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

تقويم التعلم المدمج في تعليم التمريض في المنطقة الوسطى في العراق

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المستخلص

الاهداف: هدفت الدراسة الى تقويم التعلم المدمج في تعليم التمريض في المنطقة الوسطى في العراق.

منهجية البحث: أجريت هذه الدراسة الوصفية لتقويم التعلم المدمج في تعليم التمريض في المنطقة الوسطى في العراق في الفترة من ٢٦ ايلول ٢٠٢١ ولغاية ١٥ كانون الاول ٢٠٢١، وتضمنت كليتين من كليات التمريض في الجامعات العراقية، وهي جامعة بغداد وجامعة تكريت. تم أختار عينة ملائمة وغير احتمالية متكونة من (٦٠) طالبا وطالبة، تكونت العينة من (٣٠) طالبا وطالبة من كل كلية تمريض.

استخدمت استبانة معدة من قبل الباحثين لجمع البيانات اعتماداً على الدراسات السابقة، وتتكون هذه الاستبانة من جزئيين، تضمن الجزء الاول المعلومات الديموغرافية للطالب، والجزء الثاني تقويم التعلم المدمج في تعليم التمريض. اجريت دراسة تجريبية مصغرة لتحديد صلاحية محتوى أداة الدراسة لتقييم مدى ثباتية ومصداقية هذه الاستبانة قبل استخدامها في جمع البيانات.

النتائج: بيّنت النتائج الى وجود فروقات بين كليات التمريض بمجالات تقويم التعلم المدمج في تعليم التمريض، والتي لا تتأثر بالخصائص الديموغرافية للطلاب والطالبات مثل العمر والجنس والمرحلة والدخل الشهري للعائلة والمنطقة السكنية.

الاستنتاج: استنتجت الدراسة إلى أن كليات التمريض في المنطقة الوسطى في العراق قد شهدت تنفيذا متوسطا للتعلم المدمج ذات الصلة بمؤشراته.

التوصيات: توصي الدراسة إلى إن تقويم التعلم المدمج في تعليم التمريض في المنطقة الوسطى في العراق بحاجة للمتابعة المكثفة والجادة بما فيه مصلحة الكليات والتدريسيين والطلبة. إضافة إلى إنه من المهم توفير الدعم والتسهيلات للتدريسيين والطلبة.

الكلمات المفتاحية: تقويم، التعلم المدمج، تعليم التمريض، المنطقة الوسطى، العراق

Abstract

Objective(s): To evaluate blended learning in nursing education at the Middle Region in Iraq.

Methodology: A descriptive study, using evaluation approach, is conducted to evaluate blended learning in nursing education in Middle Region in Iraq from September 26th, 2021 to March 22nd, 2022. The study is carried out at two Colleges of Nursing at the University of Baghdad and University of Tikrit in Iraq. A convenient, non-probability, sample of (60) undergraduate nursing students is selected. The sample is comprised of (30) students 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 Middle Region in Iraq have experienced fair performance of blended learning relative to its domains in nursing education. Blended learning had not correlated with students' sociodemographic characteristics such as age, gender, college stage, and the family monthly income and residency.

Conclusion: 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.

Key Words: Evaluation, blended learning, nursing education, middle region, Iraq

Introduction

Blended learning (sometimes referred to as hybrid learning) is a type of instruction that blends technology and digital media with traditional teacher-led classroom activities to give students greater influence over their learning [1].

Students learn in a variety of ways through blended learning. Teachers report increased engagement and motivation. Blended learning's success is demonstrated by high examination scores. Additionally, the majority of students prefer a hybrid approach than a standard approach. Parents typically concur and anticipate that colleges would increase online information available to their children as they develop skills such as self-management, goal setting, and self-pacing in addition to mastering course material [2].

Learners can experiment with technology and study using a range of tools and approaches, such as PowerPoint, virtual classrooms, and video lectures, through blended learning. Blended learning enhances the value of education and information interaction while also boosting teaching efficiency and effectiveness [3].

The Clinical Teaching Blended Learning program provides an in-depth examination of clinical teaching methodology and evaluation methodologies. Through the combination of the world challenges program and the case-based approach, a range of learning styles are available to satisfy the diverse learning requirements of preceptors. The clinical teaching blended learning program enables preceptors to obtain direct feedback from facilitators during face-to-face sessions. Additionally, preceptors commented on the practicability of the web-based task. This study demonstrates that a blended learning program for clinical teaching enhances preceptors' clinical teaching competencies and self-efficacy while also fostering positive attitudes toward web-based learning and resulting in improved blended learning outcomes [4].

Methodology

Between September 26th, 2021 and March 22nd, 2022, a descriptive study employing an evaluation approach is done to evaluate blended learning in nursing education in Iraq. The study is being conducted at two nursing colleges at Iraq's University of Baghdad and University of Tikrit. The sample is composed of a convenient, non-probability sample of (60) undergraduate nursing students. The sample consists of thirty (30) students from each nursing college. A self-report questionnaire was developed from the literature to assess the use of blended learning in nursing education at these nursing colleges. The study has received formal ethical approval from the Scientific Research Ethical Committee of the University of Baghdad's College of Nursing. Each participant signed a permission form indicating their willingness to participate in the study.

The test is divided into two sections that provide sociodemographic information about the students and an evaluation of blended learning in nursing education. Pilot study is undertaken to determine the content validity of the study instrument using an expert panel and internal consistency reliability.

The data are gathered using a self-report questionnaire prepared for undergraduate nursing students from early indicated institutions and universities. The paperwork style is employed to collect data. The data collection period is between December 12th, 2021 and February 22nd, 2022.

