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Quick Response Code:

Website: https://journals.lww.com/pjhrd
DOI: 10.4103/PJHRD.PJHRD_22_25

Assessment of students and instructors' experiences, satisfaction, and self-efficacy in blended learning in the new normal

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Abstract:

INTRODUCTION: The suspension of face-to-face education across all public and private institutions in the Philippines during the COVID-19 pandemic prompted nationwide adoption of blended learning—a hybrid model combining online and modular instruction with limited in-person components, while blended learning became primary instructional approach during this period, the Dr. Jose Fabella Memorial Hospital School of Midwifery's specific implementation lacked formal evaluation. This study aimed to analyze students' and instructors' experiences, self-efficacy, and satisfaction with blended learning during the pandemic-era "new normal," addressing a critical gap in assessing pedagogical effectiveness in specialized vocational training contexts.

METHODOLOGY: This study used mixed method approach to assess of DJFMH midwifery students and instructors' experiences, self-efficacy, and satisfaction by using quantitative questionnaires and qualitative focus groups to explore deeper insights. This pattern enabled the researchers to evaluate the level of experiences, self-efficacy, and satisfaction but also the strengths and weaknesses of the program.

RESULTS: The findings revealed that the demographic profile predominantly consists of young, single, first-time midwifery students with no prior experience in information and communication technologies (ICT) literacy experience and limited professional background. This group was compared to a more experienced cohort of instructors, with both groups using PLDT as their internet service provider. Both students and instructors reported moderate agreement regarding blended learning experiences. In addition, the results indicated a positive correlation between experience and satisfaction. However, there was only a weak correlation between experience and self-efficacy. Instructors generally reported high self-efficacy, while students expressed mixed feelings about their preparedness and skill acquisition, especially in practical midwifery competencies. Overall, both groups demonstrated moderate levels of satisfaction with the blended learning approach. Instructors largely report higher self-efficacy, while students exhibit mixed feelings about their preparedness and skill acquisition, particularly regarding practical midwifery competencies. Both groups display moderate satisfaction with blended learning, especially appreciating its flexibility in time and location, as well as the fresh perspectives it brings to education. However, they also identify several challenges, including the pressure of expectations, limited adjustment to online platforms, technological issues, gaps in applying midwifery skills, disparities in learning resources, and environmental distractions. Despite recognizing the strengths of blended learning, there remains a strong preference among participants for in-person instruction.

DISCUSSION: The study highlighted the need for multifaceted approach to midwifery education that addresses the disparities in ICT literacy, preferences for in-person instructions, technological competencies, emotional wellbeing, and practice. Policymakers should focus on practical skill

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Received: 06-02-2025

Revised: 07-05-2025

Accepted: 03-06-2025

Published: 21-11-2025

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How to cite this article: Blanquera JS, Angeles CR, Herras BB, Turbolencia SJ, Saltin YL, Pilapil JR. Assessment of students and instructors' experiences, satisfaction, and self-efficacy in blended learning in the new normal. Philipp J Health Res Dev 2025;29(3):35-44.

development of students and the professional development of instructors to create a more effective and supportive environment. Future studies should conduct longitudinal research to track the progress of students' skills and confidence.

Keywords:

Blended learning, midwifery education, student satisfaction

Introduction

The incidence of COVID-19 at the beginning of the pandemic affected thousands of lives in the different parts of the world. Contracting the COVID-19 virus caused an increasing number of morbidity and mortality among the people. Early measures against the COVID-19 virus to combat the spread of COVID-19 and prevent the negative effects on the economy.^[1] As of March 8, 2022, with the outbreak of COVID-19 globally, the government took initiative and announced a state of public health emergency under (Republic Act No. 11469), known as the "Bayanihan to Heal as One Act," was enacted throughout the Philippines. In line with the declaration, when everyone even the experts had little background about COVID-19 and no effective measures, or treatment was available, face-to-face education in the Philippines was suspended at all levels, both public and private, to ensure that the students stay home and avoid places like malls, movie house, markets, and similar crowded places.^[2]

