



The Blended Learning Model During Work from Home and Its' Impact on Students' Satisfaction and Learning Achievement in the Pandemic Covid-19 Period

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Abstract.

The Covid 19 pandemic has caused many changes in various aspects of life, including education. This blended learning is the mixing of conventional (face-to-face) learning models with online learning. The study aimed to describe the blended learning model During Work From Home And Its' Impact On Students' Satisfaction And Learning Achievement In The Pandemic Covid-19 Period. A Cross-Sectional study approach was applied in this study. The samples were all students who took community nursing learning who selected using the purposive sampling technique. The researcher involved 121 students in this study. The data were collected using a questionnaire online via a google form. The results showed that most of the respondents were satisfied (60.3%), and their learning achievement was good (53.7%). Satisfied respondents will have good learning achievement as many as 44 respondents (60.3%). The p-value<0.05, which indicated that there is a relationship between satisfaction and learning achievement of respondents in community nursing learning. This study's results can provide input from the Ministry of Education and Culture, leaders of educational institutions, and teachers in making regulations and formulations for developing blended learning models, especially during the pandemic and in the Industrial Age 4.0.

Keyword: Blended Learning, Satisfaction, Learning Achievement



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INTRODUCTION

Currently, there is a COVID-19 pandemic that has spread in 215 countries, including Indonesia. This covid 19 pandemic affects almost every country. The massive spread of covid-19 in various countries has forced the world community to see that the world is

changing. Not only that, but they must also see how changes in the social, economic, political, legal, and educational fields are grieving during the crisis due to the spread of Covid-19 (1, 2)

Based on data obtained from UNESCO, currently, a total of 39 countries have implemented school closures. By far, China has the most number of students affected by the coronavirus, which is around 233 million students. While other countries, until March 13th, 61 countries in Asia, Africa, the Middle East, Europe, North America, and South America have imposed restrictions on learning activities at schools and universities, namely by learning online (3).

The impact of the Covid-19 virus spreading has forced all physical distancing policies to be carried out to minimize and prevent the spread of the Covid-19 virus. One of the efforts to prevent the spread of covid-19 in educational settings, the Ministry of Education and Culture, responded with the Work From Home / WFH policy and "Learning From Home/LFH" through online learning (4). New information and communication technologies (ICTs) provide educators and learners with an innovative learning environment to stimulate and enhance teaching and learning. In this context, educational concepts such as blended learning suggested that Blended Learning, a mixed learning pattern, consists of two main elements: classroom learning and online learning (5-7). Learning online is carried out through various applications that can support the learning process, starting from face-to-face applications such as zoom, google meet, and other online media platforms such as google classroom, WhatsApp group, youtube(8). It suggested that blended learning can attract students' attention, so they don't feel bored and lose focus on their studying subjects. For many researchers, it is almost certain that blended learning will be the new traditional model for course delivery in higher education(9).

Barriers and challenges faced by the college when implementing blended learning include adaptation from traditional to web-based (10). The results of the preliminary study on March 20th, 2020, on ten semester VI STIKes Bina Sehat PPNI Mojokerto students who took part in the blended learning of community nursing learning found that 40% of students were not satisfied with the ongoing learning for a reason: 30% of the internet network in the student residence was not smooth, 30% of students are not familiar with using applications offered by lecturers, 30% of communication tools used by students do not support the applications provided by lecturers, 40% feel unclear in understanding the material from lecturers, 50% say they prefer lectures by face to face only. This data shows that some students feel dissatisfied with blended learning and do not clearly understand the lecturers' material.

Satisfaction is the level of a person's feelings after comparing the performance/results he feels with his expectations. Satisfaction indicators include tangibles, reliability, responsiveness, assurance (11). A previous study stated that psychological factors (disappointment, dislike) are factors that affect learning achievement (12).

Satisfaction can affect learning achievement. mention that Blended learning has been growing in popularity as it has proved to be a practical approach for accommodating an increasingly diverse student (13-14). The previous research showed a strong relationship between perception and learning achievement (15). High achieving students are the most satisfied with blended learning, and prefer blended learning over face-to-face or online. High achievers also felt that blended learning was more comfortable, more attractive and felt learning concepts were better than face-to-face learning. Another study also stated that students are more satisfied with learning using blended learning (e-learning as face-to-face / classic complement) compared to learning using complete e-learning and only face-to-face in class without e-learning significant in a $p < 0.05$ (16).

Studies on blended learning in Saudi Arabia reveal that Saudi universities' obstacles and challenges when implementing blended learning include the adaptation of a learning culture from traditional to web and time-based. An in-depth understanding of the challenges of implementing blended learning must be explored(10). One of the main factors that are considered in carrying out blended learning subjects is the consideration of the 'suitability of each learning media and method. Thus, the face-to-face learning can develop discussion skills in the classroom, while the electronic component considering critical thinking skills(17). Based on the remediation above, research is interested in researching " The Blended Learning Model During Work From Home And Its' Impact On Students' Satisfaction And Learning Achievement In The Pandemic Covid-19 Period".

OBJECTIVE

This study's main objective is to analyze the relationship between learning satisfaction and student learning achievement when participating in the blended learning model.

