ORIGINAL ARTICLE

Evaluation of Blended Learning in Nursing Education at the Kurdistan Region in Iraq

MURTADHA YOUNES MOHAMMED[1], MOHAMMED F. KHALIFA[2]
[1]M.scN. Clinical Nurse Specialist, Ministry of Health and Environment, Baghdad Teaching Hospital, Iraq
[2]PhD. Professor, College of Nursing, University of Baghdad, Iraq
Correspondence to: Murtadha Younes Mohammed, Email : mortada.yonis1206b@conursing.uobaghdad.edu.iq

ABSTRACT
Objective(s): To evaluate blended learning in nursing education at the Kurdistan Region in Iraq.
Design: A descriptive study, using evaluation approach, is conducted to evaluate blended learning in nursing education in Iraq from September 26th, 2021 to March 22nd, 2022.The study is carried out at three Colleges of Nursing at the University of Duhok, University of Sulaymania and Hawler Medical University. A convenient, non-probability, sample of (90) undergraduate nursing students is selected. The sample is comprised of (30) student from each college of nursing, Self-report questionnaire is constructed from the literature, for evaluating the blended learning in nursing education at these colleges of nursing. The instrument consists of two parts which they include students' socio-demographic data and evaluation of blended learning in nursing education. A pilot study is conducted for the determination of the study instrument's content validity and internal consistency reliability.
Results: The findings indicate that Colleges of Nursing at the Kurdistan Region in Iraq have experienced fair performance of blended learning relative to its domains in nursing education.
Conclusion: It is discovered, in the present study, that the blended learning program
application is not influenced by learners' demographic characteristics of age, gender, grade, family monthly income and residency.
Recommendations: The study recommends that the implementation blended learning in nursing education should be seriously monitored for the benefits of the colleges of nursing, instructors and learners, supportive alternatives should be presented to both of the instructors and learners.
Keywords: Evaluation, Blended Learning, Nursing Education, Kurdistan Region, Iraq

INTRODUCTION

Instruction is no lengthier just about placing pen to paper and remembering truths. Today, innovative educators in both higher education and corporate learning and development are improving learning through technology, as evidenced by the rapid adoption of technology-assisted teaching methods and blended learning models (PO, 2019).

According to literature, (73) percent of teachers believe that blended learning improves engagement; (60) percent of teachers believe blended learning improves academic ability; (59) percent of students are more stimulated when using blended learning models; (82) percent of students have a desire to blended teaching to traditional teaching environments; and (30) percent to (79) percent of blended learning lessons are provided online. In blended learning models; students believe that interactive polls and quizzes are the most beneficial online tools (48) percent and prefer to use distinct social media channels for learning and personal life (60) percent (Pandurov, 2021).

Blended learning is significant because it halts down classic teaching walls that do not work for all learners, and we can now alter the learning skills for each student with access to modern technologies and resources. Blended learning also provides malleable schedule that can be tailored to each individual, allowing them to learn at their own pace (Giarla, 2021).

Blended learning has a positive impact on the learning process because it combines the two advantages of instructional models. According to some researchers, blended learning can improve students' learning outcomes, motivate students, and is an effective way to achieve learning objectives (Utami, 2018)

METHODOLOGY

A descriptive study, using evaluation approach, is conducted to evaluate blended learning in nursing education in Iraq from September 26th, 2021 to March 22nd, 2022. The study is carried out at three Colleges of Nursing at the University of Duhok, University of Sulaymania and Hawler Medical University. A convenient, non-probability, sample of (90) undergraduate nursing students is selected. The sample is comprised of (30) student from each college of nursing, Self-report questionnaire is constructed from the literature, for evaluating the blended learning in nursing education at these colleges of nursing. Formal ethical approval for the study is obtained from the Scientific Research Ethical Committee in the College of Nursing, University of Baghdad. All participants have signed a consent form for their agreement to participate in the study.

The instrument consists of two parts which they include students' socio-demographic data and evaluation of blended learning in nursing education. A pilot study is conducted for the determination of the study instrument's content validity through panel of (11) expert and internal consistency reliability.

Data are collected through the use of the developed self-report questionnaire from undergraduate nursing students out of early stated colleges of universities. Paperwork style is used as mean for data collection. The data are collected between the period of December 12th, 2021 to February 22nd, 2022.