The midwifery program at the Dr. Jose Fabella Memorial Hospital (School of Midwifery) (DJFMH [SOM]) provided theoretical courses, clinical affiliation, and field practices. Hence, face to face class was put on hold. In line with the Inter-Agency Task Force for the Management of Emerging Infectious Diseases guidelines, midwifery education required and abruptly modified its guidelines on learning, activities, and assessment measures by providing blended learning.^[3] Blended learning was one of the controls and preventive measures while face-to-face classes were suspended to ensure the safety of the faculty members and students during the pandemic. This was done using the internet platform in delivering courses to the student midwives. Clinical exposure in taking care of pregnant women, postpartum clients, and newborn care to enhance the skills of the student are not applicable. However, studies in developing countries emphasized issues such as difficulty adjusting in learning styles, increased domestic responsibilities, and poor.^[4]

Blended learning education was used at DJFMH (SOM) as their primary means of continuity in the delivery of education and to ensure the safety of the students. A study suggests that while online platforms can support learning, they cannot fully replicate it and require

further improvements in delivery and methods.^[5] This type of learning approach is being introduced for the first time last September 2020, by the DJFMH (SOM) to midwifery students and instructors, and as of this writing, no analysis or assessment has been carried out since the introduction of blended learning. Based on the previous findings during the pandemic, midwifery students perceived significant relationships between their blended learning experiences, self-efficacy, and satisfaction. In addition, this research was planned for recognizing differences in the blended learning experience of students and instructors in blended learning, and satisfaction and self-efficacy of students and instructors.

Methods

Methodology and design

This study used mixed method approach to assess of DJFMH midwifery students and instructors' experiences, self-efficacy, and satisfaction by using quantitative questionnaires and qualitative focus groups to explore deeper insights. This pattern enabled the researchers to evaluate the level of experiences, self-efficacy, and satisfaction but also the strengths and weaknesses of the program. The researchers used an application, G power apps using Fisher's exact test because there are two different populations. Thus, 72 midwifery students (Batch 2022 with 36 students and Batch 2023 with 36 students) needed to determine the students' satisfaction of 93% in the blended learning taken from the related literature and assuming the midwifery students for DJFMH students' satisfaction is 65% with 80% confidence and 5% margin of error. The researchers identified those midwifery students who were enrolled in Diploma in Midwifery offered by DJFMH from September 2023 up to July 1, 2023, and all the instructors who facilitated and supervised the midwifery student in academic requirements. The researchers invited 8–10 level II midwifery students and instructors for Focus Group Discussion (FGD). Convenience sampling used in selecting the participant for the FGD based on their availability. The researchers sought the permission to the Research Ethics Committee (REC) of DJFMH to conduct the research; thus, the study protocol was reviewed and approved by REC with document no. REC-2023-026. The researchers conducted the pilot testing determining validity and reliability of the tools that used in the study.

Research instruments

Blended learning experience survey

To measure the level of the blended learning experiences of the midwifery students and instructors of DJFMH, the researchers adopted the Dimensions on Levels of Learners' Satisfaction^[6] with the categories of Blended Learning Perspective, Instructor's Attitude, Content Quality, Learning Environment, and Social Interaction. The measures for learning environment and social interactions were captured on Student learning satisfaction in the Blended learning system.^[7] The instrument was measured using a 5-point Likert Scale, with descriptive references from totally agree (5) to totally disagree (1), which were used to analyze quantitative data. The alpha coefficient was 0.98 which indicates that the instrument is highly acceptable or reliable for use.

Satisfaction survey in blended learning

To measure the level of students' satisfaction, the researchers adopted the Dimensions on Levels of Learners' Satisfaction^[6] with category of service and support quality and overall satisfaction.^[8] Finally, the measure for learning activities was self-made questionnaires by the researchers. These variables proved to be critical in achieving learners' satisfaction in blended learning. The instrument was measured using a 5-point Likert scale, with descriptive references from extremely satisfied (5) to not satisfied at all (1), which were used to analyze quantitative data. The alpha coefficient was 0.94 which indicates that the instrument was highly acceptable or reliable for use.

