

# Perception of Nursing Students Regarding Blended Learning Implementation at University of Lahore, Pakistan

Muhammad Afzal<sup>1\*</sup>, Dr. Tazeen Saeed Ali<sup>2</sup>, Dr. Syed Amir Gilani<sup>1</sup>

<sup>1</sup>The University of Lahore, 1- Km Raiwind Rd, Sultan Town, Lahore, Punjab, Pakistan

<sup>2</sup>The Aga Khan University, National Stadium Rd, Aga Khan University Hospital, Karachi, Karachi City, Sindh 74800, Pakistan

DOI:10.21276/sjnhc.2019.2.8.1

| Received: 20.06.2019 | Accepted: 22.07.2019 | Published: 16.08.2019

\*Corresponding author: Muhammad Afzal

## Abstract

**Background and objectives:** Blended learning (BL) is positive development in education. This method provoke the learner's critical thinking and given different ways for implementation of their knowledge in real life. There are several advantages of blended learning to the faculty, students and institutions as well. **Methods:** The Cross-sectional study design was used to collect data from nursing students. The study was carried out at Lahore School of Nursing, The University of Lahore, Pakistan. All nursing undergraduates students enrolled at elective practicum blended learning course at Lahore School of Nursing, The University of Lahore, Pakistan academic year 2016-2017 were included in the study. The tool was adopted from Roca *et al.*, 2006 and Song 2010 study. **Results:** About 65% of students showed positive response towards the information quality of course, student's usability of elective course, satisfaction with course and perceived usefulness of elective practicum blended learning course. **Conclusions and Recommendation:** Students had well believes about elective practicum blended learning course. Moreover, enrolled students agree with the statements of usability of blended course and overall showed satisfaction with elective practicum blended learning course. Blended learning significantly improve the learning of the students and provides the space for better skills in the clinical setting simultaneously. Institutions, policy makers and regulatory bodies should incorporate this strategy in the nursing curriculum in Pakistan.

**Keywords:** Blended learning, Elective practicum, Perception, Nursing students.

**Copyright © 2019:** This is an open-access article distributed under the terms of the Creative Commons Attribution license which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use (NonCommercial, or CC-BY-NC) provided the original author and source are credited.

## INTRODUCTION

Development of information and internet technologies has been increased throughout the world. A large no of communication applications web-based technologies are being started in different universities worldwide. In universities instructing methods are substituted by electronic learning [1]. E-learning can be simply elaborated as learning with the help of information and communication technology (ICT). In order to improve the standards of teaching and learning the different resources like extranets, intranets, internet is used.

To Increase opportunities for lifelong learning E-learning is incorporated which is actually cost effective and convenient for all students. E-learning has several advantages over traditional learning by allowing to learn at anyplace and anytime [2].

It also certifies students to redirect the learning materials and their retorts. It permits to work at their own leap without any preferences regarding sex, race,

appearance or disability. In university education different stimulus can effect students' understanding and interpretation of e-learning. These stimulus includes age, gender, and experience of using computers, technology acceptance and personal learning styles [3].

According to a study conducted by Saade, Nebebe and Tan [4] it was concluded that the use of technology depends upon the benefits people gain from the technology. The more the benefits are the more the use technology will be used [5].

In current frame of time the university ICT may be depriving their students from opportunities for advance learning and developing their skills for the future. A wide range of learning experiences can be seen in students of higher education. These experiences ranged from traditional lectures and seminars to online lectures. It also varies from lecture notes from formal lectures to interactive sessions containing innovative use of ICT. It all leads to development of a wide range

of new and innovative ideas based on technology. Although it is seen that there is a combination of traditional lectures with web-based content. This trend used in different organization is blended learning [6].

The blended learning is combination of both online learning and traditional face-to-face instructional time [2]. It is replacing both other types of learning day by day. Students, faculty and organizations all get different rewards from blended learning. Students appear to get more satisfied regarding blended learning because it helps them to gain higher grades than those of fully lectures or fully online classes. Faculty gets benefits by increasing flexibility in their schedules for teaching. In term of institutional benefits see it is seen as a model that makes efficient use of classroom [1].