Data are analyzed through the application of the following approaches:
1. Descriptive statistical data analysis approach:
Such approach is comprised of frequency, percentage, total scores, ranges, and mean of scores. The mean of scores is measured as low (<2), moderate (=2) and high (>2) for measuring student engagement and measuring learner satisfaction, it is measured as low (<1.5), moderate (=1.5) and high (>1.5) for measuring course outcomes and itis measured as low (<5.5), moderate (=5.5) and high (>5.5) for students' view on blended learning and its implementation process, ease of use for web environment, on-line environment, content, face to face sessions and assessment. These means of data analysis are utilized to describe the demographic characteristics of the sample and to evaluate blended learning.
2. Inferential statistical data analysis approach:
Such approach is comprised of principal component factor analysis and multiple linear regression. These statistical tests are used to evaluate the contribution of each domain of the blended learning in nursing education; to compare between these colleges relative to the regions of Iraq and to identify the relationship between the blended learning and learners' demographic characteristics.

RESULTS

Table 1: Students' Socio-demographic Characteristics at The Kurdistan Region

Region	Characteristics	Frequency	Percent
Kurdistan Region	1. Grade Second Year Third Year Fourth Year	30 30 30	33.3 33.3 33.4
	2. Gender Male Female	45 45	50 50
	3. Age 19-20 20-21 21-22	30 30 30	33.3 33.3 33.4
	4. Family Monthly Income < 300 thousand Iraqi Dinar 301- 600 thousand Iraqi Dinar 601-900 thousand Iraqi Dinar 901- > 1 million Iraqi Dinar 1,201,000 and 1,500,000 Iraqi Dinar > 1,501,000 Iraqi Dinar	2 19 33 15 16 5	2.2 21.1 36.7 16.7 17.8 5.6
	5. Residency Urban Rural	69 21	76.7 23.3

Results, out of this table, indicate that the students of the Kurdistan Region are equally distributed relative to their grade, gender and age for the purpose of their comparison. With respect to their family monthly income more than one third of them have monthly income of (601-900) thousand Iraqi dinar, and more than three quarters of them are coming of urban residency.

Table 2: Overall Evaluation of Blended Learning at The Kurdistan Region

Poor (120-427.3)	Fair (427.4-734.6)	Good (734.7-1042)
0 (0%)	67 (74.44%)	23 (25.55%)

Results, out of this table, present that the blended learning at the colleges of nursing in Kurdistan Region of Iraq is fair (74.44%).

Table 3: Relationship between Learners and Their Demographic Characteristics in Kurdistan Region

Model		Sum of Squares	Degree of freedom	Mean Square	F-statistics	Significance
1	Regression	71998.577	5	14399.715	1.638	0.159
	Residual	738423.023	84	8790.750		
	Total	810421.600	89			

a. Dependent Variable: blended learning
b. Predictors: (Constant), Electronic Devices and Internet Access Availability, Residency, Gender, Age, Income

The result, out of this table, confirms that there is no significant relationship between blended learning and learners' and demographic characteristics in Kurdistan Region.

DISCUSSION

Part I: Discussion of Learners' Demographic Characteristics: Analysis of such demographic characteristics depicts that the learners are equally distributed relative to their age, gender and grade. This is due to the nature of the sampling process which is necessary for attaining the study objectives.

This result comes from the same context as (Mehrdad et al., 2011), who used

learners' age, gender, and grade as a criterion to begin the evaluation process aims at achieving the study objectives.

Most of the learners are coming out of low-income families, except some who are coming out of middle income families in the Middle Region. The income status, in the present study, possibly inaccurate for the reason that Iraqi society people are conservative when they face a certain question about their income, although it is necessary to keep in mind that the majority of Iraqi people as any developing country, with low or moderate income.

As a result of the findings of a study conducted in Turkey, which revealed

that one-third of the learners come from low-income families and two-thirds come from middle-income families (Baskale & Sercekus, 2015).

The high percent of urbanized learners probably appears accepted, since the recent trends represented by the high turnout of learners towards registration in the colleges of nursing in Iraq.

In contrast to the findings of Ali and his colleagues (2020), who reported

that the majority of learners live in rural areas.

In terms of electronic devices and internet access availability, findings show that the

majority of learners do not have a valid printer device at home and do not have stable electric power.