Self-efficacy scale

To measure the level of the midwifery student's efficacy, the researchers adopted the Online Learning Self-Efficacy Scale with category of technology, learning, and time management.^[9] The instrument was measured using a 5-point Likert Scale, with descriptive references from completely agree (5) to completely disagree (1), which was used to analyze the quantitative data. The alpha coefficient was 0.94 which indicates that the instrument was highly acceptable or reliable for use.

Teacher self-efficacy scale

To measure the level of instructor's efficacy, the researchers adopted the Teachers Sense of Efficacy Scale with category of efficacy for instruction, efficacy for motivation efficacy for classroom management.^[10] The instrument was measured using a 5-point Likert Scale, with descriptive references from Strongly Agree (5) to Strongly Disagree (1), which were used to analyze the quantitative data. The alpha coefficient was 0.95 which indicates that the instrument was highly acceptable or reliable for use.

Data procedure

In Table 1, The Research Flow Chart, the researchers adopted a mixed-method strategy, conducting data collection in two distinct phases:

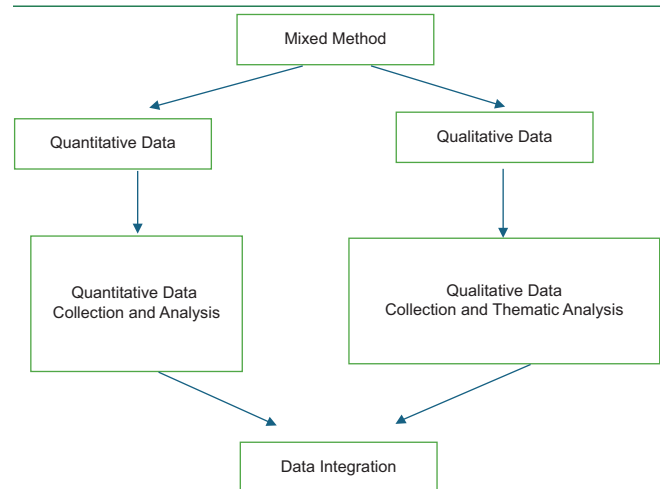
Phase I

The quantitative data collection, the researchers gathered information from the respondents using survey questionnaires and met them in different schedule with the same venue. Consent was secured and explained the objective, rationale of the study. The collated data were accordingly arranged and tabulated in a descriptive form on Microsoft Excel.

Phase II

The qualitative data, consent were secured for FGD participants and obtaining approval for the audio recording in a private room with closed door. Data collected using semi-structured interview and open-ended questions were used to describe participants' experiences, satisfaction and personal perspectives comfortably, and talk freely. The interview lasted for 45 min. When the researchers arrived at data saturation, the FGD and data collection have been stopped. Moreover, the audio-recording was handled by the assistant moderator then transcribed outside the facility and further identifiers deleted. There were no repeated or followed-up interviews. The FGD data were transcribed verbatim, translated into English as interpreted by the researchers. During the transcription of audio recorded files, the researchers have more verifiable and less bias. The participants were identified as P1, P2, and so on (where *P* represented participants and the number participant number from 1 to 10) to maintain its anonymity. The data resulting from FGD were analyzed using thematic analysis and were included in analysis of the study. To identify the strength and weaknesses that provided a more

Table 1: Research flow chart



comprehensive understanding of the blended learning program. For ethical considerations, this research was reviewed by the REC of DJFMH. Thus, principles of ethics in research were observed in the conduct of study including confidentiality, anonymity, autonomy, veracity, and justice for the participants.

Results

Quantitative

The first phase was the collection of quantitative data. The researchers met the 63 participants in one of DJFMH (SOM)'s classroom by group. There were nine participants from the 2022 batch who were unable to participate due to their availability during the scheduled interviews.

Based on the demographics in Table 2 The profile of the participants, most of the students ($n = 63$) were aged 21–25 years (58.7%), largely single (82.5%) and without children (73.0%). Majority of students (77.8%) were not employed, many were first time midwifery participants (74.6%). In contrast, the instructors ($n = 13$) are mainly female (84.6%) and aged 51 years and older (31%). Instructors were married (46.2%) with 0–4 year of teaching experience. Noteworthy, significant number of students (46%) had no prior information and communication technologies (ICT) experience, while its reported instructors (69.2%) over 6 years of ICT experience.

