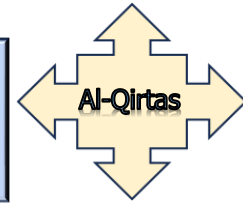


University Students' Perception on Blended Learning



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Abstract

A mixed strategy that minimizes drawbacks, both in-person and virtual learning settings, and combines their benefits is known as blended learning. A portion of the course is completed in a classroom setting under the guidance of an instructor in blended learning, and the remaining portion can be undertaken by the student independently, at their convenience and location, using electronic, online, or alternative methods like learning management systems. This research aims to investigate students' experiences with blended learning in higher education across the university. A causal-comparative research design was used to find out the university student's perception on blended learning. All the university students of district Lahore were taken as the population of the current research. A sample of 200 university students was selected using a convenient sampling technique. A standardized questionnaire was used for this research. Data was obtained through the distribution of a questionnaire among the respondents. Descriptive (mean, frequency) and inferential (t-test) statistical analysis techniques were used to analyze the data. The research findings indicate a statistically significant difference in students' perceptions of blended learning between public and private sector universities. This study suggested that universities must try to improve the quality of internet service because technological infrastructure is crucial for fostering positive blended learning experiences among university students.

Keywords: Blended learning, university students, students experience

Introduction

In Turkish literature, the terms "hybrid learning" or "blended learning," commonly used in international literature to describe "mixed mode instruction," are translated similarly. When the foundation known as Interactive Learning Centres was established in 1999, blended learning made its debut as a methodology. The investigation uncovered limited information about the origins of blended learning, which can be traced back to the 1920s with Benton Harbour High School's "supervised correspondence study" program (Moore, 2002). The first attempt period of

blended learning occurred between 1999 and 2002 defined by Guzer and Caner (2014), the definition period as occurring between 2003 and 2006, and the popularity era as occurring between 2007 and 2009. Additionally, blended learning provides a way around the time and space constraints of in-person instruction (Graham, 2006). Accordingly, Blended learning is characterized as a versatile approach that aims to minimize the limitations of in-person and virtual learning environments and combine their benefits (Bland & Christie et al., 2008). A portion of the course is completed in a classroom setting under the guidance of an instructor in blended learning, and the remaining portion can be undertaken by the student independently, at their convenience and location, using electronic, online, or alternative methods like learning management systems (Horn & Staker, 2011).

The researches on blended learning contains an extensive number of definitions (Yen & Lee, 2011). It is observed that each research in the literature has its framework, leading to the absence of a singular, definitive description. Each of the current identifications possesses specific characteristics (Osgerby et al., 2013). The researchers have indeed categorized the terminologies due to their diversity in the literature (Graham et al., 2003). Blended learning is defined by certain scholars (Allen & Seaman, 2014) as the combination of both in-person and virtual learning settings, however, other scholars focus more on pedagogy (Lim & Morris, 2009). The rising usage of advanced technology in education these days has led to a rise in the popularity of blended learning. According to Boelens et al. (2015) and Ardana et al. (2016), blended learning is the blending of various teaching modalities, such as in-person education with computer-mediated instruction or online teaching. Students in blended learning, according to O'Flaherty & Phillips (2015), after receiving in-person instruction, students were expected to fulfill assignments beyond the classroom using various technological tools. The mix of online and offline learning can be summed up as blended learning.

The literature provides evidence of numerous advantages associated with blended learning. These benefits include increased learning opportunities, efficient learning environments, easier access to resources for students, motivation from students through interaction, communication, and teamwork, and support for course management activities in the form of feedback and grading. (Bath et al., 2010) Because of these benefits, blended learning has become more popular and widely recognized, prompting academics to highlight its potential for global adoption (Horn & Staker, 2011). According to the predictions, blended learning will overtake in-person or virtual learning as the predominant paradigm in the future and be recognized as a form of education in and of itself (Yen & Lee, 2011). The primary focus of blended learning research seems to be on student learning (Ekwunife-Orakwue & Teng, 2014; Herloa, 2015). All things considered, some student characteristics are important in how blended learning is applied in language learning settings. Two important factors that emphasize how important it is for online resources to be user-friendly and freely available to students are student attitude and experience. Computer literacy among students is another crucial aspect that educators need to take into account. The standard of mixed language learning settings is also influenced by several teacher-

related factors. Therefore, teachers must receive proper pedagogy and technological training and assistance. Additionally, it became evident how crucial instructor acceptance and buy-in were, and how teacher behavior can impact students' views of blended learning settings in addition to their learning. Put differently, the impression is that blended learning was implemented with little consideration for the rationale behind it or for the specific educational enhancement that the researchers or teachers claimed to be pursuing (Larsen, 2012).