Students perceive that blended learning help them to cooperate with their fellows in the class. It also helps them to develop a close relationship with each other. It will help the students to promote relationships with community other than classroom fellows. In order to explain the gain of assurance it is stated that it is accompanied by implementing gained knowledge into practice. Blended learning courses enables students develop a link between e- learning and lectures to gain knowledge and response from multiple sources. It also help them to understand the subject matter of the course [7].

The important factors like students' understanding related to learning, their ability to accept responsibility for their learning, and the degree of interpersonal relationships outside of the classroom influence the blended learning. With the help of interactive technologies students are motivated to increase their learning efficiency. A deeper approach can be used for learning by using blended learning. Promotion of development of communication skills are also aided by blended learning. It helps to improve the students understanding related to their course content [8].

Health Information Technology (HIT) is most leading communication process in all areas of nursing practice. By the 1970s collaborative nursing care was established and nurses in combination with multidisciplinary team members deliver multidimensional care. The multidisciplinary team also helped in the desiging and application of HIT system within different health care settings [9].

After this era nurses are being guided in developing Nursing Informatics (NI) into a well-established specialty. Information technology can helps to promote the delivery of materials regarding courses, it helps to improve access of students and faculty, aids in course management, helps to excel in learning outcomes. It is also can cost effective by using information technology [10].

A large number of applications in context to nursing education are established. These application include online scholarly, E-learning, simulations, blogs, and research journals. These application help in improvement of nursing education [7]. Clinical simulation and e-learning can be excelled by institutions influence and availability of resources. Nursing and health care can be influenced by utilizing informing health information technology at clinical care settings. Because it helps in interconnecting clinicians, focusing on personalized care and improving population health. All these above mentioned goals are considered to be top priorities in nursing improvement. The importance of traditional teaching methods is undermined due to rapid spurt of the world technology [8].

Online learning is developing a sense capability and confidence in faculty members. Online learning is a leading causes of national calls for all students to attain informatics competencies [8]. The rapidly growing enrolment rate that started in the 1970s and 1980s, which lead to a large number of students per class led to decline of the higher education quality in Pakistan

#### **Aim of the Study**

- To assess the perception of nursing students regarding blended learning implementation at Private Sector University

#### **Research Question**

- What is the perception of the nursing students' elective practicum course regarding blended learning implementation at Lahore School of Nursing, The University of Lahore, Pakistan?

## **MATERIALS AND METHOD**

#### **Study Design**

The Cross-sectional study design was used to collect data from nursing students.

#### **Study Setting**

The study was carried out at Lahore School of Nursing, The University of Lahore, Pakistan.

#### **Study Subjects**

All 198 undergraduates nursing students enrolled at elective practicum course at Lahore School of Nursing, The University of Lahore, Pakistan academic year 2016-2017 were included in the study.

#### **Tools of the Study**

The tool used in the study was adopted. It has two parts the first part consisted of socio-demographic of students. Second part of the tool included question related to perceptions of student regarding blended learning method.

The scale was extracted from Roca *et al.*, [11] and Song [12] study. Five point Likert scale was used. Scale consisted of question related to different portions including perceived quality, perceived usefulness, student satisfaction, and student loyalty. The reliability of each of these measures was calculated as Cronbach's was 0.831.

**Ethical Considerations**

- All the participants were autonomous for participation in the study.
- A consent was signed before data collection from each participants. Permission letter was taken from the Dean of Faculty of Allied health sciences, University of Lahore.
- Confidentiality of the students was secured by keeping the data in secret. All students were informed about the purpose this study.

**Data Collection**

The study was conducted at the beginning of first and second semesters of academic year 2016-2017. Questionnaires were distributed among all undergraduates students enrolled during first and second semesters. The collected data was categorized according to specifications.

**Statistical Analysis**

The data was analyzed by using SPSS (version 21). Tables for frequency and percentages were made.