Most students (68.3%) are first time participants in blended learning, spending 5–7 h/day on it, while instructors usually spend 1–3 h/day.

Table 2: Profile of the participants

($n=63$)	Frequency (Percentage)	($n=13$)	Frequency (Percentage)
Age		Age	
Below 21	7 (11.1%)	21-25	1(7.7%)
21-25	37 (58.7%)	26-30	2(15.4%)
26-30	9 (14.3%)	31-35	2(15.4%)
31-35	4 (6.35%)	36-40	3(23.1%)
41-45	4 (6.35%)	41-45	1(7.7%)
46-50	2 (3.2%)	46-50	1(8%)
		51 and above	4(31%)
Number of children		Sex	
0	46 (73.0%)	Male	2(15.4%)
1	7 (11.1%)	Female	11(84.6%)
2	5 (7.9%)		
3	4 (6.3%)		
4	1 (1.6%)		
Civil Status		Civil Status	
Single	52(82.5%)	Single	5(38.5%)
Married	11(17.5%)	Married	6(46.2%)
		Widowed	2(15.3%)
Employment Status			
Employed	14(22.2%)		
Not employed	49(77.8%)		
University Academic Course		Year of Teaching experience	
First Course	47(74.6%)	0-4	8(61.5%)
Second Course	15(23.8%)	10 and above	5(38.5%)
Third or more	1(1.6%)		
Internet Access		Internet Access	
PLDT	20(31.7%)	PLDT	9(69.2%)
Converge	17(27.0%)	Converge	1(7.7%)
Skycable	8(12.7%)	Globe	1(7.7%)
Globe	12(19.0%)	Smart	2(15.4%)
Smart	6(9.5%)		
ICT Literacy		ICT Literacy	
No experience	30(47.6%)	No experience	2(15.4%)
Less than 1 year	8(12.7%)	Between 4-6 years	2(15.4%)
Between 1-3 years	4(6.3%)	More than 6 years	9(69.2%)
Between 4-6 years	1(1.6%)		
More than 6 years	20(31.7%)		

Table 3: Relationship between blended learning experience, self-efficacy and satisfaction of the participants

	Criteria	Blended Learning Satisfaction	Blended Learning Self Efficacy
Blended Learning Experience	Correlation Coefficient Spearman Rho	0.7710	0.1321
	Sig. (2-tailed)	<0.00001	0.2555
	Remarks	Significant	Not Significant
Blended Learning Satisfaction	Correlation Coefficient Spearman Rho	0.7710	0.159
	Sig. (2-tailed)	<0.00001	0.171
	Remarks	Significant	Not Significant

Table 4: Comparison in the blended learning experience of the students and instructors in blended learning

Blended Learning Experience	Mean (SD)	Mann-Whitney <i>U</i>	<i>P</i>	Decision	Remarks
Students	3.91 (±0.60)	359.0000	0.4848	Fail to Reject Ho	Not Significant
Instructors	3.98 (±0.56)				

Table 5: Comparison in the self-efficacy of the students and instructors in blended learning

Self-Efficacy	Mean (SD)	Mann-Whitney <i>U</i>	<i>P</i>	Decision	Remarks
Students	3.92 (±0.55)	256.0000	0.0340	Reject Ho	Significant
Instructors	4.24 (±0.56)				

Table 3 the relationship between blended learning experience, self-efficacy and satisfaction of the participants illustrated the Mann–Whitney *U*-test comparing “Student versus Instructor” perceptions in terms of “Blended Learning Perspective” yielded a *U* = 359.0000 and a *P* = 0.4848. Based on this result, they failed to reject the null hypothesis (*H*₀), indicating that the mean of satisfaction score between the student and instructors are not significantly different in particular the mean score of the student is lower than the instructors.

Table 4 the comparison in the blended learning experience of the students and instructors in blended learning reveals The Mann–Whitney *U*-test comparing “Student versus Instructor” perceptions in terms of “Satisfaction” yielded a *U* = 409.0000 and a *P* = 0.9945. Based on this result, they failed to reject the null hypothesis (*H*₀), indicating that the mean of satisfaction score between the student and instructors are not significantly different in particular the mean score of the student is lower than the instructors.

