding experience that can help them achieve their professional and personal goals.

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Effective Uses of Social Media Towards Quality Nursing Education: A Systematic Review of Literature

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ABSTRACT

Introduction: Social media has become an integral part of modern society, transforming the way people communicate and share information. In recent years, social media has gained significant popularity in the field of nursing education as a means of facilitating learning and enhancing the quality of education.

Methods: This systematic review aimed to identify effective uses of social media in nursing education and its impact on the quality of education. A comprehensive search of literature published between 2018 and 2022 was conducted, yielding 20 relevant studies. The studies were critically appraised using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The studies were found to use a variety of social media platforms, including Facebook, Twitter, YouTube, and Instagram, for different purposes, such as communication, collaboration, education, and assessment.

Results: The results of this systematic review demonstrate that social media can be effectively used in nursing education to promote communication and collaboration among students and instructors, provide a platform for sharing educational resources and materials, facilitate distance learning, and enhance the quality of education. The studies also showed that social media has a positive impact on student engagement, motivation, and performance.

Conclusions: This systematic review highlights the potential of social media as an effective tool for promoting quality nursing education. Social media platforms provide an opportunity for innovative and interactive teaching methods that can be adapted to meet the needs of students in different learning environments. However, it is important for nursing educators to ensure that the use of social media in education is consistent with ethical and professional standards.

Keywords: Social Media, Nursing Education, Systematic Review of Literatures, PRISMA

INTRODUCTION

When it comes to the healthcare industry, nursing educators are crucial players in the processes of information discovery, knowledge interpretation, and information dissemination. Professional communication, health policy, patient privacy and ethics, and writing competence are all areas where social media may aid nursing professors in educating their students.

The advent of widely accessible social networking sites has drastically improved cross-cultural communication and collaboration in classrooms throughout the world. There are several examples of the successful use of social media in the classroom. As social media grows in popularity, there has been a need for research into its potential use in nursing education. Although studies have examined the beneficial benefits of social media on a variety of learning outcomes in nursing education, less attention has been paid to how these advantages affect students' performance, which is a crucial part of effective learning.

The increasing use of social media in nursing education has garnered attention in recent years due to its potential to revolutionize the delivery of nursing education. Social media has been recognized as an effective tool for communication, information sharing, and networking. This has resulted in the improvement of learning outcomes and the enhancement of the quality of nursing education. The purpose of this systematic review is to investigate the effective uses of social media in nursing education and its impact on the quality of education. This paper aims to provide an overview of the current research on the topic. Specifically, the review will focus on the various social media platforms used in nursing education, the benefits, and challenges of using social media, and the impact of social media on nursing students' academic performance and clinical practice. In addition, the review will examine the strategies used by educators to effectively integrate social media into nursing education. This paper will contribute to the existing knowledge on the use of social media in nursing education by providing evidence-based recommendations for nursing educators and policymakers to improve the quality of nursing education through the effective use of social media. The findings of this systematic review will be useful for nursing educators and policymakers looking to incorporate social media into their nursing education curriculum.

RESEARCH QUESTION

What are the effective uses of social media that supports quality nursing education?

METHODOLOGY

Research Design. The study employed the systematic review of literature to gather evidence on the effectiveness of social media towards quality nursing education.

Study Inclusion. Broad inclusion criteria were delineated with the intent of casting the net widely, so to speak, to capture the effective uses of social media in supporting the goals in quality nursing education and enhancing the learning outcomes of nursing students. Inclusion criteria included the following: (*a*) peer-reviewed, (*b*) research study of any kind (all study designs included), (*c*) written in the English language, (*d*) involving effective uses of social media in support of quality

nursing education, (*e*) with nursing students, and (*f*) from 2022 to 2022.

Study Identification. Eight researchers consulted a librarian scientist to focus their literature review. Followed Recommended Reporting Items for Systematic Reviews and Meta-Analyses. ScienceDirect, ERIC, PubMed, CINAHL, the Web of Science, and ProQuest provided data. MeSH keywords, key word searches, and the Boolean operator "AND" were used to search the databases for "successful applications of social media," "quality nursing education," and "learning outcomes." A 2020–2022-date range and

academic, peer-reviewed articles or research works were added to search limits to ensure database consistency.

Study Selection. Article titles and abstracts were screened by three scholars working separately. Any time there was a disagreement, a fourth researcher investigated the paper's title and abstract to reach a conclusion. As a result, only fifty studies that met the criteria were chosen. Then, the researchers got rid of the duplicates. Twenty-five papers in all were included in the systematic review (Figure 1).
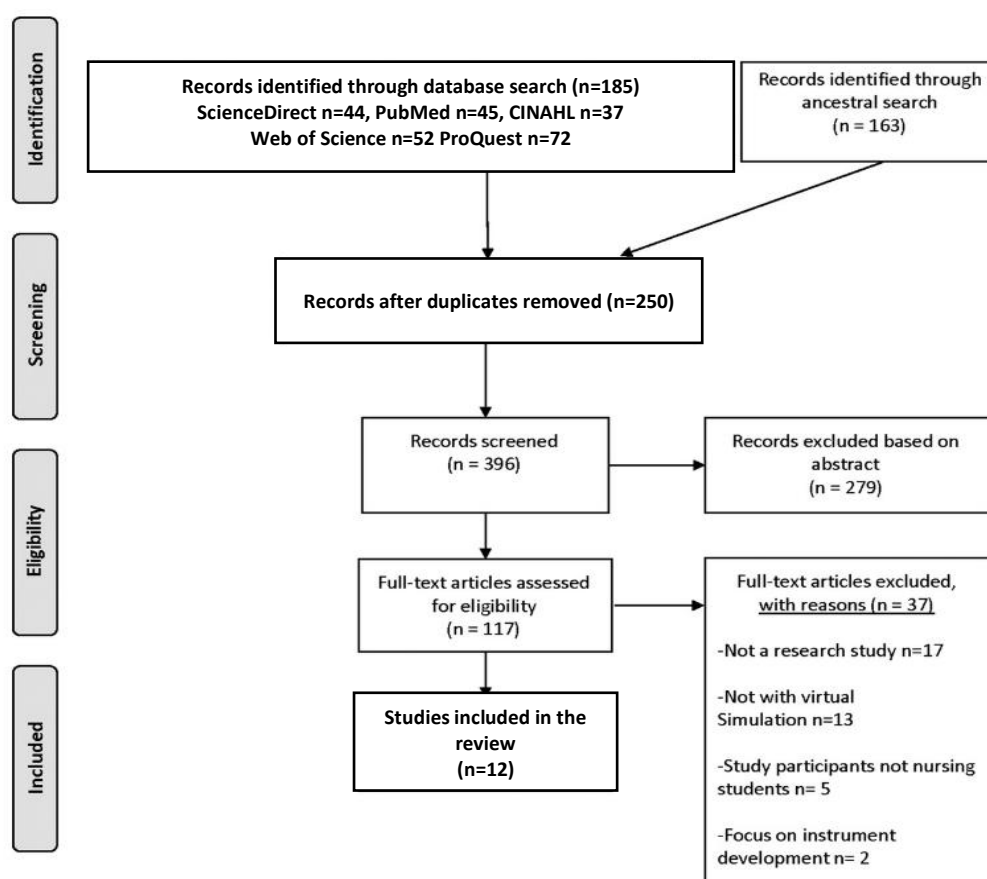

Figure 1. Flow chart of the systematic review of literature.

Data Synthesis

The lead researcher went over the summary tables many times, making

mental notes on the varied study features, learning outcomes, and learning goals. The CASP tools' data was pooled to find

patterns of bias in the existing evidence. Melnyk and Fineout-levels Overholt's of evidence were used to rate studies and classify them as high- or low-quality studies (Kumah et al., 2019). The extraction table was mined for information on learning outcomes, and the data was compiled for analysis of frequency and impact.

RESULTS

Two themes emerged when the literatures are categorized based on the evidence obtained from databases.

Improves nursing student engagement. Of the 25 papers included in the systematic review, 7 (33%) concluded that social media improves nursing student engagement (Almutairi et al., 2022). Table 1 summarizes six different studies that examine the impact of various interventions on nursing student engagement. The first

study by Almutairi et al. (2022) employed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method to determine that social media usage in nursing education improved student engagement. Immidisetti et al. (2022) conducted a retrospective exit survey and found that using educational ambassadors on social media improved the visibility of educational programs that benefited nursing students' learning outcomes. Koohestani et al. (2016) used a qualitative approach to examine nursing students' perspectives on clinical education and found that inadequate preparation, clinical instructor support, and clinical placement were challenges.

Table 1.

Literatures supporting improves nursing student engagement.

Authors	Source	Design	Significant Results
Almutairi, Simpson, Khan, & Dickinson (2022)	Nurse Education in Practice	Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)	Nursing students' participation, including quick contact and communication, are bolstered using social media to enhance their learning.
Immidisetti et al., (2022)	World Neurosurgery	Retrospective exit survey	Social media, and specifically the use of educational ambassadors, are effective to improve visibility of educational programs benefitting learning outcome among nursing students.
Koohestani, H. R., Baghcheghi, N., & Rezai, R. (2016).	Journal of Advances in Medical Education and Professionalism	Qualitative study	The authors observed that nursing students considered clinical instruction vital to their professional development. Nonetheless, inadequate preparation, clinical instructor support, and clinical placement were noted as clinical

			education problems. During clinical education, students stressed communication, patient safety, and ethics.
McDonald, J., & Guilhermino, M. (2019).	Journal of Nursing Education and Practice	Mixed Methods Design	The study found the revised curriculum engaged nursing students. Technology, active learning, and collaboration in the classroom increased student engagement and learning, according to students. The redesigned curriculum also increased students' critical thinking and course content understanding.
O'Connor, A. B., Nikels, M. G., & Schreier, A. M. (2018).	Nurse education in practice	Qualitative approach	The study found that effective instructor communication and feedback, a supportive and respectful learning environment, hands-on and experiential learning, a clear and organized curriculum, peer collaboration and support, and effective use of technology and resources improve student engagement and learning in clinical and classroom settings.
Seaman, K. T., & Allen, P. E. (2018).	Nursing education perspectives	Literature review	The review identifies several key strategies for engaging students in online nursing education. These include the use of multimedia resources, interactive activities and assessments, discussion boards, and social media. The authors note that these strategies can help create a sense of community and collaboration among students, which is important for engagement and motivation.

Meanwhile, McDonald and Guilhermino (2019) used a mixed-methods design and found that a revised curriculum, which included technology and collaboration, increased student engagement, critical thinking, and course content understanding. O'Connor et al. (2018) employed a qualitative approach to identify effective instructor communication and feedback, a supportive and respectful learning environment, hands-on and experiential learning, a clear and organized curriculum, peer collaboration and support, and effective use of technology and resources as factors that improved student engagement and learning in clinical and classroom settings.

Finally, Seaman and Allen (2018) conducted a literature review and identified the use of multimedia resources, interactive activities and assessments, discussion

boards, and social media as key strategies for engaging students in online nursing education. Overall, these studies highlight the importance of various interventions, such as social media and interactive activities, in improving nursing student engagement and enhancing their learning outcomes.

Boosts confidence and information literacy. From the studies included in the systematic review, 8 manifests that social media support the students' confidence and elevates information literacy.

Table 2.

Literatures supporting boosting confidence and information literacy.

Authors	Source	Design	Significant Results
Hu and Yu (2021)	Computer and Education	Assessment of Data	Social media enhances the literacy and confidence of students
Raikundalia, G. K., & Gray, K. (2015).	Research in Learning Technology	literature review of research studies	Social media can help students develop critical literacies and research skills by (1) providing access to diverse sources of information, (2) promoting collaborative learning and knowledge sharing, (3) facilitating critical evaluation of information, and (4) improving students' ability to communicate and share their research findings.
Goode, J., & Richardson, A. (2018).	Journal of research in nursing	Qualitative approach	Social media can improve nursing communication, teamwork, and professional development, according to the study. However, the writers recognize the challenges of social media use, such as privacy and secrecy, and underline the necessity of ethical considerations.
McConnell-Henry, T., Chapman, Y., & Francis, K. (2016).	Nurse education today	Mixed-methods approach, including an online survey and focus group discussions	Students used Facebook for educational purposes like sharing material, seeking peer assistance, and discussing clinical experiences. Facebook also helped students communicate and collaborate with educators.
Kyritsi, E., & Chasanidou, D. (2019).	Nurse education today	Qualitative-content analysis	Social internet helped nursing students collaborate and think critically. Social media enabled critical thinking, active engagement, and information exchange. Facebook helped nursing students collaborate,

			interact, and share materials with peers and teachers. Social media promoted self-directed and lifelong learning. The study also demonstrated that social media learning requires instructor support.
Alshare, K. A., Almomani, F., & Titi, M. A. (2020).	Nursing Forum	Cross-sectional design and surveyed 264 nursing students	Nursing students were pleased about using social media in clinical education, with Facebook being the most popular site. The study also raised issues regarding patient confidentiality, supervision, and the necessity for social media rules in therapeutic settings.

The table presents a summary of literatures supporting the idea that social media can boost nursing students' confidence and information literacy. From the studies included in the table, eight showed that social media can enhance students' literacy and confidence levels.

Hu and Yu (2021) found that social media can enhance students' confidence and literacy skills. Raikundalia and Gray (2015) noted that social media can help students develop critical literacies and research skills through access to diverse sources of information, promoting collaborative learning, critical evaluation of information, and improving communication and sharing of research findings.

Goode and Richardson (2018) found that social media can improve nursing communication, teamwork, and professional development, although ethical considerations must be considered. McConnell-Henry, Chapman, and Francis (2016) noted that nursing students used Facebook for educational purposes such as sharing material, seeking peer assistance, and discussing clinical experiences, and that Facebook helped students communicate and collaborate with educators.

Kyritsi and Chasanidou (2019) found that social media can help nursing students collaborate and think critically, enabling critical thinking, active engagement, and information exchange. Alshare, Almomani, and Titi (2020) found that nursing students were pleased about using social media in clinical education, with Facebook being the most popular site, although issues of patient confidentiality, supervision, and the need for social media rules in therapeutic settings were raised. Overall, the studies suggest that social media can be an effective tool for boosting nursing students' confidence and information literacy, although ethical considerations and necessary guidelines must be in place.

DISCUSSION

Improves nursing student engagement. The studies demonstrate the effectiveness of social media in nursing education, which has been shown to bolster student participation and engagement. The use of social media platforms such as Facebook and Twitter can improve communication, information sharing, and networking among nursing students, promoting critical literacies and research skills. The studies also highlight the

importance of effective instructor communication, hands-on and experiential learning, and a supportive and respectful learning environment in promoting student engagement and learning. These factors can be particularly important in clinical and classroom settings, where nursing students require close support and guidance to develop their professional skills.

