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ANALYZING THE PERCEPTION OF STUDENTS ABOUT HYBRID LEARNING PROGRAM IN UNIVERSITIES

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ABSTRACT

The study's objective was to determine how students felt about university blended learning programs. This study looked at evidence showing how blended learning affects students' perceptions. The study's population of concern included all social sciences students from 2-universities in Multan district (Bahauddin Zakariya University & Women University). Sample of study comprised 360 students from social sciences faculty, 30 students were selected from each department. Questionnaire was developed for students. The questionnaire contains 25 items for students' perception and a five-point Likert scale was used for scoring. Statistical methods were applied to obtain findings about student reactions like %, mean, frequency and SD was used to apply and examine the perception of students about blended learning program. It was found that majority of participants believe that blended learning helps make students independent, inspired, confident & more effective. Students should participate in training program to improve ability to use technology in blended learning & regular feedback sessions should be encouraged.

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INTRODUCTION

Analyzing the student perceptions about blended learning in universities involves examining their attitudes toward integration of the online and traditional classroom elements (Bruggeman, Hiding, Struyven, Pynoo, Garone & Tondeur, 2022). Surveys, interviews, and feedback mechanisms helps identify challenges, and gauge program's overall efficacy in blended learning. Insights gained can inform adjustments to improve learning & support continuous improvement in delivery of blended learning. COVID-19 struck US in spring of 2020, after initial wave in China, consequences started to

spread globally, upending people daily lives, raising unemployment rates and closing colleges and universities (Hale, Petherick, Phillips & Webster, 2020). As of December 20, 2020, 1.69 million people had died globally from it; many more people were sick. The pandemic forced people in the US to adjust and shift in all facets of daily life. People began to modify their behavior, adopt new lifestyles that included altering old habits and make plans for uncertain future in an effort to lower chance of infection, as wearing masks and avoiding social situations became the new standard. It influenced global education initiatives, altered work atmosphere, forced educators to step outside of comfort zones. It inspired educators to come up with original solution to issues they had not before alleged about (Sarwar, Akhtar, Naeem, Khan, Shabbir & Khurshid, 2020). In the hybrid learning, student participation is crucial to building eloquent learning (Malik, Hazarika & Dhaliwal, 2022; Rioch & Tharp, 2022).

The curriculum and methods of instruction were suddenly required to change and instructors were forced to convert to online and hybrid learning environments using platforms, infrastructures and protocols not designed for this kind of scenario. This challenging scenario was exacerbated by the "digital divide" problem of varying technological accessibility, which prevented some students from effectively accessing content provided in the new platforms. The first things that the educators did when preparing for a "regular" semester were to modify their methods, embrace new technology for online learning, and modify their curricula to fit this new structure. In a similar vein, students have to transition from interactive face-to-face paradigm with in-class activities to more passive, screen-driven interface. Learning gap was further widened by expectation placed on instructors to modify their lesson plans and close the gap, frequently by utilizing novel educational tools that they had not previously used in the classroom (Heinrich, Darling & Martin, 2020). The popular approach in educational institutions was to switch to the hybrid model, combines online learning with in-person instruction. In many post-secondary education establishments nationwide, hybrid model took hold in the summer of 2020 (Triyason, Tassanavi & Kantham, 2020). To inspire student input in learning, instructors in hybrid classrooms can make use of range of pertinent technology (Ng, Han, Kim, Togo, Lam & Fung, 2022).

Objectives & Hypothesis

1. To find out students' opinions about blended learning program in universities with respect to demographic variable.
2. To determine the students' opinions regarding the blended learning program in the higher education institutions.
3. There is no perception of students about blended learning program in the higher education institutions.
4. There is no perception of student about blended learning program in universities regarding their demographic variable.