Table 5 the comparison in the self-efficacy of the students and instructors in blended learning shows The Mann–Whitney *U*-test comparing “Student versus Instructor” perceptions in terms of “Self-Efficacy” yielded a *U* = 256.0000 and a *P* = 0.0340. Based on this result, they rejected the null hypothesis (*H*₀), indicating that the mean of self-efficacy score between the student and instructors are significantly different in particular the mean score of the student is lower than the instructors. Therefore, this finding suggests that the observed difference in self-efficacy levels is significant.

Table 6: Thematic analysis students and instructors' perception of blended learning program

Types of perception	Themes	Emerging Codes
Strength	Accessibility in time and place	Convenient Cost effective Seamless learning Multitasking Balance study life integration User-friendly learning materials
	Fresh Perspective in Education	First timer Innovation Learning opportunity Autonomy Students curiosity
Weaknesses	Weight of the expectation	Primary affected Navigating the unknown Trial and error Pressure in the blended learning
	Limited adjustment to online program	No formal training Needs to adopt Administrative support Attending webinars
	Technological Barriers	Unreliable internet connections Technologically unprepared Challenges in navigating online tools
	Gaps in midwifery skill application	Not conducive in skill development Anxiety during procedure Memorization only Imaginative learning
	Learning resources disparities	Necessity in devices Unaffordable Lack of gadgets Lacks sufficient space at home
	Environmental distractions	Gadget centered Difficult to focus Fail to foster social relationship

Qualitative

The second phase consisted of FGD conducted with faculty as additional collections of data. The researchers developed six semistructured questionnaires for students and seven semistructured questionnaires for instructors composed of experiences, satisfaction, challenges of students, and instructors in blended. Table 6, which presents the thematic analysis of students' and instructors' perceptions of the blended learning program, reflects the transcribed results of the Focus Group Discussions. The researcher generated themes to systematically capture the program's strengths and weaknesses.

Strengths

Accessibility in time and place

Both participants discovered convenient and blended learning effectiveness as its commuting cost and time were eliminated particularly for those travelling long distances and improved their attendance. Online platforms flexibility allows students to catch up and access by fosters multi-tasking, allowing them to manage their studies alongside their home responsibility and during inclement weather, while the instructor benefits from adopting family time while preparing lecture materials used in online classes suggests limiting of used of physical books during online class.

"And the good thing is they don't need to spend money when going to school. PS6"

"There are also many advantages in terms of attendance in online learning because they no longer need to travel. PI5"

"Similar to that, there was a pandemic, or for example, in cases where there's a stormy weather. Of course, the internet can be affected, but having blended learning can actually help both teachers and students to find activities. PS4"

Fresh perspectives in education

The students echoed on their first experience with blended learning during the COVID-19 pandemic. They didn't participate in any online classes during their secondary education. It's an innovative approach essential for education while transitioning to new platforms like Zoom advances a great opportunity for effective learning contributing to the overall learning. It develops self-discipline, as they manage their own time and prioritize tasks, while the instructors find value in receiving new skills through this new method, although at first experienced stress.

"Because it was my first time experiencing online classes since the pandemic hit during my undergraduate years, I also didn't experience it then. PI1"

I think blended learning is an innovation. Time is changing, technology is evolving, and people need to adapt to that technology and the times., PS4"

"It promotes self-discipline because, of course, it also involves autonomy. You manage your own time. So, you should know what you need to prioritize and what you need to study first., PS1"

Weaknesses

Weight of expectations

Instructors noted that initially affected by COVID-19 pandemic, while the students described the feeling of mentally unprepared after expending extended time at home and a trial- and-error process. Instructors felt overwhelmed by the transition and the stress associated with the use of technology in the education. Both participants experience anxiety and nervousness particularly in the preparation for the board exam.