Both in K-12 education and higher education, the pedagogic approach has seen a significant increase in renown in the past few years. Nonetheless, research indicates that institutional blended learning is poorly understood (Anthony et al., 2020). This poses an issue since the limited understanding of institutional leaders regarding blended learning may hinder their capacity to establish crucial safeguards and support networks for teachers. Consequently, it could result in uneven and inconsistent experiences for students. The considerable changes in teaching practices brought about by blended learning, require teachers to master both the pedagogical concepts of "blending" and the use of technical tools like learning. This implies that the degree to which teachers are open to implementing certain pedagogical strategies is directly related to how well they enhance the educational experiences of learners (Ali, 2022). This study aimed to investigate students' perceptions of blended learning and explore students' experiences with blended learning in higher education.

Statement of the problem

The study focuses on investigating the perceptions of university students regarding blended learning. This research explores the experiences of students with blended learning in higher education, it is a method that combines both in-person and virtual learning.

Objectives of the study

The objectives of this research are:

- To explore the students' experiences of blended learning in higher education across the university.

Research Questions

- What are students' experiences of blended learning in higher education across the university?

Significance of the study

The research highlighted the university students' perception on blended learning. The data could offer educators a more distinct understanding of how to effectively assist students. Students' perceptions of blended learning highlight their adaptability to new modes of education. Positive perceptions may suggest that the blend of online and in-person elements effectively promotes student engagement. Blended learning experiences may prepare students for the future, where technology and flexible work environments are becoming increasingly prevalent. Educators want to give the best possible education and training to students related to blended learning.

Rationale of the Study

Studies have focused on the practices of blended learning in both the United Kingdom and the United States (Allen et al., 2007). Most of these studies centered around examining environments

or perspectives related to blended learning. All of them were qualitative studies conducted with a limited sample size across higher education institutions in the country. Some researchers conducted quantitative inquiries into experiences and research related to blended learning and less researches are conducted in Pakistan that why this study is crucial to done. This study analyzed the perceptives of university students regarding blended to improve practices in teaching and learning within the educational framework. This study holds significance as it aims to comprehend the existing challenges and opportunities related to blended learning and provide insights into university students' experiences with the technology services offered by universities.

Literature Review

Blended learning, as commonly defined by Dziuban et al. (2018), involves the combination of technology-mediated and in-person training. Historically, this integration encompassed virtual learning and physical classroom tasks. It is frequently made possible by instructional management systems like Moodle or Canvas. The type of integration varies, but it frequently consists of virtual lectures with in-person tutorials (Dey & Bandyopadhyay, 2019), delivery of lectures in person followed by concurrent with online learning, or a combination of the two methods (Evans et al., 2020). According to Anthony Jr. and Antwi Boampong (2021), the goal of this combination is to generate adaptable and ideal learning that improves the educational involvement of students. Ultimately, improving learning outcomes by elevating the caliber of instruction and learner achievement is aim of the blended learning (Anthony Jnr, 2021).

According to Dziuban et al. (2018) and Evans et al. (2020), blended learning has been interpreted widely, and many pedagogical features of the approach remain unclear. Though usually accepted to exist on a continuum, blended learning is situated between pure online learning and traditional in-class instruction at one extreme (Dey & Bandyopadhyay, 2019). According to Fresen (2018), the blend is produced by combining "different aspects of the two extremes, situated at a point in the spectrum." Blended learning, according to Muller and Mildemberger (2021), encompasses all learning environments that incorporate technology, excluding solely online or entirely in-person instruction. When described, the concept of purposeful integration into personalized education to meet students' needs is often emphasized to pinpoint the high quality of learning associated with blended learning (Hrastinski et al., 2019). Although possessing these characteristics, numerous academics express concern about its lack of a clear definition (Dziuban et al., 2018). Therefore, in line with current research, blended learning is characterized as the intentional integration of in-person and technology-mediated instruction to improve teacher delivery, learning outcomes, and student achievement.