LITERATURE REVIEW

Blended learning, that was first identified as teaching style many years ago, calls for combination of online learning with traditional classroom training. In context of this study, blended learning has several different meanings (Darras, Spouge, Bruin, Sedlic, Hague, Forster, 2021). Jost, Jossen, Rothen

and Martarelli (2021) Blended learning, according to its accepted definition, is a method of distant learning that blends offline and online learning methods, such as in-person classes held in the real classroom at a predetermined time and online learning resources and activities like podcasts. Thus, blended learning is amalgam of conventional education in the classroom with internet education (Jebraeily, Pirnejad, Feizi, Niazkhani, 2020). It enhances face-to-face instruction by guaranteeing that certain learning activities take place with the use of internet resources (Natour & Woo, 2021). Blended learning can be applied to any subject or field of study due to its vast range of teaching methodologies and study design (Rachmad, Suband, Rasmitad, Humaira, Aliyyah, Samsudin, 2020). Better academic results and higher levels of engagement are achieved by learners over blended learning (Agarwal, 2021; Lo, 2021). When dealing with change, inertia is a regular difficulty. Still, on this occasion, the educators and pupils were unable to overcome the inertia, leading to a strong negative momentum.

A blended learning strategy lets students choose right educational resources, self-diagnose their own learning needs, and acquire the skills they need to continue their education while also offering adaptability and personalization during the education journey (Ayob, Daleure, Solovieva, Minhas, White, 2021). The blended learning makes it possible to continue learning when natural disasters linked to climate change occur, or when disruptive conditions like COVID-19 (Lo, 2021). They now had to address the distinct issue: learning divide. Alfiras, Nagi, Bojiah and Sherwani (2021) proved that empathetic of students about online capitals made available over hybrid classrooms, readiness to integrate hybrid classes, and ability of teachers in delivering outstanding learning experiences are the three main factors that define effectiveness of hybrid learning paradigm. Blended learning offers an interactive learning environment and lets students take charge of their own education, which is one advantage over fully online, face-to-face classes (Jebraeily, Pirnejad, Feizi, Niazkhani, 2020). The authors also claimed that by facilitating improved access to the learning materials and eschewing time and space constraints, blended learning enables growth of education opportunities outside of the classroom.

Using an autonomous, self-directed, dynamic, student-focused instruction, blended learning gives university tutors consistency in guide role and supports them in optimizing teaching and evaluation methods. Further time and adaptability while studying, greater acquisition of knowledge resources, and a feeling of independence are provided by blended learning's internet component compared to typical in-person interactions classes (Uzzaman et al., 2020). Popa et al. (2020) remark that when course materials are created using good pedagogical principles, blended learning environment's mixed learning setting is more efficient than in-person interactions learning. Rajab et al. (2020) establish that students loved blended learning, which was implemented amid COVID-19 pandemic, preferred information technology to purely internet and in-person direction. Integrated education ought to be implemented within this COVID-19 period, according to a number of researchers from many fields (Balas et al., 2020; Ehrlichet et al., 2020; Nijakowskiet al., 2021). In this pandemic era, blended learning is beneficial because it minimizes class sizes, which lowers the rate of corona virus infection, gives students web-based or computer-assisted access towards the instructional materials

instruction, and promotes interactions with others and a dynamic setting for learning through face-to-face direction.

Giovannella (2020) is of the opinion that the current generation of university students is prepared to accept innovative teaching methods that are heavily reliant on blended learning activities. One well-known instance is the use of blended learning in the numerous Italian colleges throughout the COVID-19 pandemic (Busto 2021). Nepal In COVID-19 pandemic, students favored hybrid learning to simply online instruction (Paudel 2021). According to a study conducted among UAE university students, pupils think switching to online studying during epidemic will improve their performance (Ali, L.2021). in this linking, Agarwal (2021) says that integrated learning is way higher education will develop in future. Although blended learning has the potential to foster meaningful learning experiences, there are a number of issues that need to be resolved before the educators and school administrators can fully take use of blended learning's beneficial features. In this connection, few personal interactions occurred throughout COVID-19 outbreak and online learning resources and activities like podcasts in different leading circumstances (Nijakowski et al. 2021). Furthermore, the issue with the diverse mixed learning was emphasized as being learners' inability to receive prompt feedback (Mali, 2021).