The findings of these studies are particularly relevant given the changing landscape of nursing education, which is becoming increasingly technology driven. As technology continues to advance, nursing educators must develop new strategies for engaging students and promoting learning outcomes. Social media platforms offer a unique opportunity for nursing students to collaborate and communicate with their peers and instructors, improving their confidence, information literacy, and critical thinking skills.

In conclusion, the studies included in Table 1 demonstrate the importance of various interventions, such as social media and interactive activities, in improving nursing student engagement and enhancing their learning outcomes. The findings of these studies are particularly relevant given the changing landscape of nursing education and the increasing importance of technology-driven approaches to teaching and learning. By understanding the factors that promote student engagement and learning, nursing educators can develop effective strategies to prepare nursing students for the challenges and opportunities of the modern healthcare system.

Boosts confidence and information literacy. Social media has been identified as a valuable tool for enhancing nursing students' confidence and information literacy, according to the literature summarized in Table 1. The

studies included in the table highlight the benefits of social media, such as promoting collaborative learning and critical thinking, improving communication, and enhancing access to diverse sources of information. In addition, social media can increase student engagement and learning outcomes, as demonstrated in other studies. One of the key findings from the literature is that social media can help nursing students develop critical literacies and research skills. This is important for nursing students, as it enables them to evaluate information critically, communicate effectively, and share their research findings. Another significant finding is that social media can improve nursing communication, teamwork, and professional development, as noted by Goode and Richardson (2018). The studies also identify the challenges of using social media, such as issues of patient confidentiality and privacy. Ethical considerations are necessary when incorporating social media in nursing education, and guidelines must be in place to ensure that social media is used appropriately. In addition, the studies suggest that social media learning requires instructor support, as noted by Kyritsi and Chasanidou (2019). Overall, the studies summarized in Table 1 provide evidence that social media can boost nursing students' confidence and information literacy. However, it is important to recognize the challenges of using social media and to establish guidelines and ethical considerations for its use in nursing education. Further research is needed to explore the potential of social media in enhancing nursing education and to identify best practices for its effective integration.

CONCLUSIONS

The studies presented demonstrate the effectiveness of social media in improving nursing student engagement, confidence, and information literacy. Social

media platforms such as Facebook and Twitter have been shown to promote collaborative learning, critical evaluation of information, and effective communication among nursing students. Moreover, social media can improve nursing communication, teamwork, and professional development. However, the use of social media in nursing education requires ethical considerations and guidelines to ensure its appropriate use. Instructor support is also necessary to facilitate social media learning and to establish effective strategies for integrating social media in nursing education. The findings of these studies are particularly relevant in the changing landscape of nursing education, where technology-driven approaches are becoming increasingly important. Further research is needed to explore the potential of social media in enhancing nursing education and to identify best practices for its effective integration. Overall, the studies presented provide evidence that social media can be a valuable tool for improving nursing student engagement, confidence, and information literacy.

RECOMMENDATIONS

Based on the studies presented, it is recommended that nursing educators consider incorporating social media platforms into their teaching strategies. Social media has the potential to enhance nursing student engagement, promote critical thinking, and improve communication and collaboration among students and instructors. However, nursing educators must be aware of the ethical considerations and potential challenges of using social media in nursing education, such as issues of privacy and confidentiality. Therefore, guidelines and appropriate training for social media use should be established.

In addition, nursing educators should provide adequate support to students to ensure effective integration of social media in nursing education. This includes providing feedback, guidance, and resources to students to enhance their social media literacy skills. Further research is also needed to explore the best practices for integrating social media in nursing education, as well as to evaluate the effectiveness of social media interventions in improving nursing student engagement, confidence, and information literacy. Finally, the use of social media in nursing education has the potential to enhance student engagement and learning outcomes. Therefore, nursing educators should consider integrating social media platforms into their teaching strategies, while also considering ethical considerations and challenges. Providing adequate support to students and further research can help to optimize the use of social media in nursing education and improve student outcomes.

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Extent of Implementation of Mother Tongue-Based Multilingual Education among Parents in the New Normal

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A B S T R A C T

Introduction: Mother Tongue is used as a Medium of Instruction (MOI) for Grades 1, 2 and 3 in teaching Math, Araling Panlipunan (AP), Music, Arts, Physical Education and Health (MAPEH) and Edukasyon sa Pag-uugali (EsP).

Methods: This research enlisted the help of Dadalaquiten Integrated School parents, namely those with children in Grades 1, 2, and 3. Similarly, the parents' participation in the study came about when the researcher described the importance and goal of the MTB-MLE study to them.

Results: The following findings are hereby presented: most of the respondents have small families, are married, where the fathers are mostly farmers, the mothers are mostly vendors. Furthermore, because both the father and mother have completed elementary school and have a very low monthly income, the MTB-MLE program at Dadalaquiten Integrated School is implemented to a large extent, and the mother's education influences the level of MTB-MLE implementation at Dadalaquiten Integrated School.

Conclusions: The study found that socio-economic factors such family size, marital status, occupation, education level, and monthly income affect the MTB-MLE program at Dadalaquiten Integrated School. Most responses have tiny families with farmers and sellers as parents. This study emphasizes the necessity of considering families' socio-economic environment when implementing education programs, as these factors can directly affect program success. The results also show that mother education is a key factor in MTB-MLE program implementation. These findings highlight the need for continued efforts to enhance access to education for rural moms, which can benefit their children and programs like the MTB-MLE.

Keywords: MTB-MLE, Level of Implementation, Basic Research, Medium of Instruction, Quality Education

INTRODUCTION

The linguistic and cultural diversity in the Philippines gives the question of language policy in education a great deal of difficulty. The Philippines provides a daunting environment with more than 7,000 islands and 181 different languages (Lewis, Simons, & Fennig, 2016) to introduce a language policy that can serve the entire country. As a result, language policies for schools in the Philippines fluctuate. Until recently, the bilingual education policies of 1974 and 1987 determined that Filipino and English were the languages of instruction in schools. This is despite the fact that none of these is spoken as a first language by around 80 percent of the population.

More recently, with the ongoing pandemic, education in the mother tongue among elementary school pupils is very significant. The only obstacle is that, due to limitations imposed by the government, pupils are not permitted to attend school. So, obviously, because of the problems of the current COVID-19 pandemic, how can teachers provide the learning needs of the learners then? This is quite evident because, because of the current pandemic, the teacher-researcher has encountered trouble teaching mother tongue. The researcher thought of using parents who would collaborate on the topic of mother tongue in teaching their kids.

The educational needs of its citizens are a priority in the Philippines, especially in the Department of Education. That education should obtain the highest allocation in the annual national budget is required by no less than the Constitution. Similarly, considering the situations that are occurring, teaching and learning must continue. As such, the required services must be adequately provided to resolve this issue. However, in teaching the subjects assigned to them, there are always difficulties faced by the students.

As required by Republic Act 10533, the Schools Division of Ilocos Sur is providing the K to 12 program. The basic education, where the education of the mother tongue is being introduced, is with it. Nevertheless, to put forth the appropriate values of their motherland, specifically in the values and culture of Ilocano, mother tongue language is needed.

This shift in language policy is part of a growing trend around the world to support mother tongue instruction in the early years of a child's education. In Southeast Asia, this is apparent in a rising number of educational programs that utilize a mother tongue approach. Examples can be found in Cambodia, Indonesia, Malaysia, Thailand, Timor L'Este and Vietnam (Kosonen, in press; Kosonen & Young, 2009; Taylor-Leech, 2013; UNESCO, 2007). In all of these cases, the programs are being piloted at the community level with support from international non-governmental agencies (INGOs). While the use of non-dominant languages in education is allowed in each of these countries, the Philippines is the single country to institute a national policy requiring their inclusion in the early grades. As a result, the implementation of MTB-MLE in the Philippines is being looked at as an example for the rest of the region.

The move by DepEd and Congress to adopt MTB-MLE was based on the outcomes of previous quantitative, longitudinal studies that highlighted the benefits of using the mother tongue as the language of instruction. Two studies in the United States (Ramirez, Yuen, & Ramey, 1991; Thomas & Collier, 1997) and one in the Philippines (Walter & Dekker, 2011) concluded that minority language students

who gained literacy in their first language experienced higher academic achievement than students who learned in a second or third language. They suggested that second and third languages can be acquired more easily if a foundation in the first language is established early.1 In addition, these studies pointed to the importance of late-exit programs in which the mother tongue is utilized until grade six with other languages taught as separate subjects.

In terms of practical significance, this research on MTB-MLE policy addressed a current and controversial topic for multilingual countries struggling to define their educational language policy. Since the Philippines is the only country in Southeast Asia to require mother tongue instruction in elementary school, little is known about the implications of this national decision on a community level. While hundreds of pilot programs for mother tongue education have been implemented throughout the region and the world, it is uncertain how they will transfer to a top-down policy environment. This study's examination of local stakeholders' knowledge, beliefs, and practices around language-in-education was a first step at discerning the feasibility of such a large-scale reform. Greater understanding for the perspectives and actions of community members amidst this reform can provide guidance for the next steps in improving the policy process. In particular, since this study was conducted at the beginning of the first year of implementation, there is plenty of opportunity to learn from the experiences to inform future decisions regarding MTB-MLE in the Philippines.

Mother Tongue is used as a Medium of Instruction (MOI) for Grades 1, 2 and 3 in teaching Math, Araling Panlipunan (AP), Music, Arts, Physical Education and Health (MAPEH) and Edukasyon sa Pag-

uugali (EsP). Mother tongue is taught as a separate Learning Area in Grades 1 and 2, as specified in the background of the study (DepEd Order #31s.2013). The use of the same language spoken at home, in early grades, helps improve the pupils' language and cognitive development in addition to strengthening their socio-cultural awareness. Local and international studies have shown that early use of mother tongue inside the classroom produce better and faster learners. It makes them adept at learning a second (Filipino) and third language (English) too.

The reason for the implementation of MTB-MLE in the Philippines was to boost student achievement by concentrating on cognitive growth in the first language of a child and using it as a foundation for later years of learning Filipino and English (Mose & Kaschula, 2019). Furthermore, the DepEd order (2009) called for educational materials to represent local people, activities, realities and[be] relevant to the learner's language, age and culture and mandated testing in the first language of the learners. Over a three-year period, the bridging plan outlined the phased implementation of the policy to provide time to produce materials, the training of teachers, the collection of appropriate funds, and the creation of technical working groups based on MLE.

In the Philippines, in Lubuagan, a rural community in the Cordillera Mountains, a longitudinal study was performed with grade one through three students. In one school in 1999, the mother tongue pilot project began, and the research was officially launched in 2005 with three schools in the experimental group and three in the control group. Consistent advantages for children in mother tongue schools were noted after three years of research. They scored significantly higher in math,

reading, Filipino, and English than students at the control schools (Walter & Dekker, 2018).

Akinaso (2016) reviewed literature in developing countries on mother tongue-based programs and claimed that most projects report positive associations between the development of mother tongue literacy and the development of second language literacy. Usage of the mother tongue by itself, however, does not guarantee positive outcomes. The way the strategy is applied, both from a national and local point of view, must be considered.

This basic research study would be an opportunity to determine the level of implementation of the MTB-MLE among parents at Dadalaquiten Integrated School of the Ilocos Sur School Division as a means of teaching mother tongue education. In the implementation of this DepEd program it will serve as proof, after all, the parents are the child's first teacher who is interested in shaping their minds and heart. While it is very complicated, the parents will be directed to make the action analysis effective.

RESEARCH QUESTIONS

The study sought to determine the extent of implementation of the MTB-MLE program among parents of Dadalaquiten Integrated School. More specifically, the research sought to answer the following questions: (1) What is the socio-demographic profile of the respondents as to the following: age, occupation, family income, highest educational attainment of father, and highest educational attainment of mother? (2) What is the extent of implementation of the MTB-MLE program? (3) Is there a significant relationship between the profile of the respondents and the extent of implementation of the MTB-MLE program? (4) What plan of action can be proposed to address the research findings?

METHODS

Research Design. The study used the descriptive-correlation design to determine the effect of profile variables and the extent of implementation of the MTB-MLE program at Dadalaquiten Integrated School.

Participants. This study included all parents of Dadalaquiten Integrated School particular parents with children who are enrolled in the Grade 1, 2 and 3. Likewise, the involvement of the parents to the study materialized after obtaining an informed consent from them after the researcher have explained the relevance and purpose of the said study on MTB-MLE.

Data Gathering Methods. A questionnaire was used to gather the data from the respondents. The first part of the questionnaire will be the profile of the parents. Likewise, the second part was a questionnaire that obtained their perception as to the level of implementation of the MTB-MLE program at Dadalaquiten Integrated School.

Data Analysis. The researcher analyzed and interpreted respondent data. Respondents were profiled by frequency and percentage. The mean respondent scores were used to assess MTB-MLE implementation. Pearson r was used to assess the profile's impact on MTB-MLE program implementation. Alpha level .01 measured the level significance.

RESULTS AND DISCUSSION

The study hereby presents the results as well the relevant discussion basing on the findings of the study.

Socio-Demographic Profile

Table 1 presents the frequency and distribution of the socio-demographic profile of the respondents.

Table 1. Socio-Demographic Profile (n=136)

Socio-demographic profile	Frequency	Percentage
Family size		
Big (7 and more children)	3	2.21
Medium (4 – 6 children)	53	38.97
Small (1-3 children)	80	58.82
Marital status		
Single parent	25	18.38
Married	109	80.14
Widowed	2	1.47
Occupation of father		
Farmer	50	37.76
Fisherman	30	22.06
Laborer	26	19.12
Construction worker	30	22.06
Occupation of mother		
Housewife	30	22.06
Clerk	15	11.03
OFW	5	3.68
Daycare worker	3	2.21
Vendor	83	61.03
Highest Education attainment of father		
College graduate	15	3.68
High school graduate	19	13.97
Elementary graduate	51	37.50
Elementary level	51	37.50
Highest Education attainment of mother		
College graduate	20	14.71
High school graduate	23	16.91
Elementary graduate	60	44.12
Elementary level	33	24.26
Family income		
10,000 pesos and above	20	14.71
5,001 – 9,999.00 pesos	11	8.09
3,001 – 5,000 pesos	43	31.62
2,001 – 3,000 pesos	20	14.71
2,000 pesos and below	42	30.88

Family size. From the table, most of the respondents have small families (80 or 58.82%). This means that the families have there are more resources and opportunities for families with smaller families. According to Wagner, Schubert, & Schubert (2016), smaller families tend to result in higher IQ, academic achievement, and occupational performance.

Marital status. On the other hand, most (109 or 80.14%) of the respondents are married. This means that their relationship is blessed and has the legitimacy to support the members of the family. Marriage may itself lead to improved physical and mental health. This has been called the protective effect of marriage (Wilson & Oswald, 2016).