**Results Interpretation**

**Table-1: Demographics of participants**

Demographic characteristics	Studied students No = 198	Percentage %
<b>Age in years</b>		
23	104	52.5
24	76	38.4
25	18	09.1
<b>Sex</b>		
Male	10	05.0
Female	188	95.0
<b>Marital Status</b>		
Married	194	98.0
Unmarried	04	02.0

The table shows that the majority of the students were in the age group of 23 years, i.e. 52.5%, while 38.4% of the students were in the age of 24 years. Moreover, 05.0% of the students was male and 95.0% students were female with majority marital status of married.

**Table-2: Students Perception regarding information quality of elective practicum blended learning course**

Variables	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Blended learning provide me with Correct information	87	66	2	25	18
Blended learning provide me with Good information (supporting the course goal)	68	70	5	26	29
Blended learning provide me with Timely information	90	65	3	20	20
Blended learning provide me with Relevant Information (enough for me to master course content)	80	62	9	26	21
Blended learning provide me with information was easy to understand	71	75	5	24	23
Blended learning provide me with The level of detail was right	68	60	6	30	34
Blended learning provide me with Appropriate information format	91	53	7	20	27
Blended learning provide me with Overall information quality	56	89	8	19	26

Table-2 showed frequency distribution of students according to their perception of information quality of elective practicum blended learning course. The Table reveals that students (87, 66, 2, 25, and 18) respectively indicated positive agreement that the blended learning of elective practicum course provided them with correct information, relevant information,

easy information to understand and appropriate information format. Students' perception about the overall information quality of elective practicum blended learning course more than one third of students (45) were neither disagree nor agree regarding information quality of the course.

**Table-3: Perception of student’s usability of elective practicum course**

Variables	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I search out a site help me easy to learn.	54	81	7	31	25
My collaboration with the site is clear and reasonable.	65	75	6	32	20
Easily accessible site is searched	90	65	3	20	20
I understood that site is easy to use.	80	62	9	26	21
An attractive site has been find out appearance.	45	96	6	17	34
The searched site has a fast speed in browsing.	68	60	6	30	34
The design of site is appropriate for the type of online learning.	63	69	8	28	30
The site provides a sense of competency.	77	56	7	29	29
The site gives me a positive experience	83	66	6	23	20
The overall usability of the site	75	65	6	20	32
I think the site easy to learn.	72	80	7	26	13

Table-3 depicts that more than half and more than one third of students disagree and strongly disagree regarding the usability of the blended learning course. Moreover, students’ perception about the overall

usability of blended learning course 75 students were strongly agree and 65 agree regarding usability of the course.

**Table-4: Perception of satisfaction of elective practicum blended learning course**

Variables	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
My experience with the E-learning course is best than I was expected	66	62	8	25	37
Blended learning is best than I was expected	80	52	9	32	25
Overall, most of my expectations with the E-learning were confirmed	74	68	7	28	21
Elective practicum blended learning course is the best than others.	65	63	6	25	39
I am generally satisfied with the quality of elective practicum blended learning.	85	50	6	26	31
I feel I am getting my money’s worth from the elective practicum blended learning	70	62	11	30	25
The quality of elective practicum blended learning course is excellent.	60	68	5	33	32
Overall, I am very satisfied with the elective practicum blended learning course	66	61	9	29	33
Generally I’m sure about the quality of elective practicum blended learning course	85	64	8	21	20
Overall blended learning satisfaction.	73	51	6	42	26

Above mentioned table shows students satisfaction with blended learning course. The Table shows that mostly students agree and strongly agree with the Statements of satisfaction relative to blended learning course. According to results as in above table,

students revealed that blended learning is best than they were expected, the quality of elective practicum blended learning course is excellent. Few of them were neither disagree nor agree regarding their overall elective practicum course satisfaction.