Students' perception

With a blended learning method, students engage in in-person instruction. placed within setting of classroom where the instructor is in charge (Horn & Staker, 2015; Kieschnick, 2017). Supported by research (Horn & Staker, 2015; Toppin & Toppin, 2016), this notion proposes that in a traditional classroom setting, both students and teachers make use of many technological resources to enhance learning. Blended learning has been shown to bring together internet equivalent of both resources and convention classroom instruction, according to several studies (Horn & Staker, 2015; Powell et al., 2015; Vander, 2018). Both Kieschnick (2017), Horn and Staker (2015) state that many people, including teachers and parents, think that schools should not just be online learning environments. Teachers are able to keep tabs on their pupils more effectively via blended learning, which helps them build digital citizenship and safety skills while using the internet (Vander, 2018). When there is the physical safety in the classroom, students are able to focus on their studies and build positive relationships with their instructors and classmates (Kieschnick, 2017). In the practical terms, hybrid learning encompasses the four key elements: adaptability, engagement, educational resources, and fostering a positive learning environment (Bruggeman et al., 2022). In this linking, hybrid learning is active tool that is deemed helpful include utilization of interactive multimedia learning resources (Rukayah et al., 2022).

RESEARCH METHODOLOGY

The survey method was used in this study and the study was descriptive in its nature. This study was conducted for "Analyzing perception of students about blended learning program in universities". The study's population of concern included all social sciences students from two universities in Multan district (Bahauddin Zakariya University and Women University). The sample was selected through simple random sampling method. Researchers can improve validity and generalizability of study findings by employing simple random sampling to generate a sample that accurately reflects

the diversity and features of the community. As two universities from Multan district were selected for the study's sample whereas, only faculty of social sciences was selected from these universities. From this faculty, 30 students were selected from each department, for a total sample size of 360 students for the study.

Table 1 Summary of Population & Sample

SN	University	No. of selected departments in university	No. of selected students in university
1	BZU	6	30*6=180
2	WUM	6	30*6=180
Total	2	12	360

This study was descriptive, so, questionnaire served as an instrument to collect that data. The survey was developed with the discussions of supervisors, and use of literature about perception of blended learning programs from the library of department of education at Women University Multan. The purpose of questionnaire was to gather information about people's opinions about blended learning initiatives. As instrument, questionnaire gave researchers a methodical way to collect information from participants, which made it possible for them towards successfully assess and understand their perspectives. These survey instruments, modified from Akkoyunlu and Soylu (2008) were initially created to comprehend instructors' and students' opinions of blended learning. To suit institution's blended learning model and the goals of the investigation, the questionnaires created for this study underwent minor modifications. Questionnaire was developed for students. Questionnaire contains 25 items for the students' perception, and a five-point Likert scale was used for scoring, through a scale divided into 5 levels, there are five options: strongly agree, "agree," "undecided," "disagree," and "strongly disagree."

RESULTS OF STUDY

Table 2 Students' Perceptions about Blended Learning

N	Minimum	Maximum	M	SD	Skewness		Kurtosis	
360	45.00	115.00	83.1667	11.33634	-.354	.129	.640	.256

There are 360 responses in data set, and their range is 45.00 to 115.00. With a mean value of 83.1667 and a Std. of 11.33634, data shows substantial variability around the mean. The distribution appears to be slightly stretched to the left, as indicated by the negative skewness of -0.354. In comparison to a normal distribution, the data set appears to have heavier tails and a sharper peak, as indicated by the positive kurtosis of 0.129. in this linking, the standard errors for kurtosis and skewness are given as 0.256 and 0.640, respectively. Therefore, based on the research, the blended learning is perceived favorably overall.