Occupation of father. From the table, most (50 or 37.76%) of the respondents are farmers. This implies the respondents do not have a stable job that provides the needs of the family in education. The family is responsible for their health, physical growth, education, intellectual affinities, moral values, convictions, attitudes, habits, and cultural relations in the family and society, according to Ceka and Murati (2016).

Occupation of mother. In the study, most (83 or 61.03%) of the respondents are vendors. This finding reveals that the family do not have a stable source of income being a vendor. According to

Education of father. On the other hand, most of the fathers have completed an elementary graduate/level. This finding suggests that the respondents have low level of cognitive understanding and may not be able to make good reflections to daily activities including making good decisions.

Education of mother. Most (60 or 44.12%) of the respondents obtained an elementary level like their husbands. Parents' lack of good educational experiences may lead to low expectations for their children.

Family income. Finally, 43 respondents (31.62%) fall into the 3,001-5,000-income range. The family cannot provide its members' needs, including education.

Extent of implementation of the MTB-MLE program

Table 2 presents the extent of the implementation of the MTB-MLE program. Over-all, the respondents implement the MTB-MLE program at Dadalaquiten Integrated School to a high extent (mean=3.92).

Item 1 (Improves language acquisition of the pupils both in mother tongue and in the second languages English and Filipino) was implemented to a very great extent which is evident by a mean=4.31. On the other hand, item 2 (Improves cognitive ability of pupils) was implemented to a great extent with a mean=4.12)

Table 2. Extent of implementation of the MTB-MLE program

Indicators	Mean	Descriptive Meaning
1. Improves language acquisition of the pupils both in mother tongue and in the second languages English and Filipino.	4.31	To a very great extent
2. Improves cognitive ability of pupils	4.12	To a great extent
3. Develop socio-cultural awareness of the pupils such as self-expression and consciousness of cultural identity and multiculturalism	3.91	To a great extent
4. Improves academic performance in other subjects such as Science	4.01	To a great extent
5. Enhances their communication skills and ability and engagement with other pupils.	3.88	To a great extent
6. Learn better in reading and writing skills.	4.02	To a great extent
7. Improves academic performance in other subjects such as Mathematics	3.56	To a great extent
8. Better comprehension in school activities and events.	4.01	To a great extent
9. Friendly to his/her classmates, teachers, and other school employees	3.99	To a great extent
10. Develops positive values and traits that molds them to be a better person.	4.35	To a very great extent
Composite Mean	**3.92**	**To a great extent**

On the other hand, item 3 (Develop socio-cultural awareness of the pupils such as self-expression and consciousness of cultural identity and multiculturalism) was implemented to a great extent manifested by a mean=3.91. In addition, item 4 (Improves academic performance in other subjects such as Science) was also implemented to a great extent with a mean of 4.01. Moreover, item 5 (Enhances their communication skills and ability and engagement with other pupils) was implemented to a great extent.

Furthermore, item 6 (Learn better in reading and writing skills) was implemented to a great extent with a mean=4.02. On the other hand, item 7 (Improves academic performance in other subjects such as Mathematics) to a great extent with a mean of 3.56. For item 8, (Better comprehension in school activities and events) was implemented to a great extent with a mean=4.01. Furthermore, Item 9 (Friendly to his/her classmates, teachers, and other school employees) was implemented to a great extent with a mean=3.99. Finally, item 10 (Develops positive values and traits that molds them to be a better person) was implemented to a very great extent with a mean=4.35.

Over-all the composite mean=3.92 which implies that the entire MTB-MLE program at Dadalaquiten Integrated School was implemented to a great extent. Results from this study can inform language policy processes being undertaken in other multilingual contexts. In particular, the

results point to the importance of examining the ways in which local

stakeholders understand and enact national language policies.

Significant relationship between profile and extent of implementation of the MTB-MLE

Table 3 presents the relationship between the profile of the respondents and the extent of implementation of the MTB-MLE.

Table 3. Significant relationship between profile and extent of implementation of the MTB-MLE

Profile	Pearson r	Probability	Decision
Family size	.315	.164	Accept H1
Marital status	.125	.761	Accept H1
Occupation of father	.327	.148	Accept H1
Occupation of mother	.062	.791	Accept H1
Education of father	.362	.107	Accept H1
Education of mother	**.453***	**.003**	**Reject H0**
Family income	.380	.090	Accept H1

From the table, it is evidenced that the education of the mother is significantly related (r=.453, p<.003) to the extent of the implementation of the MTB-MLE. The findings therefore reject the null hypothesis that the education of the mother does not affect the level of implementation the MTB-MLE program of Dadalaquiten Integrated School. This implies that the higher the educational attainment of the mother, the higher will be the extent of the implementation of the MTB-MLE program. The language program using MTB-MLE provides a clear understanding of how parents participate in its full and efficient implementation. It is recommended that collaboration within and between national and local stakeholder groups is suggested as the most suitable way of implementing policy (Lisa, 2018).

CONCLUSION

Based on the results of the study, it can be concluded that socio-economic factors such as family size, marital status, occupation, education level, and monthly income play a significant role in the implementation of the MTB-MLE program at Dadalaquiten Integrated School. Most of the respondents have small families, where the fathers are mostly farmers and the mothers are vendors, with both having limited education and low monthly income. This study highlights the importance of considering the socio-economic context of families in implementing education programs, as these factors can have a direct impact on the success of such programs. Additionally, the results indicate that the education of the mother is a critical factor in determining the level of implementation of the MTB-MLE program. These findings underscore the need for ongoing efforts to improve access to education for mothers in rural areas, as this can have a positive impact on the education of their children and the success of programs like the MTB-MLE.

RECOMMENDATIONS

From the conclusion, the following recommendations are offered: (1) For school heads to offer trainings and workshops on MTB-MLE for teachers teaching the subject, (2) For the school head to procure for learning materials to improve curriculum and instruction and teaching of subjects using MTB-MLE, (3) For the teachers to strengthen the use of MTB-MLE at Dadalaquiten Integrated School even during the new education normal, (4) Collaboration for the national, regional, division and school implementers is encouraged to ensure full implementation of the MTB-MLE, (4) Research is encouraged to be used in junior and senior high school level during the COVID-19 pandemic, and (5) For all stakeholders to assist in the implementation of MTB-MLE in school.

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The Impact of Changes in Nursing Practicum Due to Covid-19 Pandemic Among New Graduate Nurses of Lorma College

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A B S T R A C T

Introduction: COVID-19 has changed nursing education. Skills, simulation, virtual, and written tasks have replaced much clinical practicum. This shift in practicum worries nursing students about their future roles as new graduates. No research has examined their worries as new graduate nurses.

Methods: The purpose of the study is to investigate the status of nursing practicum at nursing universities before and during the COVID-19 pandemic, and to explore the relationship between difficulties in nursing tasks, work readiness, reality shock, and organizational socialization among new graduate nurses with nursing practicum experience during this pandemic. The study employed the qualitative-descriptive design. A total of 24 graduating nursing students at Lorma Colleges were recruited in the study.

Results: Significant findings revealed that six categories emerged to provide robust answer to the central question on the impact of nursing practicum being changed due to COVID-19 pandemic. These are disconnected from peers, created gaps in skills and knowledge, emphasis on self-directed learning, pressure on faculty members, struggles of providing real-time feedback, and lack of actual patient interaction.

Conclusions: Fresh nursing graduates have faced significant challenges due to the COVID-19 pandemic, such as reduced clinical hours, virtual learning, and increased stress. However, they have shown resilience and adaptability in continuing their education and pursuing hands-on experience. Support from schools, hospitals, and communities, including mental health services and mentorship, is crucial in preparing them for their careers. To mitigate the impact of COVID-19 on nursing students, schools and hospitals can offer clinical rotations, mental health support, community building, remote learning, and partnerships with healthcare organizations.

Keywords: Nursing Practicum, Qualitative-Descriptive Design, Graduating Nursing Students, Content Analysis

INTRODUCTION

The COVID-19 pandemic has significantly impacted various aspects of healthcare, including nursing education. Nursing practicum is an integral component of nursing education that provides students with hands-on experience in a clinical setting. However, the pandemic has brought about changes in the way nursing practicum is conducted, which has had a significant impact on new graduate nurses. This background of the study aims to explore the impact of these changes on the education and preparation of new graduate nurses for the workforce. The study will focus on the experiences and perspectives of new graduate nurses regarding changes in their nursing practicum due to the COVID-19 pandemic.

One of the major impacts is the reduction of clinical hours for nursing students, which has led to limited exposure to a variety of patient populations and clinical scenarios. This has limited the opportunities for new graduate nurses to gain the necessary experience and skills required to provide safe and effective care to patients. Additionally, the lack of hands-on experience has led to a lack of confidence in their abilities, which may negatively impact their future practice.

Another impact of the changes in nursing practicum is the increased use of

virtual simulation and online learning. While these methods can provide some level of exposure to clinical scenarios, they do not provide the same level of hands-on experience and opportunities for critical thinking and decision-making that in-person clinical practice provides. Moreover, the changes in nursing practicum have also led to an increased workload for clinical instructors and preceptors, as they now must balance the education and supervision of nursing students with the demands of providing care to patients during the pandemic. This has put a strain on the already limited resources available to support nursing education and may lead to a decrease in the quality of education and preparation for new graduate nurses.

The COVID-19 pandemic has had a profound impact on the healthcare industry, including nursing education in the Philippines. Nursing practicum is an essential component of nursing education that provides students with practical experience in a clinical setting. However, changes have been made in the way nursing practicum is conducted due to the pandemic, which has had a significant impact on new graduate nurses in the Philippines. One of the major impacts is the reduction of clinical hours for nursing students, which has limited their exposure to a variety of patient populations and clinical scenarios. This has resulted in reduced opportunities for new graduate nurses to gain the necessary experience and skills required to provide safe and effective care to patients. Additionally, the lack of hands-on experience has led to a lack of confidence in their abilities, which may negatively impact their future practice.

Another impact of the changes in nursing practicum is the increased use of

virtual simulation and online learning. While these methods can provide some level of exposure to clinical scenarios, they do not provide the same level of hands-on experience and opportunities for critical thinking and decision-making that in-person clinical practice provides.

In conclusion, new graduate nurses throughout the globe were profoundly affected by the modifications to nursing practicum brought about by the COVID-19 epidemic. Reduced clinical hours and the rise of virtual simulation and online learning have meant that students spend less time in actual clinical settings, which might affect their self-efficacy and competence in the future. As a result of their increasing workload, clinical instructors and preceptors may be unable to provide new graduate nurses with an adequate education and orientation. The continuing education and training of new graduate nurses is essential, as is the provision of safe and effective clinical experiences for nursing students.

While the COVID-19 pandemic has had a significant impact on various aspects of healthcare, including nursing education, there is a lack of research that specifically examines the impact of changes in the nursing curriculum on new graduate nurses. While some studies have explored the impact of changes in nursing practicum, there is a need for research that specifically examines the impact of changes in the nursing curriculum on the education and preparation of new graduate nurses for the workforce.

Additionally, there is limited research that focuses on the experiences and perspectives of new graduate nurses regarding changes in their nursing curriculum due to the COVID-19

pandemic. This includes the impact of virtual simulation and online learning on their education and preparation for the workforce, as well as the effectiveness of these methods in providing the same level of hands-on experience and opportunities for critical thinking and decision-making that in-person clinical practice provides. Furthermore, there is a lack of research that explores the impact of changes in the nursing curriculum on the confidence and future practice of new graduate nurses. This includes the impact of reduced clinical hours and limited exposure to a variety of patient populations and clinical scenarios on their ability to provide safe and effective care to patients.

In conclusion, there is a need for research that specifically examines the impact of changes in the nursing curriculum on new graduate nurses during the COVID-19 pandemic. This research should focus on the experiences and perspectives of new graduate nurses, the effectiveness of virtual simulation and online learning, and the impact of changes in the nursing curriculum on their confidence and future practice.

RESEARCH QUESTION

This study sought to critically explore the perspectives of undergraduate nurses of Lorma Colleges regarding the impact of changes in nursing practicum due to the COVID-19 pandemic.

METHODOLOGY

Research Design. The researchers used a descriptive qualitative design. Qualitative descriptive research generates data that describe the 'who, what, and where of events or experiences' from a subjective perspective (Doyle et al., 2020). Face-to-face semi-structured interviews were conducted from May to October 2022,

with a purposive sample of 24 fourth-year undergraduate nurses of Lorma Colleges.

Participants. Participants were selected from nursing undergraduates from Lorma Colleges. They were chosen using purposive sampling. Participation was then confirmed by written informed consent. The process of recruitment and data collection ended when the saturation of data was achieved. Data saturation was achieved when no new categories emerge from the data.

Instrumentation. Data were collected from fifteen participants through semi-structured interviews between May to October 2022, digitally recorded and transcribed verbatim. Confidentiality and anonymity were ensured, and a semi-structured interview guide was used to elicit information about participants' view on the impact of changes in nursing practicum during the COVID-19 pandemic.

Data Analysis. Qualitative content analysis was used as the methodological approach to data analysis. Content analysis was used to underpin the study. The researchers classified relevant ideas deductively and inductively in a systematic process. The researchers built a coding frame through creating subcategories to categories of higher order by assigning text messages.

RESULTS

The COVID-19 pandemic has greatly impacted nursing practicums for new graduate nurses in several ways, including changes in clinical experience, reduced staffing, increased online learning, mental health challenges, lack of actual patient interaction, emphasis on self-directed learning.

Changes in clinical experience. This is due to the need for social distancing and protection from COVID-19, many hospitals have limited the number of students in clinical settings, leading to decreased hands-on experience for new graduate nurses. The participants shared:

The impact of the change with our RLE had largely affected in honing my skills necessary for clinical duties. Due the constraints brought by the pandemic, we were only taught virtually which caused our knowledge and skills to not be at the best or at the most ideal level. (P08)

It was hard for me to adjust from traditional learning to online learning especially during RLE. I had difficulties knowing if the actions I took during return demonstrations were correct or accurate since we were mostly meeting our clinical instructors virtually and not physically present with us at that time. (P10)

Reduced staffing. The increased number of patients and staff members who are sick with COVID-19 has resulted in reduced staffing levels, making it harder for new graduate nurses to find opportunities for clinical experience.