**Table-5: Perception of students regarding perceived usefulness of elective practicum blended learning course**

Variables Elective practicum blended learning course	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Develop a clearer idea of my future career plans	63	81	2	39	13
Develop my skills in expressing myself verbally and in writing.	79	51	7	33	28
Develop skills needed to get a better job	68	68	8	25	29
Improve the skills I need for my career	65	71	6	24	32
Strengthen my basic nursing skills.	58	70	10	38	22
Increase my overall knowledge of elective practicum course	85	50	6	26	31
Increase my overall knowledge of nursing education	74	68	7	28	21
Improve my learning performance	77	56	7	29	29
Can increase my learning effectiveness.	83	66	6	20	23
I find blended learning service to be useful to me.	68	60	6	30	34
<b>Overall perceived usefulness</b>	91	53	7	20	27

Students' perceptions regarding blended learning elective practicum is shown in table: 5. Results depict the idea that mostly students indicated their agreement about perceived usefulness blended learning course. About 75% of the students expressed their agreement about the overall perceived usefulness of elective practicum blended learning course.

## DISCUSSION

E-learning and mixed method learning appear to be the forthcoming pattern. Mixed method study have been spreading worldwide including Pakistani colleges and its resources. By and large, the present investigation proposed positive connection between everything factors identified with understudies impression of network wellbeing nursing mixed course including their accepts, saw ease of use, helpfulness, data quality, administration communication, course fulfillment, and course devotion [1].

Each of these variables is influenced by the nature of others variables. According to a study conducted by Owston *et al.*, [13] it was concluded that a solid relationship was found between understudies recognitions and course grades.

After studying a large number of studies it is concluded that of great importance in nursing. It is affecting all aspects of nursing and nursing education. It provides a feeling of individualization. A large no of nursing students has conflict regarding the availability of resources utilized for blended learning. The errors noticed are low web speed and unavailability of resources. Other problems noticed were web did not allow students to get advantage of e-learning courses which help in close and personal learning.

Poor understanding of ICT can also be a cause of poor use of blended and e learning among nursing students. Blended learning also helps in the clinical areas as it enables a nurse and patient to share data about health at online webpage. Only they have to do log in with id and passwords. This outcome is related to the study of as it uncovered that a higher number of understudies concur with all value and convenience explanations [14].

The results different articles suggested that acceptance of mixed network wellbeing in nursing has dual suggestions. Nurses have different conflicts related to announcements of webpages. The contradictions may leads to unsupportive mixed method learning. However it might be supported because it a type of the mixed learning which help the student faculty and organization in development of cost and time effective studies.

The study finding are supported by the consequences of Elga-mal and Abd El-Aziz [15] during their examination they evaluated the view of understudies regarding e-learning execution in Egyptian

colleges. It was detailed that understudies' believed that the e-learning lead them away from traditional learning which leads them to uncertainty of use e-learning. However in another study conducted by Brook I and Beauchamp [16] it was stated that with the evidence of recent studies it was found that use blended learning method or mixed method study would leads the nursing student to development of professional skills, and excellence in education. These both results are contradicted are due to social contrasts participants of each investigation. However in conclusion it is said mixed courses have preference over conventional lectures.

The present examination uncovered the contradiction of the contemplated understudies about certain announcements obviously fulfillment, which ascribed to poor educator collaboration with them as they revealed. This outcome might be identified with poor educators' involvement in instruction with E-courses, and inadequate in-administration preparing for them about how to oversee mixed learning. This outcome is concurrence with the outcomes in an examination by Svanum and Aigner [17], who found that understudies who were spurred and put their exertion in the course were bound to suc-ceed and to express higher fulfillment with the course.

Other investigations found that effective understudies are bound to trait their fulfillment with the course to the sum and nature of staff's connection and bolster they get during the course. Also, Lo [18] found that understudies in the mixed courses who were persuaded and delighted with the educator's help and course approaches would in general see their learning results higher. Therefore, it is so critical to assess understudies' observation toward any implemented mixed adapting course including elective practicum course to complete a revision activity plan if necessary to enable understudies to get profit by it however much as could reasonably be expected.

## CONCLUSION AND RECOMMENDATION

It very well may be reasoned that albeit contemplated understudies had great convictions about elective practicum course mixed course, around 33% of them not concur about some of articulations of its ease of use and usefulness, dependability, administration collaboration and educator connection which ascribed for the most part to the low perusing velocity of the online website.