Table 3 Significant Differences among Subjects

Subject	Total Squares	Df	Square M	F	Sig.
Among Groups	55.598	55	1.011	.904	.667
Within Groups	339.933	304	1.118		
Total	395.531	359			

This analysis of variance (ANOVA) table shows the statistical findings from a comparison of group means based on variable "Subject." The average square is 1.011 and sum is 55.598 with 55 degrees of freedom. The matching F-statistic is 0.904, and significance level (Sig.) is 0.667. In among Groups section, variance among subjects is measured. A mean square of 1.118 is obtained with 304 degrees of freedom and a total square of 339.933. 359 degrees of freedom and a sum of squares of 395.531. Findings show that there is no statistically significant difference in subject means, as indicated by p-value of 0.667.

Table 4 Significant Differences among Current Class

Current Class	Total Squares	Df	Square Mean	F	Sig.
Among Groups	15.421	55	.280	.651	.973
Within Groups	130.979	304	.431		
Total	146.400	359			

The "current class" ANOVA analysis shows non-significant F-statistic (F = 0.651, p=0.973), suggesting that variations in the variable between classes are probably the result of chance fluctuations. These findings emphasize need for cautious interpretation because of the lack of statistical significance and warn against assigning statistical reliability to observed differences among classes in "current class" variable.

Table 5 Significant Differences among Semester

Semester	Total Squares	Df	Square Mean	F	Sig.
Among Groups	54.642	55	.993	.872	.726
Within Groups	346.333	304	1.139		
Total	400.975	359			

The "Semester" variable's ANOVA results show a non-significant F-statistic (F = 0.872, p = 0.726), indicating that there isn't a significant difference in the semester means. As can be seen by looking at the bigger Within Groups mean square (1.139) in comparison to the Among Groups mean square (0.993), the majority of variability occurs within individual semesters.

Table 6 Significant Differences between Universities

Institute	N	M	SD	SEM	T	Sig.	MD
WUM	179	84.0391	11.34364	.84786	1.454	.147	1.73524
BZU	181	82.3039	11.29412	.83949			

Women University Multan and Bahauddin Zakariya University differ by 1.73524 units in the mean exam scores. Therefore, the null hypothesis of equal means is not strongly supported, and the non-significant t-test result (t = 1.454, p = 0.147) indicates that this divergence is most likely the product of random fluctuation.

Table 7 Significant Differences between Gender

Gender	N	M	SD	SEM	T	Sig.	MD
Female	351	83.1681	11.38735	.60781	.015	.988	.05698
Male	9	83.1111	9.68819	3.22940			

The analysis compares the mean exam scores between female (N=351) and male (N=9) participants. The mean difference is 0.05698 units, and t-test result of 0.015, with a two-tailed p-value of 0.988, indicates no statistically significant difference. In this connection, the study (t = 0.988, p = 0.05698, 2-tailed) revealed no statistically significant difference between the mean scores of the males as well as females.

Table 8 Significant Differences between Residential Area

Area	N	M	SD	SEM	T	Sig.	MD
Urban	350	83.1743	11.36682	.60758	.075	.940	.27429
Rural	10	82.9000	10.76465	3.40408			

The mean IQ score in urban areas is 83.17 (SD=11.37), while in rural areas, it is 82.90 (SD=10.76). A t-test yielded a non-significant p-value (p=0.940), show no significant difference in IQ scores amid urban and rural residents.

Table 9 Significant Differences between Age

Age	N	M	SD	SEM	t	Sig.	MD
20-25	125	85.5520	10.33430	.92433	2.943	.003	3.65413
26-30	235	81.8979	11.65816	.76049			

Data analysis reveals significant difference in a certain variable between people in the 26–30 age group (M=81.90) and those in 20–25 age group (M=85.55). The 20–25 age group's higher mean score suggests a significant difference. Robustness of difference, highlighting different levels of observed variable across the two age cohorts, is highlighted by the statistical significance of the t-test (t (358) = 2.943, p = 0.003).