This indicator is found in many countries, and research has found that most learners face difficulties with electronic devices and internet access when attempting to access online courses

(Liyanagunawardena et. al., 2013).

Part II: Discussion of Evaluation of Blended Learning in Nursing Education in Kurdistan Region: With regard to the evaluation of blended learning in nursing education in Kurdistan Region, nearly three quarters of the learners have experienced an apparent level of blended learning employment, while only a limited number of learners value the blended learning program, in nursing education, is effective educational mean.

The advantages of a blended learning environment include providing a safer learning environment, increasing learner engagement, flipping the classroom improves comprehension, learners have more autonomy over their learning, efficient use of instructor time, gathering learner data for better insights, and having access to and enrolling more learners (Weitzel, 2021).

Learners have a favorable impression of the university's blended learning courses. The disparity in perceptions among learners of different courses suggests that the blended learning format offered needs to be modified based on course content in order to improve its perception (Shantakumari, 2015).

The results of a case study revealed that the blended learning instructor executed instruction more effectively and used more effective methods of assessment than the face-to-face instruction teacher (Sejdiu, 2014).

Part III: Discussion of Relationship between Learners and their Demographic Characteristics of Blended Learning in Kurdistan Region: Analysis of such relationship has depicted that all learners' demographic characteristics of age, gender, grade, residency, monthly income and electronic devices and internet access availability have no influence on the implementation of the blended learning program.

Unfortunately, there is no supportive evidence available in the literature to support to the finding of the relationship between learners and their demographic characteristics of blended learning in Kurdistan Region due to the study's originality.

CONCLUSION

It is discovered, in the present study, that the blended learning program application is not influenced by learners' demographic characteristics of age, gender, grade, family monthly income and residency.

Recommendations: The study recommends that the implementation blended learning in nursing education should be seriously monitored for the benefits of the colleges of nursing, instructors and learners, supportive alternatives should be presented to both of the instructors and learners.

REFERENCES

1. Pan Opto (PO). (2019). What is Blended Learning? Retrieved from: https://www.panopto.com/blog/what-is-blended-learning/
2. Pandurov, M. (2021). Exciting Blended Learning Statistics. Retrieved from: https://markinstyle.co.uk/blended-learning-statistics/

3. Giarla, L. (2021). The Benefits of Blended Learning. Retrieved from: https://www.teachthought.com/technology/the-benefits-of-blended-learning/
4. Utami, I. (2018). The Effect of Blended Learning Model on Senior High School Students' Achievement. Retrieved from: http://creativecommons.org/licenses/by/4.0/
5. Mehrdad, N., Zolfaghari, M., Bahrani, N., & Eybpoosh, S. (2011). Learning Outcomes in Two Different Teaching Approach in Nursing Education in Iran: e-learning versus Lecture. Acta medica Iranica, 49(5): 296–301. Retrieved from: https://pubmed.ncbi.nlm.nih.gov/21713747/
6. Başkale, H. & Serçekuş, P. (2015). Nursing as Career Choice: Perceptions of Turkish Nursing Students. Contemporary Nurse, 51(1): 5–15. Retrieved from: https://doi.org/10.1080/10376178.2015.1025469
7. Ali, K. A. G., Khalil, H. E. M., & El-Sharkawy, F. M. (2020). Impacts of Online Remote Education on the Learning Process among Nursing Students. Open Journal of Nursing, 10(9), 810-830. Retrieved from: https://www.scirp.org/journal/paperinformation.aspx?paperid=102859
8. Liyanagunawardena, T., Adams, A., Rassool, N., & Williams, S. (2013). Using Non-Personal Computers for eLearning: Sri Lankan Experience. Journal of Education and Training Studies, 1(2): 152–158. Retrieved from: https://eric.ed.gov/?id=EJ1054868
9. Weitzel, A. (2021). Advantages of Blended Learning Programs. Retrieved from: https://coursekey.com/blog/7-advantages-of-blended-learning-programs/
10. Shantakumari, N. (2015). Blended Learning: The Student Viewpoint. Annals of Medical and Health Sciences Research, 5(5). Retrieved from: DOI: 10.4103/2141-9248.165248
11. Sejdiu, S. (2014). English Language Teaching and Assessment in Blended Learning. Journal of Teaching and Learning with Technology, 3(2). Retrieved from: https://doi.org/10.14434/jotlt.v3n2.5043