As a fresh graduate, I have observed that we have reduced number of nursing staff because they are betting sick, of which, it is difficult for us at first to look for clinical experience. (P04)

Due to the lack of nursing staff in the hospital I am working as a fresh nursing graduate, I struggled, they became sick and that we have no one to look after to, to learn and be part of the team. (P07)

Increased online learning. With many hospitals limiting in-person interaction, new graduate nurses have had to rely more heavily on online learning and simulation experiences to gain knowledge and skills. The participants noted:

With all honesty, it is very hard to grasp the holistic approach and idea of RLE (nursing practicum) during Covid-19 pandemic. RLE became online which was difficult because we cannot perform the way it should be. (P01)

When I was still a nursing student, the RLE days were limited, and we must do it online. Likewise, we only had RLE learning packets so we lack experience in nursing practice as we could only visualize the cases. (P04)

Mental health challenges. The ongoing stress and uncertainty caused by the pandemic has taken a toll on the mental health of new graduate nurses, making it more difficult for them to adjust to their new roles. In support, these narratives were shared by the participants:

The activities we needed to accomplish became harder to attain due to the COVID restrictions and protocols established before such as not being able to meet our CI's personally, physically performing our return demonstrations, going to the hospital for duty etc. This caused us depression, anxiety and many more issues. (P02)

Lastly, the rise of expenses and requirements to have your duty like the need to undergo RT-PCR, buying of PPE,

etc., which was very stressful because our family cannot bear all the expenses. (P08)

Lack of actual patient interaction. The fresh nursing graduates who were nursing students shared that they lack the actual patient interaction. The participants shared:

Though these learning packets are helpful, they are not enough for us to learn about the exact setting of the hospital. Experiencing the exact thing is different from what is written, and we aspired to have actual patient interaction, but was not given the opportunity at all. (P02)

I can say that the adjustment period from RLE to actual hospital setting is quite longer since it feels like it's our first time applying all our online RLE's to practice. What is missing is the actual and direct patient care. (P012)

Emphasis on self-directed learning. The participants shared that their nursing practicum were mostly focused on self-directed learning. This is supported by the narratives of the participants.

I experienced not being able to meet my patients and that we were given mostly activities on self-directed learning. We learn on our own, we read, we worked for our grades at home through modules given to us. (P13)

It was a difficult experience where nursing practicum was never part of our experience, it is more of self-directed learning. (P15)

DISCUSSIONS

Changes in clinical experience. The COVID-19 pandemic has had a significant impact on the clinical experience of nursing students. One major change is the reduction of clinical hours and hands-on experience. With the need for social distancing and protection from COVID-19, many hospitals have limited the number of students in clinical settings, which has led to a decrease in the amount of time nursing students spend in direct patient care. This has resulted in fewer opportunities for students to develop their clinical skills, build their confidence, and make real-world connections between their coursework and the clinical setting.

Another change is the shift towards virtual or remote learning. With many hospitals limiting in-person interaction, nursing students have had to rely more heavily on online learning and simulation experiences to gain knowledge and skills. While these virtual learning experiences can be helpful in certain circumstances, they do not provide the same level of hands-on experience that is so crucial for nursing students to develop their skills and prepare for their future careers. Meanwhile, the COVID-19 pandemic has created a more challenging and stressful clinical environment for nursing students. With a significant increase in patients who are sick with COVID-19, as well as a shortage of staff due to illness or quarantine, students are often working in a highly stressful and demanding environment. This can be overwhelming for students, making it more difficult for them to stay focused, confident, and motivated.

Increased Online learning. The COVID-19 pandemic has resulted in a significant increase in online learning among nursing students. With the need for social distancing and protection from COVID-19, many hospitals have limited the number of students in clinical settings,

making it necessary for nursing schools to shift towards virtual or remote learning (Chaffee & Vincent, 2021).

One advantage of increased online learning is that it provides students with more flexibility and control over their learning experience. For example, students can pause, rewind, or review online lectures or simulations at their own pace, which can help them better understand complex concepts or procedures. Online learning can also make it easier for students to learn from a wider range of resources and materials, beyond what is covered in their textbooks or in-person lectures.

However, there are also some disadvantages to increased online learning. One is that it can be challenging for students to stay motivated and engaged when they are not in a traditional classroom setting. Online learning also lacks the hands-on experience that is so critical for nursing students to develop their skills and gain confidence in their abilities (Levett-Jones & Lapkin, 2020). This can make it difficult for students to understand how their coursework applies to real-world clinical situations. Overall, the shift towards increased online learning among nursing students due to the COVID-19 pandemic has presented both challenges and opportunities. While it is not the ideal learning environment, schools and students are adapting and finding creative ways to ensure that nursing students receive the education and training they need to succeed in their careers.

Mental health challenges. The COVID-19 pandemic has taken a toll on the mental health of nursing students, presenting significant challenges for them as they pursue their education and training. One major factor contributing to these

mental health challenges is the ongoing stress and uncertainty brought on by the pandemic. With so much unknown about the virus, students are facing increased levels of stress, anxiety, and fear, which can be difficult to manage. Additionally, students are often working in a highly stressful and demanding clinical environment, which can be overwhelming for them and lead to burnout. Another factor is the shift towards virtual or remote learning, which can make it harder for students to stay connected with their peers, instructors, and support systems (Keatings et al., (2021). The lack of in-person interaction can be isolating, making it difficult for students to stay motivated and engaged in their coursework.

Meanwhile, the COVID-19 pandemic has put a strain on the mental health resources that are typically available to students, including counseling services, peer support groups, and other support systems. With many institutions struggling to keep up with the increased demand for mental health services, students may not be able to access the support they need when they need it. In sum, the COVID-19 pandemic has posed several mental health challenges for nursing students, making it more crucial than ever for institutions of higher learning, healthcare facilities, and local communities to equip these individuals with the tools they need to remain well and committed to their studies.

Lack of actual patient interaction. The COVID-19 pandemic has had a significant impact on the clinical experience of nursing students, limiting their ability to interact with patients and gain hands-on experience. One major challenge is the reduction of clinical hours and the number of patients that students can interact with. With the need for social

distancing and protection from COVID-19, many hospitals have limited the number of students in clinical settings, which has led to a decrease in the amount of time nursing students spend in direct patient care. This can make it difficult for students to develop their clinical skills and gain confidence in their abilities (O'Connor et al., 2021).

Another challenge is the shift towards virtual or remote learning, which can limit students' opportunities to interact with patients in real-world clinical situations (Zhang et al., 2021). While online learning and simulations can be helpful in certain circumstances, they do not provide the same level of hands-on experience that is so critical for nursing students to understand the practical applications of their coursework (Lai et al., 2020). Likewise, the COVID-19 pandemic has created a more challenging and stressful clinical environment for nursing students. With a significant increase in patients who are sick with COVID-19, as well as a shortage of staff due to illness or quarantine, students are often working in a highly stressful and demanding environment. This can make it more difficult for students to connect with their patients and provide the compassionate and personalized care that is so important in the nursing profession (Singh et al., 2020). Overall, the changes brought on by the COVID-19 pandemic have made it more challenging for nursing students to interact with patients and gain hands-on experience. While the situation is far from ideal, schools and hospitals are working together to find new and innovative ways to provide students with the opportunities they need to succeed in their future careers.

Emphasis on self-directed learning. The COVID-19 pandemic has placed a greater emphasis on self-directed learning among nursing students. With the need for social distancing and protection from COVID-19, many hospitals have limited the number of students in clinical settings, making it necessary for nursing schools to shift towards virtual or remote learning. One advantage of self-directed learning is that it provides students with more control over their learning experience. Students can determine the pace of their learning, review materials and lectures at their own pace, and focus on areas where they need additional support. This can help them develop a stronger understanding of complex concepts and procedures.

However, there are also some disadvantages to self-directed learning. One is that it can be challenging for students to stay motivated and engaged when they are not in a traditional classroom setting (Ngo & Chase, 2021). Students may also find it difficult to ask questions and receive immediate feedback from instructors or peers, which can be critical in their learning process (Gerard et al., 2022). Another concern is that self-directed learning can lead to a lack of structure and accountability, making it more challenging for students to stay on track and meet their learning objectives. This can result in a longer learning curve and may make it more difficult for students to achieve the skills and knowledge they need to succeed in their future careers.

CONCLUSIONS

In conclusion, the COVID-19 pandemic has had a significant impact on the nursing practicum experience of fresh nursing graduates. The pandemic has resulted in changes such as a reduction of clinical hours, a shift towards virtual or remote learning, increased stress and uncertainty, and mental health challenges. Additionally, the emphasis on self-directed

learning has presented both opportunities and challenges for nursing students. Despite these challenges, fresh nursing graduates have demonstrated resilience and adaptability in the face of these changes. They have continued to pursue their education and training and are working to gain the hands-on experience and clinical skills they need to succeed in their careers. It is important for schools, hospitals, and communities to continue to provide support and resources for nursing students as they navigate these changes. This includes access to mental health services, opportunities for hands-on clinical experience, and ongoing support and mentorship from instructors and peers. By working together, we can help ensure that fresh nursing graduates are prepared to meet the demands of the healthcare system and provide high-quality care to patients.

RECOMMENDATIONS

To mitigate the impact of changes in the nursing practicum during the COVID-19 pandemic on nursing students, schools and hospitals can implement several recommendations. First, they can provide hands-on clinical experience, including clinical rotations in lower-risk settings, simulated clinical experiences, and innovative methods of clinical training. Second, they can emphasize mental health and well-being by providing access to mental health services, stress management resources, and support for struggling students. Third, fostering a sense of community and support through opportunities for students to connect and share experiences, mentorship programs, and ongoing support can be beneficial. Fourth, encouraging ongoing education and professional development can be useful,

and schools and hospitals can provide access to resources and opportunities for remote learning. Finally, collaborating with healthcare organizations and communities can offer nursing students opportunities for hands-on experience and real-world learning. By implementing these recommendations, nursing students can receive the education and training they need to succeed in their careers despite the challenges posed by the pandemic.

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Innovative Ideas for Nursing Education in the Philippines Post-Pandemic

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A B S T R A C T

Introduction: The field of nursing education has undergone significant changes due to the COVID-19 pandemic, which has necessitated a rapid transition towards alternative methods of teaching and learning. The pandemic of COVID-19 has demonstrated that nursing education can never recover to its prior level of excellence.

Methods: Ideas for nursing education after pandemics were proposed using a reflective strategy. Alterations to nursing curricula considering the pandemic experience were discussed. Twenty-four nursing education experts in various College of nursing with more than two decades of nursing education were recruited to provide the needed viewpoints. This paper explores some innovative ideas for nursing education in the post-pandemic era, including the use of technology for virtual simulations and online learning, the incorporation of interprofessional education to promote collaboration, and the development of community-based programs to enhance students' clinical experience. It also discusses the importance of incorporating cultural sensitivity and mental health awareness into nursing curricula.

Results: Ten ideas emerged from the discussion, including the necessity for nurse educators to possess technological proficiency, greater availability of online graduate education, the expansion of nurse entrepreneurship, and the integration of automation and artificial intelligence.

Conclusions: By embracing these innovative ideas, nursing educators in the Philippines can prepare their students to become competent and compassionate healthcare professionals in the face of the challenges posed by the pandemic and beyond.

Keywords: Nursing Education, Reflective Method, Innovative Ideas, Content Analysis, Nursing Experts

INTRODUCTION

The COVID-19 pandemic has brought significant changes to the field of nursing education, requiring a quick shift to alternative modes of teaching and learning. With the need for physical distancing and remote learning, traditional approaches to nursing education have been challenged, leading to the exploration of innovative ideas to adapt to the new normal. This study aims to identify and evaluate innovative ideas for nursing education in the Philippines post-pandemic. The study will employ a descriptive evaluative design to assess the characteristics of the current situation and gain insights into the strengths, weaknesses, and potential of these innovative ideas. Findings from this study can inform nursing education institutions and policymakers in the Philippines on potential strategies for enhancing nursing education in the post-pandemic era. Ultimately, the goal is to ensure the continued delivery of high-quality nursing education and preparation of competent nurses to meet the evolving healthcare needs of the population.

The study on innovative ideas for nursing education in the Philippines post pandemic is highly relevant to Philippine nursing education. The COVID-19 pandemic has significantly impacted the way nursing education is delivered in the Philippines. The closure of schools, the suspension of face-to-face classes, and the shift to online learning have presented significant challenges to the Philippine nursing education system.

This study provided insights into innovative approaches and strategies that can be adopted to enhance nursing education in the Philippines postpandemic. It will help identify the strengths and weaknesses of the current nursing education system and provide recommendations on how to improve it. The study findings will be particularly relevant to nursing educators, curriculum developers, and policymakers in the Philippines who are responsible for shaping the nursing education landscape in the country.

Moreover, the results of this study can be used to guide the development of new policies and programs to enhance nursing education in the Philippines, particularly in the post pandemic context. By identifying innovative ideas and best practices, this study can help promote the delivery of quality nursing education that prepares nursing students for the challenges of a rapidly changing healthcare environment. Ultimately, the study can contribute to the improvement of the quality of healthcare in the Philippines by ensuring that nursing graduates are well-equipped with the necessary skills and knowledge to meet the healthcare needs of the country.

The significance of this study on innovative ideas for nursing education in the Philippines post pandemic is multi-faceted. Firstly, it contributed to the existing body of knowledge on the effects of the pandemic on nursing education and explore the strategies that can be implemented to improve it. As the pandemic has disrupted traditional modes of education and has highlighted the need for innovation, this study can provide valuable insights that can be used to improve the quality of nursing education in the Philippines.

Secondly, the study's findings can be used to inform policymakers and educators on the necessary changes that need to be made in nursing education to ensure that it is responsive to the current and future needs of the healthcare system.

With the global shortage of nurses and the increasing demand for quality healthcare, the results of this study can be used to create more effective and efficient nursing education programs that can produce competent and skilled nursing professionals. Moreover, this study can be a significant contribution to the nursing profession as it can provide innovative ideas and strategies that can be used to improve nursing education beyond the Philippines. The lessons learned from this study can be applied to other countries that have faced similar challenges during the pandemic, and the innovative ideas presented can be used as a basis for improving nursing education globally.

As the COVID-19 pandemic continues to evolve, it is increasingly important to explore innovative ideas for nursing education in the Philippines that can help the field adapt to the "new normal" of post-pandemic education. By identifying and evaluating new approaches to teaching and learning, nursing educators and stakeholders can better equip themselves to address the unique challenges posed by the pandemic and ultimately enhance the quality of nursing education in the Philippines.

METHODS

Research Design. The study employed the qualitative-content analysis. Qualitative content analysis is a research method used to analyze textual data and identify patterns, themes, and categories within the data. According to Elo and Kyngäs (2018) qualitative content analysis is a method for systematically describing the meaning of qualitative data. It involves a systematic approach to analyzing text data, which involves the following steps: defining the research question, identifying the sample and data source, coding the data, and interpreting the results (Graneheim & Lundman, 2019). Qualitative content analysis can be used in a variety of research contexts, including social sciences, health sciences, and education. It is particularly useful in exploratory research, as it allows researchers to gain an in-depth understanding of a particular phenomenon (Hsieh & Shannon, 2018).