METHOD

The research design used correlation analysis with the cross-sectional approach. The population used in this study were all undergraduate nursing study program students for the 4th semester of the 2019/2020 academic year. The study population was all students who took community nursing courses. The samples were partially students who took community nursing learning who selected using the purposive sampling technique. In this study, the inclusion criteria were undergraduate nursing students for the 4th semester who were actively registered in the academic section, willing to become research respondents. Meanwhile, the exclusion criteria are that the student attendance rate in lectures is less than 75%. The researcher involved 121 students in this study.

In this study, the independent variable is satisfaction, and the dependent variable is student learning achievement. The data collection instrument used a satisfaction and learning achievement questionnaire filled in online via a google form. The satisfaction instrument consists of 25 questions developed from indicators of tangibles, reliability, responsiveness, assurance, and empathy. The instrument uses a positive statement with Likert scale answer choices: strongly agree (score 5), agree (score 4), doubt (score 3), disagree (score 2), and strongly disagree (score 1). The measurement of the satisfaction level is categorized as: high satisfied (value 76-100%), satisfied (value 56-75%), and low satisfied (value <56%). The instrument pilot project was given to 10 students. All questions were valid (r count lowest 0.692 to the highest of 0.920 > r table 0.632). Reliability test results showed that the results of Cronbach's Alpha 0.850 were supposed to be reliable because the Cronbach's Alpha calculated value was more significant than 0.7. To measure learning achievement using the results of community nursing lecture assessments with the criteria A: perfect (value 80-100), B: good (value 70-79), C: sufficient, score 60-69), D: poor (score 50-59), and E: very less (value <50).

Data processing includes univariate analysis with percentages and bivariate analysis using the Spearman Rho test. Bivariate analysis was conducted to analyze the relationship between satisfaction regarding applying the Blended Learning model with learning achievement. Statistical test using the Spearman Rho. If the value of $P_v < \alpha$ (0.05), then there is a "Relationship Between Satisfaction And Learning Achievement In The Pandemic Covid-19 Period". Researchers use the principles of analysis during the research, including anonymity, confidentiality, informed consent, and justice. The study was approved by the research and has conducted ethical tests. It passed the ethical test and obtained a research permit from the Institute of Health Science Bina Sehat PPNI Mojokerto.

RESULTS

Characteristics of Respondent

Table 1 found that most of the respondents were 21-25 years old (98.3%) with female gender (85.1%). Most of the respondents did not work (92.6%) and studied from their desire (82.6%). Almost one hundred percent of them received good parental support (99.2%), supporting facilities (86%), sufficient funds (87.6%), and origin from Java Island (95.9%).

Table 1. Characteristics of Respondent in Learning During WFH Pandemic Covid-19 (N=121)

Characteristics of respondents	n = 121	
	Frequency	Percentage
Age:		
16-20 years	2	1.7
21-25 years	119	98.3
Gender:		
Female	103	85.1
Male	18	14.9
Profession:		
Does not work	112	92.6
Works	9	7.4
Reason for Studying:		
Parents' wishes	21	17.4
Own desire	100	82.6
Parental support:		
Not good	1	0.8
Good	120	99.2
Learning Facilities:		
Less support	17	14
Supports	104	86
Availability of Funds:		
Less	15	12.4
Sufficient	106	87.6
Origin:		
Outside Java	5	4.1
Java	116	95.9
Total	121	100

Level of Satisfaction in Learning During WFH Pandemic Covid-19 (N=121)

Table 2 showed the level of students' satisfaction during the WFH period. The findings found that most of the respondents were satisfied with the learning process during WFH (60.3%). About 12% of them have low satisfaction, and almost 30% were high satisfaction (29.8%).

Table 2 Level of Satisfaction in Learning During WFH Pandemic Covid-19 (N=121)

Satisfaction	Frequency	Percentage
Low satisfied	12	9.9
Satisfied	73	60.3
High satisfied	36	29.8
Total	121	100

Learning Achievement of studenty in Learning During WFH Pandemic Covid-19 (N=121)

Table 3 found that most of the respondents' learning achievement in community nursing learning in WFH Pandemic Covid-19 Learning was good (B) as many as 65 respondents (53.7%).

Table 3 Learning Achievement in Learning During WFH Pandemic Covid-19 (N=121)

Learning Achievement	Frekuensi	Presents
E (very lacking)	3	2.5
D (not good)	6	5.0
C (enough)	8	6.6
B (good)	65	53.7
A (very good)	39	32.2
Jumlah	121	100

Relationship between Satisfaction and Respondents' Learning Achievement in Learning during the WFH Covid 19

Table 4 found that 60.3% of respondents who satisfied with learning system have good learning achievement. The p-value was 0.000 which was indicated that there was relationship between satisfaction and learning achievement of respondents in learning during WFH Covid 19. The level of closeness of the relationship is 0.326 means that it has a moderate relationship

Table 4. Relationship between Satisfaction and Respondents' Learning Achievement in Learning during the WFH Covid 19 (N=121)