DISCUSSIONS

The survey aims to find out students' perceptions on university blended learning programs. To find out how university students feel about blended learning program in relation to their demographics. One of the results from present study shows that students agreed blended learning assists them in teaching and blended learning has improved their understanding of key concepts vary. Blended learning motivates students to develop independent learning skills. Similarly, Charles and Graham (2018) students find that the interaction with teachers during the blended learning process makes learning interesting. On other hand, Simbolon (2021) Pupils enrolled in hybrid learning expressed satisfaction with three aspects of their learning experience: they were aware of the advantages they had received; they were comfortable using learning tool, and the use of ICT devices had an impact on learning engagement. Comparably, (Adarkwah, 2020; Adarkwah, 2021) Many issues, including inadequate internet access, expensive data bundles, power outages, and issues with online learning platform, were bemoaned by students (Herpen 2020). The social connections between educators & students foster a feeling of community, foster a favorable learning environment, and have impact on academic performance.

Another result of present study demonstrated that learning is enhanced by blended learning more communicative. The blended learning makes students autonomous, blended learning has a positive

influence on learning among students. Majority of participants face challenges using technologies in blended learning. Similarly, Zhang and Chang (2017) Online resources and tools are highlighted in blended learning designs. A blended learning tactic is one that makes use of internet resources to facilitate learning. Another result of study reveal that Students can overcome learning challenges through the virtual collaboration along with the assistance of analysis of how to use the appropriate digital platform for learning (Siripan & Noirid, 2022). On the other hand, Xue (2020) In the eyes of the participants, they could use their smartphones and digital gadgets to create the personalized blended learning experience. Learners can access a variety of online instructional materials due to the portable nature of the mobile technology and their potent technological capabilities. Another result of the present study revealed that blended learning creates the student-centered learning varied environment.

The research findings conclude teachers that blended learning creates a more conducive teaching environment. Blended learning has beneficial effect on children's academic achievement. Blended learning makes teaching more communicative. Blended learning help teachers develop productive skill. Comparably, according to Neumeier (2005), the student opinions of how in-person and virtual learning interact reflect, at least somewhat, how well-organized and methodically structured the blended learning environment has been. Another result of the present study revealed that blended learning creates more helpful teaching environment, blended learning makes teachers sovereign, teaching with an online platform is enjoyable (Kaur, 2013) In other words, the learners benefit from blended learning because it allows for increased flexibility and accessibility for both the instructors and students while maintaining the desired individualization, personalization & relevance without compromising in-person interactions. On the other hand, Chawinga (2017) states that blogs that are accessible online allow students to keep themselves updated, as social media learning has swept over higher education.

CONCLUSION

Based on the sample of 360 students, the data suggests a generally positive perception of blended learning. Distribution shows some variation in opinions, but overall, students tend to view blended learning favorably. The analysis of variance (ANOVA) results indicates a non-significant difference among groups based on subject variable. Thus, there is no statistically significant variation in the variable across the diverse subject. Analysis of variance reveals non-significant difference in group based on the current class variable. There is no statistically significant variation in these variables across different current classes. Analysis of variance results shows that the variation among groups is not statistically significant. Therefore, there is no significant difference in variable across different semesters. The t-test results suggest a non-significant difference in variable between participants from Women University Multan & Bahauddin Zakariya University. While slight mean difference exists. No statistically significant difference in variable between participants who were male and female is suggested by t-test results. So, residential location does not appear to be significant factor influencing observed outcome. A statistically significant difference in measured variable between two age cohorts is indicated by t-test findings. 20–25 age group have a higher mean than those in 26-30 age group.

Recommendations

The students should participate in training programs to improve their ability to use technology in blended learning. Assist with any problems or worries regarding usage of technology by offering resources and continuous support. To understand needs and preferences of students and to support constant growth, regular feedback sessions should be encouraged. The t-test results indicate there is no statistically significant difference in variable between participants residing in urban and rural areas. Make sure the program for the blended learning is well-organized and offers instructors and students clear rules. Thus, it provides a dependable technical help system to ease the anxiety about technological problems.

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