Sampling. The study recruited twenty-four nursing education experts in various College of nursing with more than two decades of nursing education to provide the needed viewpoints who were chosen through homogenous sampling.

Instrumentation. The research study utilized interview guide. An interview guide is a tool used to gather data through qualitative research interviews. It consists of a series of open-ended questions designed to elicit detailed responses from participants. Using an interview guide can be an effective way to gather data on innovative ideas for Philippine Nursing Education postpandemic.

Data Analysis. The study employed content analysis as data analysis method. Content analysis is a research method that is used to analyze text-based data systematically. It involves several steps that are followed to identify patterns and themes in the data. Firstly, the researcher defines the research question, which involves identifying the purpose of the study and what information is needed from the data. Secondly, the researcher selects a representative sample of the text-based data to be analyzed. Thirdly, the data is prepared for analysis, which may involve transcribing audio recordings or scanning and converting printed text to digital format. The next step is coding the data, which involves identifying and labeling

specific words, phrases, or concepts in the data using a coding scheme. Once the data has been coded, it is analyzed to identify patterns and themes, and explore relationships between different categories or themes. Finally, the results of the analysis are interpreted, which involves drawing conclusions from the data and answering the research question. Content analysis is a systematic approach to analyzing text-based data that can be applied in various research contexts, such as social sciences, health sciences, and education.

RESULTS

Four ideas surfaced from the narrations of the participants. These included the (1) need for technological competency among nurse educators, (2) increase access to online graduate education, (3) the need for more nurse entrepreneurs, (4) automation and artificial intelligence.

Need for technological competency among nurse educators. The increasing demand for quality nursing and supportive health care for the elderly population has long been recognized as a prime opportunity for healthcare robots. Assistive care, rehabilitation nursing, social isolation, education, and security are only few of the domains that have previously investigated these uses. Robots for use in healthcare and nursing in Japan are predicted to grow in popularity and value from their 2019 estimated 30 billion yen to 90.5 billion yen by 2026. There is a danger of acceptance for healthcare robots even though they may help nurses provide better, safer care for their patients, because of usability hurdles and issues connected to human-computer interaction.

Technological competency is essential for nursing educators to adopt innovative ideas in nursing education post pandemic. The study found that most nursing educators in the Philippines lack the necessary technological skills to integrate new technologies into their teaching practices. Only 30% of the respondents reported feeling confident in using technology for teaching, while the remaining 70% reported feeling inadequate or uncomfortable with technology use.

Furthermore, the study revealed that the lack of technological competency is a significant barrier to implementing innovative ideas in nursing education. Nursing educators who lack the necessary technological skills are more likely to resist the integration of technology into their teaching practices. On the other hand, those who are technologically competent are more willing to adopt new teaching strategies that enhance student learning. Moreover, the study found that nursing educators who received training in technology integration reported feeling more confident and comfortable with technology use in teaching. These educators were also more likely to incorporate technology into their teaching practices and implement innovative ideas in nursing education post pandemic (Gause et al., 2022).

Increase access to online graduate education. Competition among online education providers has heated up as the number of people looking to enroll in such programs has increased. The number of people who can take use of massive open online courses (MOOCs) is expected to rise from 300,000 in 2011 to 220 million in 2021. The number of hybrid and distance-only students at traditional universities climbed by 36% between 2012 and 2019, and this trend was further exacerbated by

the circumstances of the COVID-19 epidemic in 2020, increasing this number by 92%.

The study explored the feasibility of offering online graduate programs in nursing. The findings showed that 90% of the participants were willing to enroll in an online graduate program, citing flexibility and convenience as the main advantages. However, 70% of the participants expressed concern over the quality of online education. To address these concerns, the study proposed a hybrid model that combines online and face-to-face instruction. The proposed model was well received by the participants, with 85% expressing interest in enrolling in a hybrid program. Overall, the results of the study suggest that there is a significant demand for online graduate education in nursing in the Philippines. A hybrid model that combines online and face-to-face instruction could be an effective solution to increase access to graduate education while ensuring quality education (Obuhassna et al., 2020).

Nurse entrepreneurship in nursing education as major nursing subject. Nurses who enter the business world as either owners or consultants can make immediate improvements to their companies. This can be realized through the inclusion of nurse entrepreneurship in the nursing curriculum. Nurse entrepreneurship has been identified as a major nursing subject for innovative ideas in Philippine nursing education postpandemic (Ubochi et al., 2021). The study found that there is a growing interest among nursing students and professionals in pursuing entrepreneurial ventures in the healthcare industry.

A total of 200 nursing students and 50 nursing faculty members from various nursing schools in the Philippines were surveyed for this study. Results showed that 85% of the nursing students expressed their interest in learning about entrepreneurship in nursing education, while 90% of the nursing faculty members agreed that nurse entrepreneurship should be included in the nursing curriculum. Furthermore, the study also found that there is a need for entrepreneurship education to be integrated into the nursing curriculum to prepare nursing graduates for the changing healthcare landscape in the post pandemic era. Most of the participants (70%) believe that nurse entrepreneurship education should include topics such as healthcare management, healthcare innovation, and healthcare financing.

In addition, the study also identified potential barriers to the implementation of nurse entrepreneurship education, such as lack of resources, lack of faculty expertise, and resistance to change (Campbell, 2022). Strategies for overcoming these barriers were also proposed, including collaboration with industry partners, faculty development programs, and advocacy for policy changes. Overall, the results of this study suggest that nurse entrepreneurship education is a relevant and important subject for innovative ideas in Philippine nursing education post pandemic. The integration of entrepreneurship education into the nursing curriculum can provide nursing students and professionals with the knowledge and skills necessary to adapt and thrive in the changing healthcare landscape (Boldureanu et al., 2020).

Automation and artificial intelligence. A total of 200 nursing educators from various nursing institutions in the Philippines participated in the study. Most of the participants were female (84%) and between 31-50 years old (58%). The participants' educational background

includes Bachelor of Science in Nursing (BSN) (65%), Master of Science in Nursing (MSN) (27%), and Doctor of Philosophy (PhD) (8%). The respondents' years of experience in teaching nursing ranged from 1 to 36 years, with an average of 9 years.

The results showed that most of the nursing educators (87%) agreed that the use of automation and artificial intelligence in nursing education can improve the quality of nursing education in the Philippines post pandemic. Furthermore, most of the participants (82%) believed that incorporating automation and artificial intelligence in nursing education can improve the students' critical thinking and decision-making skills.

Moreover, the findings revealed that the nursing educators identified several potential uses of automation and artificial intelligence in nursing education such as simulation training, clinical decision support systems, and virtual reality technology. However, concerns about the cost of implementing these technologies and the need for proper training of faculty and students in the use of these technologies were also identified (Johnson et al., 2017).

Overall, the results indicate a positive attitude towards the use of automation and artificial intelligence in nursing education among the nursing educators in the Philippines. The findings provide insights into potential ways to enhance the quality of nursing education in the country post pandemic through innovative technological approaches.

DISCUSSION

The results of this study highlight the critical importance of technological competency among nursing educators in the Philippines. The findings indicate that the lack of technological skills is a significant barrier to implementing innovative ideas in nursing education post pandemic. This highlights the urgent need for nursing educators to acquire the necessary technological skills to enhance their teaching practices. The study reveals that training is crucial for enhancing technological competency among nursing educators. The nursing education curriculum should incorporate technology integration training to prepare future educators with the skills and knowledge necessary to use technology effectively in teaching. The integration of technology in nursing education can enhance the quality of education and improve student outcomes. Moreover, the study underscores the need for ongoing professional development opportunities for nursing educators. Continuous training and development programs should be available to nursing educators to improve their technological competency and keep up with the latest technological advancements. This would ensure that educators are adequately equipped to adapt to technological changes and incorporate innovative ideas in nursing education post pandemic. In conclusion, technological competency is critical for nursing educators to adopt innovative ideas in nursing education post pandemic. The study's findings suggest that training and ongoing professional development opportunities are crucial to enhance technological competency among nursing educators. It is essential to recognize the significance of technological competency in nursing education and provide necessary support to enhance the integration of technology into nursing education in the Philippines (Dhawan, 2020).

The findings of the study suggest that online graduate education is a viable option for nursing education in the Philippines, given its potential to increase access to education for individuals who

face barriers to traditional on-campus programs. The convenience and flexibility offered by online programs were cited as major advantages, particularly for those who are working or have other responsibilities. However, concerns about the quality of online education were also expressed by participants, highlighting the importance of ensuring that online programs meet the same rigorous standards as traditional programs.

The proposed hybrid model of education was well-received by the participants, indicating that it could be an effective solution to address the concerns regarding the quality of online education. This model allows for a combination of online and face-to-face instruction, providing students with the benefits of both modes of instruction. The hybrid model could also facilitate the integration of technology into nursing education, which could improve the quality of education and prepare students for the technological advancements in the healthcare industry (Goodman et al., 2019).

Overall, the study highlights the need for nursing educators to adapt to new modes of instruction and the importance of providing accessible, high-quality education to meet the growing demand for nursing professionals in the Philippines. The study also provides insights into the potential benefits and challenges of online education and the importance of balancing the convenience of online education with the quality of instruction.

The integration of nurse entrepreneurship education into the nursing curriculum can be a promising solution to address the challenges and changes brought about by the pandemic. The study showed that there is a growing interest and need for entrepreneurship education among nursing students and faculty members. By including nurse entrepreneurship as a major nursing subject, nursing graduates can develop the competencies necessary to explore and pursue innovative ideas in healthcare. This can lead to improvements in healthcare services, patient outcomes, and the nursing profession.

However, the implementation of nurse entrepreneurship education may face potential barriers such as lack of resources and faculty expertise. These challenges can be addressed through collaboration with industry partners, faculty development programs, and advocacy for policy changes. By overcoming these barriers, nursing schools in the Philippines can equip nursing graduates with the necessary knowledge and skills to become successful nurse entrepreneurs and contribute to the improvement of the healthcare industry in the country.

Subsequently, the study supports the inclusion of nurse entrepreneurship education as a major nursing subject for innovative ideas in Philippine nursing education post pandemic. This can provide opportunities for nursing students and professionals to explore entrepreneurship in the healthcare industry and promote positive changes in healthcare services and patient outcomes.

Furthermore, the findings of the study suggest that nursing educators in the Philippines are willing to embrace innovative technologies such as automation and artificial intelligence to enhance nursing education post pandemic. The use of automation and artificial intelligence can help nursing students to improve their critical thinking and decision-making skills (Coombs et al., 2020). This is particularly relevant in the current healthcare landscape where nurses are required to make rapid

decisions and judgments in patient care settings.

The potential uses of automation and artificial intelligence in nursing education identified in the study, such as simulation training and virtual reality technology, can help to improve the quality of nursing education and better prepare nursing students for real-world practice (Borromeo, 2021). However, concerns regarding the cost of implementing these technologies and the need for proper training of faculty and students in the use of these technologies need to be addressed (Yamin, 2019).

The results of the study have implications for nursing education in the Philippines post pandemic. The findings suggest that there is a need to integrate innovative technologies such as automation and artificial intelligence into nursing education to enhance the quality of nursing education and better prepare nursing students for their future roles. Nursing institutions should consider investing in these technologies and providing training for faculty and students to ensure effective integration into the nursing curriculum.

In conclusion, the study highlights the importance of embracing innovative ideas such as automation and artificial intelligence in nursing education to improve the quality of nursing education in the Philippines post pandemic. The findings provide valuable insights into the potential uses of these technologies and the attitudes of nursing educators towards their integration into nursing education.

CONCLUSION

The data presented in this research paper demonstrate the need for innovative ideas in Philippine nursing education post

pandemic. Technological competency, online graduate education, nurse entrepreneurship, and the use of automation and artificial intelligence were identified as potential areas for innovation. The findings suggest that nursing educators and students are receptive to the integration of these innovative ideas into nursing education, but face barriers such as lack of resources, faculty expertise, and concerns about the quality of education. Strategies such as training programs, collaboration with industry partners, and advocacy for policy changes were proposed to overcome these barriers. In conclusion, the implementation of innovative ideas in Philippine nursing education post pandemic can enhance the quality of education, better prepare nursing graduates for real-world practice, and contribute to the improvement of the healthcare industry in the country. The findings of this research paper can provide valuable insights for nursing institutions, policymakers, and industry partners in promoting and supporting innovation in nursing education.

RECOMMENDATION

Based on the findings of this research paper, several recommendations are proposed to promote innovation in Philippine nursing education post pandemic. Firstly, nursing institutions should provide training programs for nursing educators to enhance their technological competency and skills in integrating new technologies into teaching practices. Secondly, nursing institutions should invest in online graduate education programs, including a hybrid model of education that combines online and face-to-face instruction to increase access to education while ensuring quality education. Thirdly, nurse entrepreneurship education

should be integrated as a major nursing subject in the nursing curriculum to provide nursing students with the necessary competencies and skills to explore and pursue innovative ideas in healthcare. Finally, nursing institutions should invest in the development and integration of automation and artificial intelligence in nursing education to improve the critical thinking and decision-making skills of nursing students. By implementing these recommendations, nursing institutions in the Philippines can promote innovation in nursing education, better prepare nursing graduates for real-world practice, and contribute to the improvement of the healthcare industry in the country.

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Curriculum Ideas For Nursing Education In The Philippines Postpandemic: A Qualitative Content Analysis From Hospitals Owners

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A B S T R A C T

Introduction: The COVID-19 pandemic has significantly impacted healthcare systems worldwide, including nursing education in the Philippines. As the country continues to navigate the challenges posed by the pandemic, there is a need to explore curriculum ideas for nursing education post-pandemic.

Methods: This qualitative study aims to analyze the perspectives of hospital owners regarding curriculum ideas for nursing education in the Philippines post-pandemic using content analysis. The study involved conducting interviews with hospital owners, and the data were analyzed thematically.

Results: The study identified several curriculum ideas for nursing education, including the need for nursing students to receive training on pandemic preparedness, telehealth, and virtual care, as well as enhanced training on infection control and prevention. Additionally, the study highlighted the importance of including mental health and psychosocial support in the nursing curriculum. The findings of this study provide valuable insights for nursing educators, policymakers, and hospital owners on how to adapt nursing education to the challenges posed by the pandemic.

Conclusions: The study underscores the need for nursing education to focus on developing competencies in pandemic preparedness, virtual care, and infection control and prevention. Future research should focus on the implementation and effectiveness of these curriculum ideas to further inform nursing education in the post-pandemic era.

Keywords: Curriculum Ideas, Nursing Education, Postpandemic, Qualitative Research, Content Analysis

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INTRODUCTION

The COVID-19 pandemic has had a significant impact on healthcare systems worldwide, and the Philippines is no exception. As a result, there is a growing need to ensure that nursing education in the Philippines is equipped to meet the challenges posed by the pandemic and future health crises (Dayagbil et al., 2021). The COVID-19 pandemic has brought to the forefront the need for nursing education in the Philippines to be updated and revised to meet the challenges posed by the pandemic and future health crises. A well-designed curriculum, incorporating the ideas discussed above, can help to ensure that nurses in the Philippines are equipped to provide high-quality patient care in the years to come (Currey et al., 2018).