Satisfac tion	Learning Achievement										Total f	p- value	Coef Cor	
	very lacking		not good		enough		good		very good					
	f	%	f	%	f	%	F	%	f	%				
Low satisfied	3	25	6	50	0	0	2	16.7	1	8.3	12	100	0.00	0.326
Satisfied	0	0	0	0	6	8.2	44	60.3	23	31.5	73	100		
High satisfied	0	0	0	0	2	5.6	19	52.8	15	41.7	36	100		
Total	3	2.5	6	5.0	8	6.6	65	53.7	39	32.2	121	100		

DISCUSSION

The Covid 19 pandemic has caused many changes in various aspects of life, including education. The impact of the Covid-19 virus spreading has forced all physical distancing policies to be carried out to minimize and prevent the spread of the Covid-19 virus. This urges lecturers to respond quickly in developing learning models during a pandemic. Blended learning is a concept of mixing conventional learning models with virtual learning with online learning. (6,18). According to Mona M. Hamad (2015), blended learning is every time students can learn because blended learning is partly face-to-face learning and partly with the internet's help(19).

Barriers and challenges faced by tertiary institutions when implementing blended learning include adaptation from traditional to web-based. Satisfaction is the level of a person's feelings after comparing the performance/results he feels with his expectations (11).

A previous study confirmed that psychological factors (disappointment, dislike) are factors that affect learning achievement (12).

Based on table 2, it was found that most of the respondents' Satisfaction in WFH Pandemic Covid-19 Learning as many as 73 respondents (60.3%). Satisfaction indicators include tangibles, reliability, responsiveness, assurance (11). Direct evidence (tangibles), in this case, according to the results of the study in table 1, shows 104 students (86%) feel that physical facilities are adequate and support blended learning. Reliability is following expectations which means punctuality, the same service for all students, and a sympathetic attitude. Responsiveness, which is shown by the lecturer's ability to provide clear explanations and information to students, as well as providing fast and precise service to students if there are questions or complaints. Assurance (assurance) covers the knowledge, abilities, politeness, and trustworthiness possessed by lecturers. Empathy is shown by good communication between lecturers and students and the ability of lecturers to listen to and understand the complaints felt by students.

Another study also showed that students are more satisfied with learning using blended learning (e-learning as face-to-face / classic complement) compared to learning using complete e-learning and only face-to-face in class without e-learning. significant at a < 0.05 (16). The use of blended learning strategies is significantly better than face-to-face learning strategies in providing learning acquisition of statistical concepts and procedures(20).

Based on table 3, it was found that most of the respondents' learning achievement in community nursing learning in WFH Pandemic Covid-19 Learning was good as many as 65 respondents (53.7%). It was consistent with previous studies found that psychological factors are factors that affect learning achievement (8,12). suggests that blended learning can attract students' attention, so they don't feel bored and lose focus on their studying subjects. A literature review study states that the average blended learning research results also influence learning outcomes (21). A study was conducted to examine the effect of blended learning on reasoning and conceptual mastery (22). The results of the t-test for concept mastery obtained were $6.64 > t_{table} = 1.66$, indicating there is a difference. Simultaneously, for the advanced test, the Tuckey test shows $Q_{count} = 7.55 > Q_{table} = 2.85$, indicating that the mastery of the concept of students using blended learning is higher than conventional. Regarding reasoning, the t-test results show $t = 2.65 > t_{table} = 1.66$, indicating there is a difference. Whereas for the advanced test, the Tuckey test shows $Q_{count} = 3.19 > Q_{table} = 2.85$. It was noted that students' reasoning using blended learning is higher than conventional.

Based on table 4, it is found that satisfied respondents will have good learning achievement, namely as many as 44 respondents (60.3%). Thus, the more satisfied with learning, the better student achievement. The P-value 0.000 study means that there is a relationship between satisfaction and learning achievement of respondents in learning during WFH Covid 19. The level of closeness of the relationship is 0.326 means that it has a moderate relationship. Another study said that psychological factors (disappointment, dislike) are factors that affect learning achievement. Satisfaction can affect learning achievement (12). The research results showed a solid relationship between perception and achievement (15). High achieving students are the most satisfied with blended learning, and prefer blended learning over face-to-face or online. High achievers also felt that blended learning was more comfortable, more attractive and felt learning concepts were better than face-to-face learning.

CONCLUSION

Most of the respondents were satisfied with blended learning, and their learning achievement was good. Satisfied respondents will have good learning achievement. The more satisfied with Blended Learning learning, the better the student achievement. In this study, the

value is 0.000, meaning a relationship between satisfaction and student achievement. The level of closeness of the relationship is 0.326 means that it has a moderate closeness.

RECOMMENDATION

Blended learning is recommended in educational institutions as a learning model during the Covid 19 pandemic and the 4.0 era. In academic institutions in a transition period from conventional to online learning, this blended learning should be carefully prepared, including a comprehensive orientation for students and lecturers, a training program for lecturers, and a curriculum with easy design use. Also, it is recommended to use feedback from students and lecturers through learning evaluations.

For future researchers, this study can be a reference for continuing research on predictors that affect the success of blended learning and the development of the blended learning method.

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