"So I found out, because we were the first ones affected by the pandemic., PI2"

"It feels like everything is just trial-and-error now. For example, in Zoom meetings, sometimes the connection isn't stable, and it wastes a lot of time., PS1"

"I'm mentally not prepared. Because of the pandemic, we've been locked up at home for years, and when we come out, we're surprised by how communication is like now., PS5"

"Because now, I'm nervous because I realized that. Because I just thought, "Wow, we're graduating." And then, we are about to take the board exam., PS9"

Limited adjustment to online platforms

Instructors lack training in blended learning due to the unique circumstances surrounding the sudden shift to this approach, which was implemented to prevent the transmission of COVID-19. The administrators were supportive, extending valuable assistance through webinars of orientation on how to use available tools like Google Forms.

"Before, there was no training because nobody knew during the time of the pandemic, right? PI2"

"As far as I know, there was support given because we had that, you participated in it. There was some sort of orientation. They provided an orientation on how to use it. Like making a Google Form, right, PS3"

"We underwent training on how to create a Google Form., PI5"

Technological barriers

Participants struggle in synchronous sessions, where unfamiliarity with tools like Zoom and Google creates difficulties in participation. Thus, reliance in Facebook pages for communication has proven ineffective and the absence of learning management system limits the overall midwifery experience.

"It's also not okay sometimes, sir, because the internet is not stable, and it's not just for students but also for teachers. PS4"

"Yes, during Zoom meetings, there's a limited amount of time. Sometimes it's only 40 min, then it cuts off., PS10"

"We don't have a learning management system because it's expensive., PI3"

Gaps in midwifery skills application

Theoretical knowledge is insufficient for midwifery students without practical experience leading to struggles in comprehending and visualizing the concepts. Instructors stated that students often memorize procedures rather than understanding the underlying principles, leading to increase anxiety, and underdeveloped skills, specifically, the newborn assessment.

"In this online setup, we rely more on imagination when our instructor teaches us because they're discussing things that we don't fully understand. We just imagine it. But when we started doing our duties, it became better because that's when we truly appreciated what our instructors were teaching us., PS5"

"They may have memorized it, but they don't really appreciate it. PI7"

"I'm in that part where I've done my return demonstration, but why do I get nervous during the actual procedure? My hands tremble. PS7"

"Just like us now, we only had skill enhancement in our second year. I don't feel confident when it comes to managing patients, particularly in LR-DR (Labor room and Delivery Room). PS7"

Learning resources disparities

Students expressed the necessity of having laptops, especially for creating PowerPoint presentations; however, there is unequal access to digital resources, such as devices and internet which led struggles to keep up with their studies. Thus, instructors noted that borrowing technology isn't a feasible solution. Furthermore, students face difficulties finding a quiet space at home during online class as the student's companions moving around often disrupt their focus.

"You really need a laptop because even if we're not doing blended learning, you'll still need it for PowerPoint presentations. We can't borrow laptops for that., P15"

"You need to provide your own laptop, For example, when everyone is teaching at the same time, laptops are available yet not everyone gets one. PI5."

"You don't have enough space at home. People keep passing by behind you, causing distractions., PS5"

Environment distractions

Students encountered interruptions from notifications and chat messages, spending more time on their gadgets particularly gaming instead of academic purposes, online

class at bedroom can tempt the student to rest rather than participate in the class. Students with children, experienced interruptions as they juggle responsibility while trying to study. Online learning has led to decrease social interaction of the midwifery students with their classmates.

"Like now, instead of children playing outside, they're just focusing on gadgets, and even if there's no online class, they claim that they have an online class., PS2"

"But what they usually do with their gadgets or when they have the chance on the internet is just play. They can no longer focus on their studies. so, that's it., PS8"

"Some of us are inside a room where the bed is right next to us. The bed is inviting sometimes, and there are times when you attend classes (inaudible). PS3"

Discussion

The study specified a widespread summary of the blended learning among midwifery students and instructors at DJFMH, highlighting different aspects of engagement, satisfaction, and self-efficacy during the new normal. The demographic profile evaluation predominantly consists of young, single, first-time midwifery student with no prior experience in ICT literacy and with limited professional experience, compared to a more experienced instructor cohort, primarily composed of women with experienced in ICT literacy for 6 years. Consistently in a study, revealed that more than half of students aged between 20 and 21 years old.^[11] The result of the study is in contrast to the discovery which is consistent with the previous research that suggests an increasing number of older persons are taking on online education responsibilities.^[12] Moreover, a study provided that many educators possess substantial knowledge of various ICT and have access to the internet.^[13]