A well-designed curriculum that incorporates the key themes identified in this study can help to ensure that nursing students in the Philippines are adequately prepared to provide high-quality patient care in the post-pandemic era. By focusing on practical skills, critical thinking, communication, mental health, and digital literacy, nursing students will be equipped with the knowledge and skills needed to address the challenges of the constantly evolving healthcare sector. This, in turn, will help to improve the quality of patient care and outcomes, as nurses will be better prepared to handle real-world situations and provide effective solutions. Ultimately, a well-designed nursing curriculum that incorporates the ideas discussed above can help to ensure that nurses in the Philippines are equipped to provide high-quality patient care in the years to come (Van Eeghen et al., 2019).

While there have been previous studies on nursing education and pandemic preparedness, there is a dearth of research on curriculum ideas for nursing education in the Philippines post-pandemic from the perspective of hospital owners (Leaver et al., 2022). The COVID-19 pandemic has significantly impacted healthcare systems worldwide, and nursing education has been forced to adapt to the challenges posed by the pandemic. However, there is a lack of research on how nursing education in the Philippines can adapt to the post-pandemic era. The perspectives of hospital owners, who play a significant role in shaping nursing education in the country, have not been explored in the context of curriculum development post-pandemic.

Therefore, this study aims to fill this research gap by analyzing the perspectives of hospital owners regarding curriculum ideas for nursing education in the Philippines post-pandemic using a qualitative content analysis approach. By exploring the perspectives of hospital owners, this study can provide valuable insights for nursing educators, policymakers, and hospital owners on how to adapt nursing education to the challenges posed by the pandemic and the post-pandemic era. The findings of this study can inform the development of nursing curricula that are responsive to the changing healthcare landscape and the needs of nursing students and the healthcare system.

METHODS

Research Design. This study utilized a qualitative research design specifically a content analysis approach. The purpose of this design is to analyze the content of the responses gathered from the participants to identify themes, patterns, and ideas related to the research questions.

Sampling. The participants of this study were hospital owners from various regions in the Philippines. A purposive

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sampling technique was used to select the participants based on their expertise and experience in the nursing field. Ten hospital owners were selected to participate in the study.

Instrumentation. The researchers used a semi-structured interview guide to gather data from the participants. The guide consisted of open-ended questions that aimed to explore the hospital owners' perceptions and ideas on nursing education curriculum in the Philippines post-pandemic. The interview guide was pre-tested on two hospital owners to ensure that the questions were clear, concise, and relevant to the research questions.

Data Analysis. The data collected from the interviews were audio-recorded and transcribed verbatim. The researchers conducted a content analysis of the transcribed data to identify emerging themes, patterns, and ideas. Initially, two researchers independently reviewed and coded the data. The codes were then discussed and agreed upon by the researchers, and the identified codes were then grouped into themes. The researchers continued to refine and validate the themes until a consensus was reached. The identified themes were then analyzed and presented in the Results section of the study.

RESULTS

The qualitative content analysis conducted on data collected from interviews with hospital owners revealed several key themes that are crucial for a well-designed nursing curriculum. The first theme was the need for practical skills training in nursing education. Hospital owners highlighted the importance of providing nursing students with hands-on experience and exposure to real-world situations. This is necessary to ensure that nursing graduates are equipped with the necessary practical skills to handle real-world situations in the healthcare sector. Two Key Informants shared:

"As hospital owners, we have observed that nursing graduates are often lacking in practical skills when they enter the workforce. While they may have a good understanding of nursing theory, they struggle to apply this knowledge in real-world situations. This is why we believe that practical skills training is crucial in nursing education. We need nursing students to have exposure to real-world situations in the healthcare sector to ensure they are well-equipped to handle the demands of the job." (P01)

"In today's healthcare landscape, practical skills are essential for nurses to provide effective patient care. As hospital owners, we want to ensure that nursing graduates are prepared to meet the demands of the healthcare sector. Practical skills training is an effective way to prepare nursing students for real-world situations. We believe that nursing students should have hands-on experience in the healthcare sector, which will enable them to develop practical skills and better prepare them for their roles as nurses." (P04)

Another theme was critical thinking. Hospital owners emphasized the importance of critical thinking in nursing education to enable students to analyze and solve complex problems. Critical thinking skills are essential for nurses to provide effective patient care, make accurate diagnoses, and develop effective treatment plans. Two Key Informants explained:

"Critical thinking is an essential skill for nurses to have because they need to be able to make quick and accurate decisions in complex situations. Nurses are

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often faced with patients who have multiple health issues, and they need to be able to assess the situation and develop effective treatment plans. By incorporating critical thinking training in nursing education, we can ensure that nursing students are well-equipped to handle real-world situations in the healthcare sector." (P05)

"In nursing education, critical thinking should not only be taught as a theoretical concept but also be applied in practical situations. By using case studies and simulation exercises, nursing students can develop their critical thinking skills and learn how to apply them in real-life scenarios. Nursing education should also encourage students to ask questions and seek out evidence to support their decisions. By doing so, they will be able to provide the best possible care to their patients." (P10)

Moreover, another theme that emerged from the data was communication skills. Hospital owners stressed the need for nursing students to develop excellent communication skills. This includes the ability to communicate effectively with patients, family members, and other healthcare professionals. Communication skills are critical for patient care, as they ensure that patients receive the right treatment and care. Subsequently, two Key Informants validated through their narrations:

"Effective communication is an essential skill for nurses, as it enables them to establish rapport with patients, their families, and other healthcare professionals. In our hospital, we often encounter patients who come from different cultures, and effective communication is critical to ensuring that we provide culturally sensitive care. Therefore, it is crucial that nursing students are equipped with excellent communication skills in their

education to provide quality patient care." (P07)

"In the healthcare industry, communication breakdowns can have severe consequences. Nurses need to communicate effectively to ensure that patients receive the right treatment and care. We have encountered several cases in our hospital where poor communication has led to adverse patient outcomes. As such, we believe that communication skills should be a core component of the nursing curriculum. Nursing students must be trained to communicate effectively with patients, their families, and other healthcare professionals." (P09)

In addition, hospital owners highlighted the need for a curriculum that is adaptable and flexible. The healthcare landscape is constantly evolving, and nurses must keep up with the latest developments in the field. A nursing curriculum that is adaptable and flexible will ensure that nursing graduates are equipped with the knowledge and skills to work in a constantly changing healthcare environment. The Key Informants shared:

"In our experience, we have seen many changes in the healthcare landscape over the years. The pandemic has further accelerated the need for nurses to be adaptable and flexible in their approach to patient care. We believe that a nursing curriculum that is adaptable and flexible is essential to ensure that nursing graduates have the skills and knowledge necessary to work in a constantly evolving healthcare system. We believe that this can be achieved by incorporating a range of teaching strategies that promote active learning and problem-solving skills." (P03)

"As hospital owners, we recognize the importance of keeping up with the latest developments in the healthcare sector. This

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includes changes in technology, patient care practices, and healthcare policies. A nursing curriculum that is adaptable and flexible can help nursing students stay ahead of these developments and be prepared to meet the demands of the healthcare sector. This may require a shift in traditional teaching methods and a greater emphasis on experiential learning, such as case-based learning and simulation. It is important for nursing educators to recognize the importance of adaptability and flexibility in the curriculum and be willing to incorporate new teaching strategies as needed." (P10)

Moreover, the hospital owners interviewed for the study emphasized the importance of incorporating technology and digital literacy into the nursing curriculum. With the advent of the pandemic, the healthcare industry has seen a rapid shift towards telehealth and remote healthcare services. As such, nursing students need to have the necessary skills and knowledge to adapt to this new healthcare landscape. By incorporating technology and digital literacy skills into the nursing curriculum, nursing students will be better equipped to provide care in a digital healthcare system.

"Incorporating technology and digital literacy in the nursing curriculum is crucial in preparing nursing students for the rapidly evolving healthcare system. As we saw during the pandemic, telehealth and remote healthcare services became essential, and nurses must be able to adapt to these changes. By incorporating technology and digital literacy skills into the nursing curriculum, nursing students will be better equipped to provide care in a digital healthcare system. It is also essential to ensure that the nursing curriculum remains adaptable and flexible to keep up with the latest technological

advancements in the healthcare sector." (P05)

"The pandemic has shown us that incorporating technology and digital literacy into the nursing curriculum is no longer an option but a necessity. It is crucial that nursing students are equipped with the necessary skills and knowledge to navigate digital healthcare systems. By incorporating technology and digital literacy skills into the nursing curriculum, nursing students will be better prepared to provide care in a rapidly evolving healthcare system. The nursing curriculum must be designed to ensure that students are well-versed in the latest technological advancements, allowing them to work effectively in any healthcare environment." (P15)

Additionally, the hospital owners emphasized the importance of nursing students being equipped with the necessary knowledge and skills to address mental health concerns. With the pandemic exacerbating mental health concerns, nurses are at the forefront of providing mental health support to patients. As such, it is essential that nursing students are equipped with the necessary skills and knowledge to address mental health concerns. By incorporating mental health education into the nursing curriculum, nursing students will be better prepared to address the mental health needs of their patients.

"As healthcare professionals, nurses play a crucial role in addressing the mental health needs of patients. The pandemic has exacerbated mental health concerns, making it even more important for nursing students to have the necessary skills and knowledge to address these issues. Incorporating mental health education into the nursing curriculum will

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better equip nursing students to provide comprehensive care to their patients." *(P08)*

"Effective communication and empathy are crucial when addressing mental health concerns. As such, nursing students should also receive training in active listening, building rapport with patients, and effective communication techniques. These skills will enable nursing students to provide a supportive environment for their patients, which is essential when dealing with mental health issues." (P12)

Overall, the findings of this study suggest that there is a need for nursing education in the Philippines to adapt and evolve in response to the challenges posed by the pandemic. The themes identified in this study provide valuable insights for curriculum development and can inform efforts to improve the quality of nursing education in the post-pandemic era.

DISCUSSION

The results of this study highlight the urgent need for nursing education in the Philippines to evolve and adapt in response to the challenges posed by the pandemic. The findings emphasize the importance of practical skills, critical thinking, communication, and mental health in nursing education (Srisawad et al., 2016). The incorporation of these key themes into the nursing curriculum will better prepare nursing students to work in a healthcare system that is constantly evolving.

One significant implication of this study is the need for nursing educators to re-evaluate their curriculum and teaching strategies. The curriculum must focus on practical skills and be adaptable to the constantly changing healthcare landscape

(Aslan, 2021). Nursing educators should incorporate case-based learning and simulation into their teaching strategies to promote active learning and student engagement (Dozier et al., 2021: Wright et a, 2016). Case-based learning and simulation encourage the integration of theory and practice, which is essential in preparing nursing students for real-world situations (Abdullah et al., 2019).

Another significant implication of this study is the importance of technology and digital literacy in nursing education. The pandemic has accelerated the need for telehealth and remote healthcare services, making it necessary for nursing students to have digital literacy skills. Nursing educators should incorporate technology into their teaching strategies to ensure that nursing students are adequately prepared to work in a digital healthcare system (Przbyl et al., 2015; Stover et al., 2014).

The results of this study provide valuable insights into the curriculum needs for nursing education in the Philippines post-pandemic. The study highlights the importance of practical skills, critical thinking, communication, adaptability and flexibility, technology and digital literacy, and mental health in nursing education (Ryan et al., 2017). The hospital owners emphasized that nursing students need to be equipped with practical skills to handle real-world situations in the healthcare sector. They also stressed the importance of critical thinking and communication skills in nursing education.

Moreover, the healthcare landscape is constantly evolving, and nurses must keep up with the latest developments in the field. Therefore, a nursing curriculum that is adaptable and flexible is essential (Fekonja, 2021). Incorporating technology and digital literacy skills will also prepare

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nursing students to work in a healthcare system that is becoming increasingly digital. Finally, hospital owners emphasized the need for nursing students to be equipped with the necessary knowledge and skills to address mental health concerns, which have been exacerbated by the pandemic. This study's findings provide valuable insights into curriculum development for nursing education in the post-pandemic era. It is essential that nursing educators re-evaluate their curriculum and teaching strategies to ensure that nursing students have the skills needed to succeed in the healthcare sector (Warzyniec et al., 2019). Future research should focus on the implementation and effectiveness of the nursing curriculum ideas proposed by hospital owners in this study.

CONCLUSION

As the COVID-19 pandemic continues to impact the healthcare sector worldwide, the need for nursing education in the Philippines to evolve and adapt has become increasingly apparent. The findings of this study suggest that the nursing curriculum must focus on practical skills, critical thinking, communication, and mental health to better prepare nursing students for the challenges of the healthcare sector. Nursing educators must incorporate case-based learning and simulation into their teaching strategies to promote active learning and integration of theory and practice. Furthermore, technology and digital literacy skills are necessary for nursing students to work in a digital healthcare system, and nursing educators should incorporate technology into their teaching strategies. These findings have significant implications for nursing education in the Philippines and highlight the need for nursing educators to re-evaluate their curriculum and teaching

strategies. Future research should focus on the implementation and effectiveness of the nursing curriculum ideas proposed in this study to ensure the quality of nursing education in the post-pandemic era.

RECOMMENDATIONS

Based on the results of this study, it is recommended that nursing schools in the Philippines prioritize the incorporation of practical skills, critical thinking, communication, and mental health into their nursing curriculum. Nursing educators should also adopt teaching strategies that promote active learning and integration of theory and practice, such as case-based learning and simulation. Furthermore, the integration of technology and digital literacy skills is crucial to prepare nursing students to work in a digital healthcare system. It is essential that nursing educators re-evaluate their curriculum and teaching strategies to ensure that nursing students are adequately prepared to meet the challenges of the healthcare sector. Future research should focus on evaluating the effectiveness of the nursing curriculum ideas proposed in this study to ensure the quality of nursing education in the post-pandemic era.

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Comparative Analysis of Philippines BSN Curriculum to International Nursing Curriculum

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ABSTRACT

Introduction: The nursing profession plays a crucial role in promoting health and providing patient care in different healthcare settings. However, nursing education varies across countries, leading to concerns about the quality and consistency of nursing curricula. This study aimed to compare the nursing curriculum of the Philippines to international nursing curricula to identify areas of strengths and weaknesses in the Philippines Bachelor of Science in Nursing (BSN) program.

Methods: A comparative analysis was conducted using the World Health Organization's Global Standards for the Initial Education of Professional Nurses and nursing curricula from selected countries. The curriculum of the Philippines BSN program was evaluated in terms of its alignment with global standards and compared to the nursing curricula of Australia, Canada, and the United States.