After the COVID-19 pandemic, blended learning has been predicted to become even more popular in higher education. It is no longer a novel approach to delivering courses (Megahed & Hassan, 2021). It has been utilized at universities for the past 20 years in almost every academic area, including business, science and engineering, nursing, computer science, education, mathematics, language acquisition, and nursing (Baek et al., 2018). Several of these studies' authors have discussed their personal success stories besides the enormous advantages of blended

learning for education (e.g., Muller & Mildenerger, 2021). According to this study, blended learning has attracted considerable attention in higher education and has the potential to cover the majority of academic courses, if not all of them. Even with the widespread adoption of blended learning in higher education, up until recently, institutions did not make decisions as a group rather, the reason for adoption was mostly realized at the individual teacher or topic level (Antwi-Boampong et al., 2021). Nonetheless, in recent years, there has been a trend toward the intentional application of blended learning, particularly since the COVID-19 pandemic's experiences with limited in-person teacher connections, and concerns about this matter are becoming more pressing (Huang et al., 2021).

The concept of "student experiences" is broad and encompasses many different aspects of a student's "journey" through college. According to Temple et al. (2014), student experiences are characterized as "the entirety of a student's engagement with the institution." Heron (2020) explained this term, including every aspect of a university student's educational journey, ranging from the course application process to post-graduation life. Similar to these viewpoints, Smith (2020) distinguished several sub-dimensions in the student experience, including the enrollment procedure, arrival, and position, educational experiences, residential arrangements, and assistance. Temple et al. (2014) classified four primary domains of student experiences: initially, the application phase, encompassing interactions between potential students and the university until their arrival; secondly, the academic phase, involving interactions linked to studies, third the campus experience, which includes experiences related to student life on campus but unrelated to studies, and fourth one is the graduate experience, which involves the university's assistance in helping students transition to the workforce. According to this research, the majority of services offered by a university center revolve around the idea of "student experiences," which refers to assisting students in thriving in their time at university and making a smooth transition to the job. The driving force for various new policies and initiatives at universities has been the enhancement of student experiences, underscoring the pivotal role that "student experiences" play in transforming practices within higher education. Overall, the literature assessment indicates that further knowledge is required regarding institutional adoption and the spread of blended learning, specifically in terms of internal diffusion mechanisms inside institutions, even in light of the anticipated benefits. This pinpointed a gap in the existing body of literature that corresponds to the objectives of the present study.

Methodology

A descriptive research design was used. A survey questionnaire was used for this study. All the university students of district Lahore were taken as the population of the current research. According to the 2017-2018 university-wise enrollment report, the total number of university students in Lahore was 289652 which is larger than the other cities that why choose district Lahore. The population denotes the entirety of units to which the research findings are intended to be applicable. Put differently, it encompasses all units exhibiting variable characteristics under study, allowing for the generalization of research findings (Shukla, 2020). 200 university students

were taken as a sample for this study. “In survey research select a sample size ranging from 10% to 20% of the population” according to the criteria proposed by (Gay et al., 2012). A sample is a reduced, manageable representation of a larger entity, retaining the traits of the broader population (Kenton, 2022). A convenient sampling method was employed to choose the sample. Convenient sampling stands as the prevalent type of non-probability sampling. It entails gathering samples from readily available sources within proximity (Edgar, 2017). Essentially, the sample is drawn from a population that is easily accessible or reachable.

Instrument

Data from participants were gathered using questionnaires. The first part of the questionnaire focused on obtaining demographic details from the participants. The second part comprised of exploring students' experience of blended learning in higher education will be assessed using a standardized tool named student questionnaire by Owston et al. (2013). The tool was adopted and permission was taken through E-mail.

Data Collection

Quantitative data was acquired from students enrolled in universities. Utilizing a questionnaire as the survey instrument, data was gathered from participants representing both public and private universities. The questionnaire was made on Google Docs. The researcher ensured the confidentiality of all the students as respondents. Students were requested to carefully assess items and mark the appropriate category.

Data Analysis

The gathered data underwent analysis employing both descriptive statistics (mean, frequency) and inferential statistics (t-test) statistical analysis techniques were used to analyze the data by using SPSS version 25. Descriptive statistics offer concise numerical summaries that summarize a given dataset, whether it represents the entirety of a population or a subset thereof. Within descriptive statistics, measures of central tendency and measures of variability categorize these summaries. Within measures of central tendency, there exist the mean, mode, and median. Conversely, measures of variability encompass standard deviation, minimum and maximum values, variance, skewness, and kurtosis (Hayes, 2023). Inferential statistics aid us to conclude how a hypothesis will describe or decide a common framework for a larger sample. Inferential statistics can usually use for comparison between two groups of subjects to make larger generalizations about a larger population (Corbo, 2022).