The following approaches are used to analyze data:

1. Analysis of descriptive statistical data

This method employs frequency, percentage, total scores, ranges, and mean scores. The mean of scores is low (<2), moderate (=2), and high (>2) for assessing student engagement and learner satisfaction; it is low (<1.5), moderate (=1.5), and high (>1.5) for assessing course outcomes; and it is low (<5.5), moderate (=5.5), and high (>5.5) for assessing students' perceptions of blended learning and its implementation process, as well as their ease of use of the web environment, online environment, content, face-to-face sessions, and assessment. These data analysis techniques are used to describe the sample's demographic features and to evaluate blended learning.

2. A technique to inferential statistical data analysis

That incorporates principal component factor analysis and multiple linear regressions. These statistical tests are used to determine the contribution of each area of blended learning to nursing education; to compare these institutions to the regions of Iraq; and to determine the relationship between blended learning and the demographic features of learners.

Results

Table (1): Students' Socio-demographic Characteristics at the Middle Region

Region	Characteristics	Frequency	Percent
Middle Region	1. **Grade**		
	Second Year	20	33.3
	Third Year	20	33.3
	Fourth Year	20	33.4
	2. **Gender**		
	Male	30	50
	Female	30	50
	3. **Age**		
	19-20	20	33.3
	20-21	20	33.3
	21-22	20	33.4
	4. **Family Monthly Income**		
	< 300 thousand Iraqi Dinar	0	0
	301- 600 thousand Iraqi Dinar	6	10
	601-900 thousand Iraqi Dinar	18	30
	901- > 1,200,000 Iraqi Dinar	21	35
	1,201,000 and 1,500,000 Iraqi Dinar	13	21.7
	> 1,501,000 Iraqi Dinar	2	3.3
	5. **Residency**		
	Urban	55	91.7
	Rural	5	8.3

The contents of this table show that the students of the Middle 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 (901- > 1,200,000) thousand Iraqi dinar, and the vast majority of them are coming of urban residency.

Table (2): Overall Evaluation of Blended Learning at the Middle Region

Poor (120-427.33)	Fair (427.34-734.66)	Good (734.67-1042)
0 (0%)	41 (68.34%)	19 (31.66%)

The contents of this table demonstration that the blended learning at the colleges of nursing in the Middle Region of Iraq is fair (68.34%).

Table (3): Relationship between Learners and their Demographic Characteristics in Middle Region

Model	Sum of Squares	Degree of freedom	Mean Square	F-statistics	Significance
Regression	15515.949	5	3103.190	1.739	0.142
Residual	96383.034	54	1784.871		
Total	111898.983	59			

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

The outcome, out of this table, confirms that there is no important relationship between blended learning and learners' and demographic characteristics in the Middle Region.

Discussion

Part I: Discussion of Learners' Demographic Characteristics

According to such demographic parameters, learners are evenly dispersed by age, gender, and grade. This is due to the sampling process's nature, which is necessary to accomplish the study's objectives. This result comes from the same setting as in Iranian study, who began the evaluation process by using the learners' age, gender, and grade as a criterion [5].

The majority of learners are from low-income families, with the exception of a few from middle-income families in the Middle Region. The income status in this study may be misleading because Iraqi society is conservative when confronted with a question about their income, yet it is vital to remember that the majority of Iraqi citizens, like those in any developing country, live on a low or moderate income.

As a consequence of the findings of a survey done in Turkey, which found that one-third of learners come from low-income

households and two-thirds from middle-income households [6].

The high percentage of urbanized learners appears to be accepted, given recent patterns in the strong turnout of learners seeking registration in Iraq's nursing colleges.

In comparison, the majority of learners are believed to live in rural areas [7].

In terms of technological gadgets and internet connection, studies indicate that the majority of students do not have a working printer at home and do not have access to steady electricity.

This sign is present in a number of nations, and research indicates that the majority of learners have challenges when seeking to attend online courses via electronic devices and internet connection[8].

Part II: Discussion of Evaluation of Blended Learning in Nursing Education in Middle Region

According to a study of blended education in nursing teaching in the Middle Region, more than two-thirds of learners exhibit some difficulty and less than a third demonstrate a strong interest in blended education in nursing teaching.

The benefits of a blended education environment include providing a more secure education, increasing learner participation, understanding is improved by flipping the seminar room, learners having control over their education, lecturer time is better used, and learner data is gathered for better insights, and having access to and enrolling a larger pool of learners [9].

The university's blended learning courses have a favorable reputation among students. The variance in perceptions among learners enrolled in different courses shows that the blended learning format should be tailored to the course content in order to improve its perceived value [10].

A case study discovered that the blended learning instructor delivered training more effectively and assessed students more successfully than the face-to-face instruction teacher [11].

Part III: Discussion of Relationship between Learners and Their Demographic Characteristics of Blended Learning in Middle Region

The research of this relationship found that none of the learners' demographic characteristics, such as their age, gender, grade, residency, monthly income, and availability of electronic devices and internet access, have any influence on how the blended learning program is implemented.

Unfortunately, due to the study's unique nature, there is no evidence in the literature to support the identification of a relationship between learners and their demographic characteristics in blended learning in Iraq.

Conclusion

Blended learning at the colleges of nursing in the Middle Region of Iraq is fair. The current study demonstrates that the application of blended learning programs is unaffected by learners' demographic variables such as age, gender, grade, family monthly income, and domicile.

Recommendations

The study proposes that blended learning implementation in nursing teaching need to be closely observed for the advantage of nursing colleges, instructors, and learners, and that helpful alternatives be offered to both instructors and learners.

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