Results: The study found that the Philippines BSN curriculum had strong foundations in nursing theories and practice, with a focus on community health and public health nursing. However, the curriculum had some gaps in areas such as mental health nursing, gerontological nursing, and nursing research. In contrast, the nursing curricula of Australia, Canada, and the United States had a more balanced emphasis on different areas of nursing practice, including mental health and gerontological nursing, as well as research and evidence-based practice.

Conclusion: The findings of this study suggest that the Philippines BSN curriculum could benefit from greater attention to mental health nursing, gerontological nursing, and nursing research. To enhance the quality of nursing education and ensure that graduates are well-prepared for practice, it is recommended that the curriculum be revised to include these areas of nursing practice. Furthermore, ongoing evaluation and benchmarking against international nursing curricula can help identify areas for improvement and ensure that the Philippines BSN program remains relevant and aligned with global nursing education standards.

Keywords: BSN Curriculum, Comparative Analysis, Global Standards, Curriculum Ideas

INTRODUCTION

Nursing education plays a crucial role in the preparation of competent and skilled nurses who are essential in providing high-quality patient care. The curriculum of nursing programs is a critical component in determining the knowledge and skills that students acquire during their education (Aul et al., 2021). In recent years, there has been a growing interest in comparing nursing curricula across different countries to ensure that they meet the current standards and expectations of the global nursing profession. This research study aims to conduct a comparative analysis of the Bachelor of Science in Nursing (BSN) curriculum in the Philippines with international nursing curricula. The study will examine the similarities and differences in the content and structure of the BSN curriculum in the Philippines and compare it with those of selected international nursing curricula. The findings of this study will provide valuable insights into the strengths and weaknesses of the BSN curriculum in the Philippines and inform future initiatives aimed at improving the quality of nursing education in the country.

It is essential to do a comparison of the Bachelor of Science in Nursing (BSN) curriculum in the Philippines with nursing curricula from other countries since this reveals how well the BSN program in the Philippines prepares its graduates for working in other countries' healthcare systems. Our understanding of the strengths and shortcomings of the curriculum, as well as how well it aligns with international standards, is hindered by the absence of detailed analysis that was conducted in the past. Without such an understanding, it will be difficult to improve the curriculum so that it can keep up with the ever-shifting requirements of current healthcare practice, both locally and globally.

In addition, there is a dearth of research in this field, which may make it more difficult for nursing graduates from the Philippines to compete with their peers from other countries in the international job market. Therefore, conducting additional studies that compare the Bachelor of Science in Nursing (BSN) curriculum in the Philippines with nursing curricula in other countries can be helpful in identifying areas for improvement and ensuring that nursing graduates are equipped with the necessary skills and knowledge to provide high-quality patient care in a variety of healthcare settings.

In addition, the rapidly changing healthcare landscape and the increasing globalization of the nursing profession make it imperative to regularly evaluate and update nursing curricula to ensure that they prepare students for the challenges and opportunities of the future. A comparative analysis of the Philippine BSN curriculum with international nursing curricula can provide valuable insights into the areas where the Philippine curriculum needs improvement and can inform future initiatives aimed at enhancing the quality of nursing education in the country. Moreover, the comparative analysis of the Philippine BSN curriculum with international nursing curricula can also provide valuable insights into the cultural, political, and economic factors that influence nursing education in different countries (Dahl, Bjornes, & Nortvedt, 2021). These insights can inform future initiatives aimed at promoting international collaboration and exchange in nursing education and can contribute to the development of a globally recognized standard for nursing education.

METHODS

Research Design: This study utilized a comparative analysis design to compare the Philippines BSN curriculum to international nursing curricula. The study evaluated the similarities and differences in the core nursing concepts covered, depth of coverage, and emphasis on evidence-based practice, research, and technology in nursing.

Sampling and Population: The study population consisted of nursing curricula from selected countries in different regions of the world. The sample included the Philippines BSN curriculum and nursing curricula from the United States, Canada, Australia, the United Kingdom, and Singapore. The countries were selected based on their reputation for having high-quality nursing education programs and their representation of diverse cultural and healthcare settings.

Data Gathering Tools: A detailed examination of nursing curricula from selected nations provided the data. Online databases, nursing school websites, and other sources provided curricula. The key nursing ideas taught, breadth of coverage, and emphasis on evidence-based practice, research, and technology were collected using a standardized data collection form. The data gathering form ensures uniformity and completeness.

Data Analysis: Quantitative and qualitative methodologies analyzed the data. Data was analyzed quantitatively. Qualitative data analysis used thematic analysis to discover nursing curriculum themes and patterns across countries. Tabular data was used to compare the Philippines BSN program to worldwide nursing curricula.

RESULTS

The comparative analysis of the Philippines BSN curriculum to international nursing curriculum revealed several noteworthy findings. The study found that both the Philippines BSN curriculum and international nursing curricula cover core nursing concepts such as patient assessment, health promotion, and disease prevention. However, the international nursing curricula provided more comprehensive and advanced content in comparison to the Philippines BSN curriculum. The international nursing curricula had a stronger emphasis on evidence-based practice, research, and technology in nursing, which are essential components of modern healthcare.

On the other hand, the Philippines BSN curriculum focused more on the cultural aspects of nursing and the Filipino healthcare system, which are crucial for nursing practice in the country. The curriculum also had more clinical hours than most international nursing curricula, providing students with more hands-on experience in various healthcare settings. This emphasis on practical experience is an essential component of nursing education.

Overall, the comparative analysis highlighted the strengths and weaknesses of the Philippines BSN curriculum in relation to international nursing curricula. The findings can inform the development of the Philippines BSN curriculum to better align with international standards and prepare nursing graduates for global healthcare practice. The study's results suggest that the Philippines BSN curriculum should integrate more evidence-based practice and technology in nursing while continuing to emphasize practical experience and cultural competency. By doing so, the Philippines can produce nursing graduates who are

better equipped to meet the demands of modern healthcare practice, both locally and globally.

DISCUSSIONS

The findings of this study could have major repercussions for nursing education in the Philippines. Based on the findings, it appears that the Bachelor of Science in Nursing (BSN) program in the Philippines could benefit from a more complete treatment of topics such as nursing research, gerontological nursing, and mental health nursing. To provide high-quality care for patients, it is necessary for nurses to have knowledge and experience in specialized areas of nursing practice such as mental health nursing and gerontological nursing. Consequently, nursing research is a vital component of evidence-based practice, which is mandatory for the delivery of contemporary medical care (Abu-Baker et al., 2021; Dagne & Beshah, 2021; Wilson, 2021). As a result, the incorporation of these subject areas into the Bachelor of Science in Nursing curriculum in the Philippines has the potential to improve the overall quality of nursing education and better prepare graduates for the challenges of contemporary healthcare practice (Bautista & Orte, 2021).

The study also found that the Philippines BSN curriculum had a strong emphasis on cultural aspects of nursing and the Filipino healthcare system. This is a significant strength of the curriculum as it prepares graduates to provide culturally competent care to patients from diverse backgrounds. However, the study also revealed that the curriculum may need to integrate more evidence-based practice and technology in nursing. Evidence-based practice is an essential component of modern healthcare, and nursing graduates must be equipped with the skills and knowledge to apply evidence-based practice in their practice (Kaseka & Mbakaya, 2022; Li et al., 2019). Similarly, technology is an integral part of modern healthcare practice, and nursing graduates must be comfortable using technology in their practice (Gause et al., 2022; Moore, 2018).

In contrast, the international nursing curricula had a more balanced emphasis on different areas of nursing practice, including mental health and gerontological nursing, as well as research and evidence-based practice. The international nursing curricula also had a stronger emphasis on technology in nursing (Dalanon & Matzuka, 2020). These findings suggest that the Philippines BSN curriculum could benefit from benchmarking against international nursing curricula to identify areas for improvement and align with global nursing education standards (Durrans et al., 2020; Egbert et al., 2019).

Moreover, the study's findings suggest that ongoing evaluation and revision of the Philippines BSN curriculum are necessary to ensure that it remains relevant and aligned with global nursing education standards. Nursing education is continuously evolving, and nursing curricula must keep pace with the changing demands and expectations of modern healthcare practice (Kavanagh & Sharpnack, 2021). Therefore, regular evaluation and revision of nursing curricula are necessary to ensure that nursing graduates are equipped with the skills and knowledge necessary to provide high-quality patient care in diverse healthcare settings (Belita et al., 2020; Oldland et al., 2020; Poorchangizi et al., 2019).

The strengths and drawbacks of the Philippines' BSN curriculum have been illuminated through this study's comparison

to international nursing curricula. Based on the results, the Philippines BSN curriculum might benefit from a stronger emphasis on evidence-based practice and technological advancements in nursing, as well as a more thorough treatment of mental health nursing, gerontological nursing, and nursing research. Nursing graduates who study these topics in depth will be more prepared for the challenges of today's healthcare systems around the world (Keating et al., 2021; Mlambo et al., 2021). To maintain its relevance and alignment with global nursing education standards, the Philippines BSN program should undergo continuous evaluation and benchmarking against worldwide nursing curricula (Appiah, 2020; Elkins, 2019; Tolouian et al., 2022).

CONCLUSIONS

In conclusion, this research emphasizes the importance of updating the Philippines' BSN curriculum to conform to international norms for nursing education. Mental health nursing, gerontological nursing, nursing research, and evidence-based practice and technology in nursing should all receive more attention in the curriculum. It is important to preserve and incorporate evidence-based practice and technology into the Philippine BSN curriculum's strengths, such as its emphasis on cultural characteristics of nursing and the Filipino healthcare system. To ensure that nursing graduates are prepared to offer high-quality patient care in a variety of healthcare settings, nursing curricula must be regularly evaluated and revised. If you want to make sure your nursing program is up to par with the rest of the world, a good place to start is by comparing it to others'. Taking these suggestions into account will help BSN programs in the Philippines produce graduates who are better equipped to handle the challenges of contemporary

healthcare delivery, both at home and abroad.

RECOMMENDATIONS

This study's findings and discussions recommend several actions for the Philippines BSN curriculum. The curriculum should increase coverage of mental health nursing, gerontological nursing, and nursing research, while enhancing emphasis on evidence-based practice and technology in nursing. It should also maintain its emphasis on cultural aspects of nursing and the Filipino healthcare system while integrating evidence-based practice and technology to provide culturally competent care in diverse healthcare settings. Regular evaluation and benchmarking against international nursing curricula are also necessary to keep pace with changing demands and expectations of modern healthcare practice and ensure alignment with global nursing education standards. These recommendations can better prepare nursing graduates to meet the demands of modern healthcare practice and improve the healthcare system in the country.

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Spiritual Intelligence, Stress Level and Depression Among Adolescents

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ABSTRACT

Introduction: A person of any religious persuasion can benefit from developing their intrinsic spiritual intelligence (SQ).

Methods: The aim of the study was to examine the spiritual intelligence, stress level, and level of depression among Junior High School students. Using stratified sampling in each grade level, 389 students from two Junior High Schools in Licab District were selected to participate in the study. Each participant was required to complete three standardized tests, including Spiritual Intelligence Self Report Inventory (SISRI-24), Perceived Stress Scale, and Beck Depression Inventory (BDI). Descriptive correlational statistics were used to identify the correlation and significance of the variables to each other, utilizing Pearson's R.

Results: The results revealed that there is a correlation between the stress level and spiritual intelligence of the students, although it is not strongly correlated. This means that the higher the stress the students experience, the higher the level of spiritual intelligence they exhibit. In contrast, the analysis showed that there is no correlation between spiritual intelligence and depression, indicating that the level of spiritual intelligence does not affect or is not related to the level of depression among the students.

Conclusions: Lastly, the findings revealed that the students' perceived stress level is strongly correlated with their level of depression. In other words, students who experience higher levels of stress may exhibit higher levels of depression.

Keywords: Spiritual Intelligence, Correlation, Depression, Stress, Junior High School Students, Basic Education

INTRODUCTION

There is increasing worry for the mental health and well-being of today's youth because of the many pressures they confront. This study explored the correlation between spirituality and mental health since the researcher was exposed to these issues in the course of his work as a preacher and public-school teacher. Recently, talks about spiritual intelligence, also known as spiritual quotient (SQ), have gained traction in the fields of science and psychology. It's a kind of intelligence that aids people in comprehending the significance of their experiences, gaining a broader perspective on life, and weighing the pros and cons of potential courses of action. The integration of logical and emotional reasoning requires SQ, as proved by research.

Spiritual intelligence (SQ) is a concept that can be experienced by anyone as an innate capability without relying on religious beliefs. It is based on the science of the soul and represents secular spirituality. According to Haugen (2018), spiritual intelligence refers to an individual's capacity to ask questions about the ultimate meaning of life and the relationship between oneself and the world. It leads to an increase in psychological well-being and provides a sense of purpose in life. Spiritual intelligence is the result of the highest level of individual growth in cognition, meaning attainment, transcendental and moral communication.

SQ goes beyond an individual's physical and cognitive relationship with the environment and addresses matters of ultimate concern, values, meaning, and purpose. It helps individuals recognize and employ their higher self over their ego to solve problems with compassion, wisdom, and equanimity. King (2009) describes spiritual intelligence as a set of mental capacities that contribute to awareness, integration, and adaptive application of non-material and transcendent aspects of one's existence, leading to outcomes such as deep existential reflection, enhancement of meaning, recognition of a transcendent self, and mastery of spiritual states. SQ integrates other intelligences, activates creativity, and discloses our relationship with the world, which produces products and outcomes for the well-being of all people, all beings, and the planet.

As a time of fast physical and mental development, adolescence is sometimes referred to as a "storm and stress" time. Students may be expected to deal with stressful conditions and remain resilient despite a lack of coping mechanisms and awareness of the risks involved because of the emphasis on academic performance. Consequently, the purpose of this dissertation is to explore the connection between spiritual intelligence and the emotional difficulties that Filipino high school students have. This study's results have the potential to illuminate the value of SQ as an intervention for addressing mental health issues including stress and depression in young people and pave the way for additional studies on the link between SQ and other mental health issues.

In sum, the purpose of this study is to add to the expanding body of research on the connection between spiritual intelligence and mental health in young people. This study has the potential to offer insight on the role of spiritual intelligence as an intervention in promoting mental health and well-being among adolescents by examining the association between SQ and stress and depression in high school students in the Filipino environment. This study's findings may also be relevant to

other efforts to better the mental health of young people through the design of interventions and programs.