However, there were educators who faced challenges due to limited ICT skills and a lack of focused professional development.^[14] These dynamic shapes the blended learning environment, influencing perceptions and interactions. Some of the students spends 5–7 h ($n = 63$, 47.3%), while the instructors spent only 1–3 h in blending learning. The research revealed that students experienced moderate to high levels of videoconferencing fatigue, which demonstrated as an overall sense of lack of energy, eye strain, dissatisfaction with interactional patterns, anxiety and moodiness, and decreasing motivation for tasks.^[15]

Blended learning experience of the students and instructors were optimistic, appreciate the effort of DJFMH (SOM). In the FGD, the first-time user felt excited and challenged for the transition. The findings revealed that students generally held positive perceptions of the blended learning environment, particularly appreciating

its design and its influence on fostering critical thinking skills.^[16] Both participants provide flexibility such accessibility by the digital resources. Multi-tasking, balancing their studies and home responsibilities and adjust during inclement weather. In the previous study, noted the flexible time and availability on answering the learning time at their own pace even in their home confinement.^[17] Conversely, participant, although having positive impressions, strongly prefer face-to-face education which is reflected in their higher mean scores for in-person learning. The result is congruent to the previous study that most of the students agreed or preferred in the real-time class because they have a direct connection with their teachers through an interactive approach to learning that enables them to learn more.^[18]

Additionally, the instructors overwhelmed while the students reported felt uncertain, anxiety and mentally unprepared after spending extended periods of online class at home. Distractions and decrease social interaction with blended learning can negatively impact students' engagement and motivation. In contrast with the previous literature, students prefer Face-to-face setting, since physical and emotional interaction significantly occur in such an environment.^[19]

Both students and instructors display moderate satisfaction with blended learning, particularly appreciating convenience, flexibility, and transformative impact on education. During FGD, Students noted that blended learning eliminates commuting cost and time, especially for those who travel long distances to participate in online classes, which improve attendance by catch up on missed classes as well as self-disciplines as students manages their own schedules and learn at their own pace by recorded lectures. Technological barriers such as need for laptop, unreliable internet, no learning management system and quiet study environments highlighted inequalities for the students. In the previous study, scores were significantly higher for academic support, organization and management, learning resources, learning community and student voice in support of blended.^[20] This dissatisfaction was primarily linked to challenges such as poor internet connectivity and inadequate broadband data affecting online learning experiences specifically in marginalized areas.^[21]

Instructors largely report higher self-efficacy, still, students exhibit mixed feelings about their preparedness and skill acquisition, particularly concerning practical midwifery competencies.

In one of the studies found a significant improvement in critical thinking skills among students who participated in blended learning programs compared to those in

traditional learning settings.^[22] However, the reliance on memorization instead of understanding and comprehension indicate a significant gap in skill acquisition for midwifery students of DJFMH. Thus, the students revealed feeling of inadequate and guilt when they committed mistakes in patient care, contributing to lack of confidence in a high-stake environment. On the contrary, author highlighted a positive experience for midwifery students that the suture at home kit gave them confidence, knowledge of the skill, and preparedness for the clinical skill laboratory practice and assessment using blended learning program for perineal suturing.^[23]

Additionally, the results show a positive correlation which implies that broader involvement with blended learning, the satisfaction level increases. However, markedly weak correlation between blended learning experience and self-efficacy directing that it doesn't automatically having more experience translate to increase self-efficacy in blended learning. Likewise, weak correlation between satisfaction and self-efficacy implies that higher satisfaction does not automatically enhance self-efficacy. The findings associated in the previous study found out a weak positive correlation between self-efficacy and satisfaction during COVID-19, do not necessarily guarantee higher satisfaction, with other factors likely influencing the outcome.^[24]