Data Analysis and Results

Table 1

Sector-Wise Distribution of Sample

University Name	Frequency	Percent
Public	100	50.0
Private	100	50.0
Total	200	100.0

The sector-wise distribution of the sample is shown in Table 1, indicating that an equal percentage of 50.0% of students was conveniently selected from universities.

Table 2

Age-wise Distribution of Sample

Age	Frequency	Percent
Below 20	30	15.0
21-25	140	70.0
26-30	24	12.0
Above 30	6	3.0
Total	200	100.0

The age-wise distribution of the sample is shown in Table 2. It indicating 15% of those aged below 20, 70% of those aged 21-25, 12% of those aged 26-30, and 3% of those aged above 30 have participated in this study.

Table 3

Overall Perceptions of University Students Regarding Blended Learning

No.	Statements	N	M
1.	I am happy to use digital technology in my learning.	200	4.34
2.	I find Moodle easy to navigate	200	4.45
3.	The flexibility of blended learning makes my course easier for me, compared to a regular course	200	4.22
4.	Blended learning is a useful way for me to complete university learning.	200	4.44
5.	My blended learning course allows me to study while I live far from the university campus	200	4.41
6.	In my blended learning course, I get more engaged with learning compared to a regular face-to-face course.	200	3.71
7.	In the future, I would take another blended learning course instead of a face-to-face one.	200	3.80
	Overall Perception	200	29.37

Table 3 represents the descriptive statistics of statements related to the overall perceptions of university students regarding blended learning. The mean of the first statement ($M = 4.34$) indicates that students agree that they are utilizing digital technologies for their education makes them joyful. The mean of the second statement ($M = 4.45$) indicates that students agree that they find it simple to use moodle. The mean of the third statement ($M = 4.22$) indicates that students agree that, in comparison to a traditional course, theirs is a simpler course because of the adaptability of blended learning. The mean of the fourth statement ($M = 4.44$) indicates that students agree that Completing coursework at a university through blended learning is beneficial.

The mean of the fifth statement ($M=4.41$) indicates that students agree that they can study even though they don't reside close to the educational institution because of blended learning courses. The mean of the sixth statement ($M=3.71$) indicates that students agree that blended education programs get more involved in the learning process than in traditional in-person classes. The mean of the last statement ($M=3.80$) indicates that students agree that they plan to substitute a blended learning course for a physical one in the future.

Table 4

Perceived Affordances of Blended Learning

No.	Statements	N	M
1.	If I did not have the blended learning option, it would be very difficult for me to participate in university learning.	200	4.36
2.	My blended learning course allows me to study in my own time.	200	4.36
3.	My blended learning course allows me to study at my own speed.	200	4.25
4.	I mostly study in my spare time after my employment and/or family commitments.	200	3.31
5.	In blended learning, I don't feel a sense of isolation during the semester even though I don't see my lecturers and classmates daily/weekly.	200	2.76
Affordances of Blended Learning		200	19.04

Table 4 represents the descriptive statistics of statements related to the perceived affordances of blended learning of university students. The mean of the first statement ($M=4.36$) indicates that students agree that participating in university education would be extremely challenging for them if they did not have access to blended learning. The mean of the second statement ($M=4.36$) indicates that students agree that they can learn on their schedule using a blended learning program. The mean of the third statement ($M=4.25$) indicates that students agree that they can learn at their own pace with a blended learning program. The mean of the fourth statement ($M=3.31$) indicates that students are undecided about when they finish work and/or family obligations, they primarily learn in their free time. The mean of the fifth statement ($M=2.76$) indicates that students are undecided that despite not seeing their professors and classmates every day or every week, students in blended learning don't experience a sense of loneliness during the semester.

Table 5

Challenges Students Faced in Engaging with Blended Learning

No.	Statements	N	M
1.	If I log a Moodle-related issue, my university's technical support team helps me in a timely manner.	200	3.89
2.	It is easy for me to get Moodle-related technical support when I need it.	200	3.72

3.	If I need any assistance related to my course, I can easily contact to my lecturer through Moodle	200	3.98
4.	If I ask for help in Moodle, my lecturer promptly responses to my request.	200	3.79
5.	I am confident of using Moodle tools for learning.	200	4.02
6.	Traveling for face-to-face classes is too expensive for me.	200	4.02
7.	I am satisfied with the quality of the internet service available for me for my blended learning.	200	3.91
Challenges Students faced in engaging with Blended learning		200	27.33