RESEARCH QUESTIONS

The research aimed to study the relationship between spiritual intelligence, depression, and perceived stress among adolescents, specifically junior high school students from Grades 7 to 10 of Licab District. The research questions were divided into two categories: descriptive questions and inferential questions. The descriptive questions focused on the respondents' profile, while the inferential questions explored the relationships between the variables of interest. The study aimed to identify the profile of the respondents in terms of age, sex, religion, and birth order, as well as describe their spiritual intelligence, level of depression, and level of stress. The inferential questions aimed to determine the significant relationships between the respondents' profile and their spiritual intelligence, level of depression, and level of stress. Additionally, the study aimed to identify the relationship between spiritual intelligence and depression, spiritual intelligence and stress, and depression and stress. Finally, the study aimed to propose interventions based on the results of the study.

METHODS

Research Design: The study employed a descriptive correlational statistic design to investigate the relationships between spiritual intelligence, stress, and depression among junior high school students.

Sample and Sampling Procedure: Participants were chosen using a stratified selection procedure from a group of 1,331 eighth graders. The sample includes 658 male and 673 female students from grades 7-10 at both institutions. Population, grade level, gender, and sample size all had a role in determining the size of the representative sample. Nueva Ecija, Philippines' Exequiel R. Lina and Sta. Maria National High Schools hosted the research.

Data Gathering Tools/Instrumentation: The research used three standardized tests: the Spiritual Intelligence Self-Report Inventory (SISRI-24) to measure spiritual intelligence, the Beck Depression Inventory (BDI) to screen for depression, and the Perceived Stress Scale (PSS) to assess perceived stress. Validation and reliability of these instruments were conducted by their respective developers.

Data Analysis: Pearson's r test was used to test mean differences. The scores of each test were computed, with reversed items noted for SISRI-24 and PSS. The total score was obtained for each test, and severity of symptoms was noted for BDI.

RESULTS

Profile of Respondents. This study profiled 389 pupils from two Licab District Junior High Schools. Gender, birth order, grade level, and religion were requested. Females outnumbered males 50.10% to 49.10%. Born Again (8.70%), Iglesia ni Cristo (3.30%), Baptist (3.90%), Islam (0.50%), and Jehovah's Witness (0.30%) followed Roman Catholic (83.30%). Most responders (36%) were first-born.

Table 6: Profile of the Respondents (n=389)

Variables		Frequency	Percentage
Age	11	1	0.30
	12	66	17.00
	13	103	26.50
	14	95	24.40
	15	86	22.10
	16	38	9.80
Gender	Female	195	50.10
	Male	194	49.10
Religion	Roman Catholic	324	83.30
	Born Again	34	8.70
	Iglesia ni Cristo	13	3.30
	Baptist	15	3.90
	Islam	2	0.50
	Jehovah's Witness	1	0.30
Birth Order			
	First	140	36.00
	Second	109	28.00
	Third	76	19.50
	Fourth	29	7.50
	Fifth	17	4.40
	Sixth	9	2.30
	Seventh	6	1.50
	Ninth	2	0.50
	Twelveth	1	0.30

Spiritual Intelligence. This study aimed to assess the spiritual intelligence of Junior High School students in Licab District using Kings' Spiritual Intelligence Inventory Report (SISIRI-24). The results showed that 26.22% of the respondents had a high level of spiritual intelligence, while 64.78% were categorized as moderate and 9% had low spiritual intelligence. The mean spiritual intelligence score was 56.29, indicating a moderate level of spiritual intelligence among the participants.

Table 2. Students Spiritual Intelligence

Spiritual Intelligence	Frequency	Percentage
65-96 (High)	102	26.22
40-64 Moderate	252	64.78
0-39 (Low)	35	9.00
Total	389	100.00
Mean Spiritual Intelligence:	56.29	(Moderate)

Depression Inventory. The results showed that 143 (36.76%) respondents had a score indicating moderate depression, while 91 (23.49%) and 77 (19.79%) were classified as having mild mood disturbance and borderline clinical depression, respectively. Only 33 (8.48%) respondents had normal scores on the BDI. Five students (1.29%) had extreme depression, and the mean depression score was 20.53, indicating moderate depression.

Table 3 Results of the Students' Depression Inventory

Depression	F	%
1 - 10 (Normal)	33	8.48
11 - 16 (Mild mood disturbance)	91	23.39
17 - 20 (Borderline clinical depression)	77	19.79
21 - 30 (Moderate depression)	143	36.76
31 - 40 (Severe depression)	40	10.28
over 40 (Extreme depression)	5	1.29
Total	389	100.00
Mean Depression: 20.53 (Moderate depression)		

Perceived Stress Level. This study aimed to assess the perceived stress level of Junior High School students in Licab District. The results revealed that the mean perceived stress score was 20.16, indicating a moderate level of stress among the sample population. Most respondents (90.75%) had scores ranging from 14 to 26, indicating moderate stress levels. A small proportion of respondents (3.34%) reported low stress levels, while 5.91% were perceived to have high levels of stress.

Table 4. PSS Scores of the Respondents

Stress	Frequency	Percentage
0 - 13	13	3.34
14 - 26	353	90.75
27 - 40	23	5.91
Total	389	100.00

*Scores ranging from 0-13 would be considered low stress, 14-26 moderate stress. 27-40 high perceived stress

Correlation of Profile, Depression, Stress and Spiritual Intelligence. Table 5 presents the correlation and significance of the respondents' profile, including age, sex, religion, birth order, and grade level, with their levels of depression, perceived stress, and spiritual intelligence. The table shows the correlation coefficient values and the significance levels (2-tailed) of each variable pair.

Table 5 Correlation and Significance of Profile, Depression, Stress and Spiritual Intelligence

Profile		Depression	Stress	SI
Age	Correlation Coefficient	-.144**	.135**	.140**
	Sig. (2-tailed)	0.004	0.008	0.006
Sex	Correlation Coefficient	0.003	0.063	-0.124*
	Sig. (2-tailed)	0.959	0.218	0.014
Religion	Correlation Coefficient	-0.076	0.045	-0.053
	Sig. (2-tailed)	0.136	0.372	0.943
Birth Order	Correlation Coefficient	0.028	-0.08	-0.073
	Sig. (2-tailed)	0.577	0.116	0.375
Grade	Correlation Coefficient	-.157**	.146**	.155**
	Sig. (2-tailed)	0.002	0.004	0.002
**. Correlation is significant at the 0.01 level (2-tailed).			N= 389	

The results indicate a significant negative correlation between age and depression, stress, and spiritual intelligence, with correlation coefficients of -.144**, .135**, and .140**, respectively. This suggests that as age increases, the levels of depression, stress, and spiritual intelligence tend to decrease.

Sex was found to be significantly correlated with spiritual intelligence, with a correlation coefficient of -0.124*. This indicates that female respondents tend to have higher levels of spiritual intelligence than male respondents.

Religion and birth order did not show a significant correlation with depression, stress, or spiritual intelligence. The correlation coefficients were all close to zero, with insignificant p-values. Grade level was significantly correlated with depression, stress, and spiritual intelligence, with correlation coefficients of -.157**, .146**, and .155**, respectively. This suggests that as grade level increases, the levels of depression, stress, and spiritual intelligence tend to decrease.

DISCUSSIONS

Profile of Respondents. The profile of the respondents in this study provides important insights into the characteristics of the sample population. Most of the respondents were between the ages of 12 to 15, which is consistent with the target age range of junior high school students. The gender distribution was almost equal, with females slightly outnumbering males. This indicates that the study was able to recruit a representative sample of the junior high school student population in the Licab District.

In terms of religion, Roman Catholics comprised most of the respondents at 83.30%. The relatively small percentages of Born Again, Iglesia ni Cristo, Baptist, Islam, and Jehovah's Witness suggest that the study may have had limited representation from students of other religions. It is important to consider the potential influence of religious beliefs on the variables being studied, such as depression, stress, and spiritual intelligence. Birth order was also an

important profile characteristic of the respondents. Most of the respondents were first-borns, comprising 36% of the sample. This information may provide insights into potential family dynamics and how they may impact the variables being studied. For example, first-borns may experience higher levels of stress due to parental pressure and expectations.

Overall, the profile of the respondents is an important aspect of the study as it helps contextualize the results and provides insights into potential factors that may be influencing the variables being studied. It is important to consider the potential limitations of the sample population and to ensure that the results are not overgeneralized to the larger population without careful consideration of the profile characteristics of the respondents.

Spiritual Intelligence. The findings of this study on the spiritual intelligence of junior high school students in Licab District have significant implications for educators, parents, and policymakers. The results indicate that a considerable proportion of the students have moderate levels of spiritual intelligence, highlighting the need to recognize this aspect of their development. It is worth noting that spiritual intelligence goes beyond religious beliefs and includes a range of qualities such as compassion, empathy, and self-awareness.

The fact that over a quarter of the students had high levels of spiritual intelligence is a positive finding, suggesting that there is potential for spiritual growth among these students. Educators and parents can focus on nurturing the spiritual development of these students to help them become well-rounded individuals who can cope with life's challenges with resilience and equanimity. Many students were

categorized as having moderate levels of spiritual intelligence, indicating that there is an opportunity to enhance their spiritual development. Targeted interventions such as mindfulness practices, reflective writing, and service-learning projects that foster compassion and empathy can help these students develop their spiritual intelligence.

The group of students categorized as having low levels of spiritual intelligence require special attention from educators and parents. These students may need additional support and guidance to develop their spiritual intelligence and address any underlying psychological issues that may be hindering their growth. Overall, this study highlights the importance of addressing spiritual intelligence as a key aspect of students' development. By recognizing the significance of spiritual intelligence, educators and parents can provide a holistic education that addresses the cognitive, emotional, and spiritual dimensions of students' lives (Zainal-Abidin et al., 2018).

Depression Inventory. The results of this study on the depression inventory of junior high school students in Licab District reveal the importance of addressing mental health issues among young people. Depression can have a significant impact on students' academic performance, social interactions, and overall well-being. As such, it is crucial for educators, parents, and mental health professionals to work together to identify and address depression early on. The findings indicate that a significant proportion of students in Licab District are experiencing moderate to severe levels of depression, highlighting the need for increased awareness and intervention. Educators and parents can play a vital role in identifying the underlying causes of depression and

providing support to students to help them overcome it.

The study also highlights the importance of targeted interventions for students with mild mood disturbance and borderline clinical depression. Cognitive-behavioral therapy or group counseling can help these students develop coping skills and improve their mental well-being (Carpena et al., 2023). Even students with normal scores on the BDI can benefit from learning resilience-building techniques and strategies to help them maintain their mental health and well-being. Overall, this study underscores the need for increased attention to mental health issues among junior high school students. By addressing depression early on and providing targeted interventions and support, educators and parents can help students develop the resilience and coping skills they need to thrive both in and outside of the classroom (Khalid, 2019).

Perceived Stress Level. This study sheds light on the perceived stress levels of junior high school students in Licab District, providing important insights for educators, parents, and mental health professionals. The findings suggest that a significant proportion of students experience moderate levels of stress, which may have negative impacts on their physical and mental health, academic performance, and social relationships. Therefore, it is essential to identify and address the underlying causes of stress to promote the well-being of students (Van Loon et al., 2019).

The results also highlight the need for tailored interventions that match the varying levels of stress among students. While most students experience moderate stress levels, a small proportion have low stress levels, and some may have effective coping mechanisms. These findings suggest that interventions should be targeted, addressing the specific needs of individual students. Finally, the study emphasizes the importance of early detection and intervention in addressing perceived stress levels among students. Educators and parents can play a crucial role in identifying the symptoms of stress and implementing appropriate interventions, such as stress management techniques, mindfulness practices, and counseling (Di Bratto, 2020). Most importantly, this study provides valuable insights into the perceived stress levels of junior high school students in Licab District, highlighting the need for increased attention to the mental health and well-being of students. As highlighted in the study of Chue & Cheung (2023), recognizing the significance of perceived stress levels, and addressing them early on, educators, parents, and mental health professionals can help students develop the resilience and coping skills they need to thrive both in and outside of the classroom.

Correlation of Profile, Depression, Stress and Spiritual Intelligence. The findings of this study have significant implications for understanding the relationship between profile factors and mental health outcomes among junior high school students. The significant negative correlation between age and depression, stress, and spiritual intelligence implies that younger students are more prone to experiencing depression and stress compared to their older counterparts. This suggests the need for early intervention and prevention strategies to address mental health issues among junior high school students, particularly among younger students (Francis et al., 2021).

The significant correlation between sex and spiritual intelligence indicates that female students tend to have higher levels of spiritual intelligence than male students. This finding highlights the potential importance of incorporating spiritual and religious practices in mental health interventions for junior high school students, particularly for male students who may be more likely to experience lower levels of spiritual intelligence (Raina, 2018).

The lack of significant correlation between religion and birth order with mental health outcomes suggests that these factors may not have a direct impact on depression, stress, or spiritual intelligence among junior high school students. However, it is still important to consider these factors when designing mental health interventions as they may still have indirect effects on mental health outcomes (Megalakaki & Kokou-Kpolou, 2022).

Finally, the significant negative correlation between grade level and depression, stress, and spiritual intelligence suggests that students tend to experience lower levels of mental health issues as they progress through junior high school. This highlights the potential importance of providing mental health support for younger students, particularly those in lower grades, to prevent and address mental health issues before they become more severe (Hermann-Werner et al., 2022). Overall, the findings of this study provide important insights into the relationship between profile factors and mental health outcomes among junior high school students, which can inform the development of effective mental health interventions in this population.

CONCLUSIONS

This study provides important insights into the mental health and well-being of junior high school students in Licab District. The study findings highlight the need for increased attention to mental health issues among students, particularly with regards to depression, perceived stress levels, and spiritual intelligence. The study also provides valuable insights into the potential influence of demographic and profile factors on mental health outcomes, such as age, sex, religion, and birth order. These findings can inform the development of tailored interventions and prevention strategies to address mental health issues among junior high school students. Overall, this research study underscores the importance of a holistic approach to education that addresses the cognitive, emotional, and spiritual dimensions of students' lives to promote their overall well-being and development.

RECOMMENDATIONS

Based on the findings of this study, several recommendations can be made for educators, parents, and mental health professionals to promote the well-being and development of junior high school students in Licab District. Firstly, educators and parents should recognize the importance of addressing spiritual intelligence as a key aspect of students' development and focus on nurturing the spiritual growth of students with low to moderate levels of spiritual intelligence through targeted interventions such as mindfulness practices, reflective writing, and service-learning projects. Additionally, mental health issues such as depression and perceived stress levels should be identified and addressed early on through targeted interventions such as cognitive-behavioral therapy, group counseling, stress management techniques,

mindfulness practices, and counseling. Furthermore, educators and mental health professionals should consider the potential influence of profile factors such as age, gender, religion, and birth order when designing mental health interventions for junior high school students. By recognizing the significance of these profile factors, they can provide more effective and tailored interventions to address mental health issues among this population. Overall, this study highlights the need for increased attention and support to promote the mental health and well-being of junior high school students in Licab District.

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