Furthermore, the Mann-Whitney test reveals that there is no significant difference in perception of blended learning between participants. In addition, the Mann-Whitney *U*-test results imply that there is no significant difference in satisfaction between students and instructors in a blended learning environment, despite students reporting lower satisfaction. The results are consistent with the findings reported that there are no significant differences in students' satisfaction between individuals with prior experience in blended learning and those without.^[25] This did not significantly impact students' perceptions. Consequently, contradictory to the other findings that showed a significant difference in satisfaction with virtual educational in different teaching styles, so that blended method had more satisfaction than others.^[26]

On the other hand, it revealed that there is a significant difference with instructors reporting higher self-efficacy than students. The current study is aligned with study found that teachers exhibited very high self-efficacy regarding blended learning, indicating a strong belief in their capabilities to effectively implement and manage blended learning environments.^[27] Similarly, a study conducted that teachers generally exhibit a fair level of confidence in their technological proficiency.^[28]

Conclusion

Based on the result of the study, the following conclusions were drawn. Regardless of moderate satisfaction noted from the participant, dissatisfaction appeared from challenges such as limited access to technology and unreliable internet affected the learning experience. A significant number of participants preferred in person instruction, suggesting face to face instruction remain crucial for their midwifery skills. It also highlighted to seek for intervention to enhance students' confidence and midwifery skill acquisition in clinical practice which is necessary for their competency. Emotions of the participants are also noticed, characterized by uncertainty and anxiety resulted from abrupt implementation of blended learning. The implication of the study highlighted the need for multifaceted approach to midwifery education that directed to the technological competencies, emotional well-being and practical skill development that will help the policymakers to create a more effective and supportive environment that prepare midwifery students for the challenges as professional midwife in the future.

Generalizability

Blended learning used in DJFMH (SOM) was used to collect the data for this study. Therefore, the findings may not be generalizable to all universities who offered midwifery course. Thus, students' perception may be influenced by different learning management system by other universities. To generalize the findings, the researchers suggest conducting a replication study with larger sample size and analyze the competency of midwifery student who used the blended learning environment.

Originality

The paper details the blended learning experience, satisfaction, and self-efficacy in the midwifery education. It provides the insights into the importance of providing continuous education despite the effect of pandemic for the students to become a registered midwife as they develop theoretical knowledge and midwifery skills through blended learning.

Ethics approval

The Dr. Jose Fabella Memorial Hospital Research Ethics Committee reviewed the study protocol and issued a certificate of approval with document number: REC-2023-028.

Consent to participate

Consent was obtained from the participants at the start of the survey.

Acknowledgment

The researcher offers my deepest thanks to God for wisdom and knowledge during every step of this

operational research. In every breath of stillness and surge of motion, I feel the hand of God guiding me. Let this work be a mirror of the faith that strengthens me to endure.

To my supportive family for their support. Thank you not only for believing in my dreams, but for loving me through them.

Dr. Al Joseph Molina, his steady presence and insightful mentorship have meant everything. Thank you for encouraging us to think critically, write with purpose, and never settle for less than excellence.

To Ms. Maria Ursulita R. Umali and the School of Midwifery, for their time and support. Their guidance and constructive critique brought clarity and depth to our academic approach.

Key Points

Question

How do midwifery students and instructors at Dr. Jose Fabella Memorial Hospital – School of Midwifery (DJFMH-SOM) perceive their experiences, satisfaction, and self-efficacy with blended learning in the context of the new normal?

Findings

In this mixed-method study involving midwifery students and instructors, both groups expressed satisfaction with the blended learning program. The instructors' experience played a significant role in this satisfaction. However, self-efficacy was notably higher among instructors than students, suggesting that satisfaction with the program does not necessarily lead to increased self-efficacy with midwifery students and instructors expressed satisfaction with the blended learning program, instructors' experience significantly contributes to this satisfaction. Nevertheless, self-efficacy was markedly higher among instructors than students, indicating that satisfaction with the program does not necessarily translate into increased self-efficacy for the students.

Meaning

These findings suggest that the first implementation of blended learning at DJFMH-SOM effectively introduced a positive learning environment and satisfied the participants, however, didn't necessarily increase students' confidence in their ability to perform midwifery skills, further studies on students' competencies in blended learning.

Financial support and sponsorship

This study was conducted as the part of the operational research in the hospital, with support from the School of Midwifery.

Conflicts of interest

There are no conflicts of interest.

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