Workforce educator and the mindful individual in ICT unit in the college need to do incredible endeavors to assist understudies with using and get advantage of elective practicum course mixed course. Specialized endeavors from E-learning focus in the college are expected to expand perusing velocity of the online webpage. Educator's learning and order on data innovation aptitudes and discernments towards e-

learning ought to be gotten to preceding execute any new showing apparatuses of data technology.

## REFERENCES

1. McCutcheon, K., Lohan, M., Traynor, M., & Martin, D. (2015). A systematic review evaluating the impact of online or blended learning vs. face-to-face learning of clinical skills in undergraduate nurse education. *Journal of advanced nursing*, 71(2), 255-270.
2. Sung, Y. H., Kwon, I. G., & Ryu, E. (2008). Blended learning on medication administration for new nurses: integration of e-learning and face-to-face instruction in the classroom. *Nurse education today*, 28(8), 943-952.
3. Smyth, S., Houghton, C., Cooney, A., & Casey, D. (2012). Students' experiences of blended learning across a range of postgraduate programmes. *Nurse education today*, 32(4), 464-468.
4. Saade, R., Nebebe, F., & Tan, W. (2007). Viability of the "technology acceptance model" in multimedia learning environments: a comparative study. *Interdisciplinary Journal of E-Learning and Learning Objects*, 3(1), 175-184.
5. Jokinen, P., & Mikkonen, I. (2013). Teachers' experiences of teaching in a blended learning environment. *Nurse education in practice*, 13(6), 524-528.
6. Hsu, L. L. (2011). Blended learning in ethics education: A survey of nursing students. *Nursing ethics*, 18(3), 418-430.
7. Liu, Q., Peng, W., Zhang, F., Hu, R., Li, Y., & Yan, W. (2016). The effectiveness of blended learning in health professions: systematic review and meta-analysis. *Journal of medical Internetresearch*, 18(1), e2.
8. Attack, L., & Rankin, J. (2002). A descriptive study of registered nurses' experiences with web-based learning. *Journal of Advanced Nursing*, 40(4), 457-465.
9. Rizvi, N. F., Gulzar, S., Nicholas, W., & Nkoroi, B. (2017). Barriers in adopting blended learning in a private university of Pakistan and East Africa: faculty members' perspective. *Mhealth*, 3.
10. Glogowska, M., Young, P., Lockyer, L., & Moule, P. (2011). How 'blended' is blended learning?: Students' perceptions of issues around the integration of online and face-to-face learning in a continuing professional development (CPD) health care context. *Nurse education today*, 31(8), 887-891.
11. Roca, J. C., Chiu, C. M., & Martínez, F. J. (2006). Understanding e-learning continuance intention: An extension of the Technology Acceptance Model. *International Journal of human-computer studies*, 64(8), 683-696.
12. Song, C., Qu, Z., Blumm, N., & Barabási, A. L. (2010). Limits of predictability in human mobility. *Science*, 327(5968), 1018-1021.
13. Owston, R., York, D., & Murtha, S. (2013). Student perceptions and achievement in a university blended learning strategic initiative. *The Internet and Higher Education*, 18, 38-46.
14. Tagoe, M. (2012). Students' perceptions on incorporating e-learning into teaching and learning at the University of Ghana. *International Journal of Education and Development using ICT*, 8(1), 91-103.
15. Abdel-Kader, M. S., Tamam, A. A., Elderwy, A. A., Gad, M., El-Gamal, M. A., Kurkar, A., & Safwat, A. S. (2013). Management of symptomatic ureteral calculi during pregnancy: Experience of 23 cases. *Urology annals*, 5(4), 241.
16. Brook, I., & Beauchamp, G. (2015). A study of final Year Education Studies Undergraduate Students' Perceptions of Blended Learning within a Higher Education course.
17. Svanum, S., & Aigner, C. (2011). The influences of course effort, mastery and performance goals, grade expectancies, and earned course grades on student ratings of course satisfaction. *British Journal of Educational Psychology*, 81(4), 667-679.
18. Cummings, G. G., MacGregor, T., Davey, M., Lee, H., Wong, C. A., Lo, E., & Stafford, E. (2010). Leadership styles and outcome patterns for the nursing workforce and work environment: a systematic review. *International journal of nursing studies*, 47(3), 363-385.