Table 5 represents the descriptive statistics of statements related to the overall perceptions of university students regarding blended learning. The mean of the first statement ($M = 3.89$) indicates that students agree that the technical support staff at their university responds quickly to their requests if they report a moodle-related problem. The mean of the second statement ($M = 3.72$) indicates that students agree that when they require technical assistance using Moodle, it is simple for them to receive it. The mean of the third statement ($M = 3.98$) indicates that students agree that they may simply get in touch with their instructor through Moodle if they need any help with anything relating to their course. The mean of the fourth statement ($M = 3.79$) indicates that students agree that when they ask for assistance on Moodle, their lecturer answers their request right away. The mean of the fifth statement ($M = 4.02$) indicates that students agree that they feel comfortable utilizing Moodle's learning resources. The mean of the sixth statement ($M = 4.02$) indicates that students agree that they cannot afford to travel for physical classes. The mean of the last statement ($M = 3.91$) indicates that students agree that the internet service provided to them for blended learning is of a satisfactory level.

Table 6

Difference in the University Student Perception on Blended Learning of Public and Private Universities

Sr.no	Sector	N	M	SD	MD	df	t	p
1.	Public	100	72.60	6.184	-5.960	198	-7.047	.000
2.	Private	100	78.72	5.770	-5.960	197.056	-7.047	.000

The results are shown in Table 6 of an independent sample t-test to measure the difference in the university student's perception on blended learning of public and private sector universities. A significant difference is observed in the university student's perception on blended learning of public ($M = 72.60$, $SD = 6.184$) and private ($M = 78.72$, $SD = 5.770$) sector universities, $t(198) = -5.960$, $p = .000$. The result shows there is a statistically significant difference in the student's perception on blended learning of public and private sector universities. The private sector universities student's perception on blended learning is greater than that of public sector universities students.

Discussion

The findings indicate a notable and statistically significant contrast in student perceptions regarding blended learning between public and private sector universities. The private sector universities student's perception on blended learning is greater than that of public-sector universities students. Blended learning emerged as the favored delivery approach due to the recognition that, unlike entirely online learning, the incorporation of face-to-face sessions within blended learning is seen as essential for effective teaching. This inclusion facilitates enhanced learning experiences through direct interactions with teachers. For executives, blended learning was viewed not only as a means to expand learning opportunities for remote communities but also as a solution to address certain quality concerns associated with the university's flexible course delivery. Particularly, it was seen as a strategy to mitigate learner engagement issues and to attract a larger student body to the university. Overall, perceptions of blended learning were largely favorable throughout the university. Furthermore, blended learning is frequently recognized as the preferred approach to learning, as it enhances both student course enrollment and retention, surpassing the outcomes of fully face-to-face or fully online learning methods.

Conclusion

The following conclusion was presented on the base of findings drawn from the current study. University students generally hold a favorable perception regarding the incorporation of digital technology into their learning experiences and their satisfaction with the user-friendly nature of the Moodle platform, university students appreciate the advantages of blended learning, including its flexibility, utility, and accessibility. While students recognize heightened engagement in blended learning courses compared to face-to-face counterparts, there might be variations in their experiences or perspectives. Nevertheless, the overall consensus on the inclination to opt for blended learning in the future signifies an increasing acceptance and preference for this educational approach among students. Students emphasize the importance of having the opportunity for blended learning in their university education, as it enables them to study at their own pace and convenience.

They are uncertain whether they primarily study during their free time amidst their work and/or family responsibilities. Similarly, they are undecided about whether they experience a sense of isolation throughout the semester despite not interacting with lecturers and classmates on a daily or weekly basis. Students generally perceive effective technical support, communication with lecturers, and confidence in using Moodle tools within the blended learning environment. The results also highlight financial considerations as a significant factor influencing students' preference for blended learning, with a recognition of the cost-effectiveness of online education. Additionally, the overall satisfaction with internet service quality further supports the notion that a robust technological infrastructure is crucial for fostering positive blended learning experiences among university students. Blended learning was seen as well-suited to meet the requirements of the university.

Recommendations

- The students are not fully satisfied with internet services quality provided in blended learning. Universities must try to improve the quality of internet service because technological infrastructure is crucial for fostering positive blended learning experiences among university students.
- The findings also underscore financial factors as a notable influencer shaping students' preference for blended learning, with an acknowledgment of the cost-efficiency associated with online education. University administration would make it budget-friendly so every university student has access to blended learning.

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