Analysis of Students' Satisfaction about Online Learning Experiences

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Abstract

Online education has seen significant changes over the past few years. Online learning involves multiple interactions, such as the learner himself, the learner to the learner, the instructor, and the learning material.The study was intended to analyse the self-perceived students' satisfaction about online learning experiences at university level. The data were collected from 110 university students enrolled in two public sector universities situated in District Rahim Yar Khan. A self-developed questionnaire was used to collect the data. Mean, standard deviation and one samples t-test was applied for analysis of the data. It was concluded that the level of students' perception about online learning experiences was medium. The university students were not highly satisfied regarding teacher, peers, assessment and feedback; and availability of online learning resources. Moreover the perceived satisfaction level of university students was lesser than that of maximum level. It also indicated that the students were not satisfied with online learning experiences. This study may be helpful for university authorities, faculty members, parents and students regarding students learning experiences

Keywords: *Online Learning Experiences, University Students, Online Education*

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Introduction

Online education has seen significant changes over the past few years. Its formation and development have followed the changes that have occurred in societies as a result of the ubiquitous influence of the digital and networked world. (Rivera-Vargas et al., 2021) maintains that 2020 saw an increase in these changes as a result of the pandemic and its aftermath. The term "online education" has undergone significant changes in definition. The current literature defines it as a mode that is mostly conducted in virtual learning environments (VLE), online, and with active use of digital gadgets, despite its many classifications and procedures (Anderson & Rivera Vargas, 2020; Bates, 2019; Lee, 2019).

Its inception and growth should be interpreted both as an evolution of traditional remote learning and as a suitable method to address the emerging formative needs of a digitally advanced

society (Lee, 2019). It should also be interpreted in terms of networked and connected society (Selwyn, 2019). According to the Economic Times (2020), the use of networks and systems to deliver classroom instruction is known as virtual learning. "Technology-driven" describes how knowledge and skills are dispersed among a large number of people. In online learning, a scenario is created where students routinely engage with other learners and practice what they have learned. The new knowledge they acquire improves students' responses. The digital revolution has progressed in the present day and age exemplified by a well-known innovation known as the World Wide Web. The digital world not only serves as a medium for networking but also for teaching.

Online learning involves multiple interactions, such as the learner himself, the learner, the learner, the instructor, and the learning material. Wiki-style exercises, online classrooms, forums, messaging, online assignment types, and other interactive activities are already common in the majority of LMS platforms. These tools, which include activity logs that focus on students' learning progress, degree of data access, and reports on the status of assignments, can also be used by teachers to monitor and control their students' learning. are According to , online learning content exposes users to educational resources (Duderstadt et al., 2002). It also affects the daily experiences of the new generation of students, their instructors, parents, the community they live in and the organization. Peters (2002) asserts that nowadays, the widely favoured method of distance learning is virtual education or online learning. As mentioned in the steam article, online learning, also known as e-learning, is a form of distant learning in which both the instructor and the learner can be situated in any given locale making it a flexible form of learning. An ideal method of imparting knowledge that was accessible at any time and was not restricted by time or location was online learning. E-learning, according to Oproiu (2015), is increasingly being used in teacher preparation programs. Thus, some of the advantages of e-learning over traditional methods are as follows: E-learning is cost-effective than traditional teaching methods because it can be completed anytime, anywhere, without the need for paper or pencil. Students can adapt better to e-learning. More intimate

Statement of the problem

The significance of online education has considerably increased after the COVID-19 times. Online education had become the sole mode of instruction during those times. In the context of Pakistan, there were many constraints when implementing online education. These constraints affected the learning of the students leading them to encounter a new situation and unique learning experiences. This study will analyse the students' experiences about online education.

Objective of the study

The objective of the study was to analyse the self-perceived student's satisfaction about online learning experiences

Literature Review

The concept of "online education" has undergone significant changes. Although there are many different definitions and ways to define it, current researches by (Anderson & Rivera Vargas, 2020; Bates, 2019; Lee, 2019) identify it as a mode that is widely used in virtual learning environments (VLE). The creation and consolidation of this method should be considered as a means of developing traditional distance education and meeting the emerging needs of a

technologically innovative and high-tech world (Lee, 2019) along with a networked and digitally connected society (Selwyn, 2019).

The gap between traditional face to face classroom instruction and online education has shrunk due to the impact and treatment of the recent COVID-19 pandemic, as well as the sustainability of the digital society. While their desired markets are still there. Traditional universities have experienced significant virtualization processes, fundamentally changing and eventually abandoning their timeless history (Rivera Vargas & Cobo Romaní, 2019). Additionally, e-learning institutes have chosen to provide some unique aspects of in-person instruction—such as, in some cases, sporadic individual events—in their own virtual learning settings. An example of this is the ongoing work to enhance the constructive and collaborative nature of educational material in virtual institutions. Unlike early distance learning methods that were cantered on separate research (Fallon & Brown, 2002; Moore, 1989) and informative teachings (Zawacki-Richter & Anderson, 2014). The platform that offers online education today allows for the creation and maintenance of synchronous, accessible learning communities, with academic teaching styles, anytime and anywhere. Additionally, online learning has defended its position as a holistic educational approach that makes it easier for people to pursue higher education and build digital skills. Research studies such as those by Sangrà et al. (2012), and Hills (2017) indicate that with active use of getting hands-on with electronic and digital media tools in online education, there can be enhanced access, development and improvement of quality of education.

Similarly, in the context of formal delivery of curriculum, Chu (2010) , Anderson and Rivera Vargas (2020) report that online education, by using the same virtual environment, imparts and streamlines the technical and digital competence of students. It bridges the potential digital divide across multiple overlapping dimensions, including geographical locale, gender, physical disability, social class and age. It is imperative to highlight that these features of online education coexist with opposing thoughtful opinions over the years—some who scrutinize their efficiency in real situations rather than their worldview. According to (Anderson & Rivera Vargas, 2020; Kocdar et al., 2018), these things include, for example, the limitations of facilitated human contact and the need for high levels of individual motivation for learners' success. Creating a virtual environment and learning activities that aren't based on actively supporting an active learning environment and are instead restricted to the arrangement and distribution of electronic resources (like uploading lectures online) provide another challenge (Davis et al., 2018).

In this sense, the most investigated and related features of the digital learning experience is the student's efforts to motivate the learning process through with autonomy, effective use of digital tools, and through an interactional and active relationship between the learner and instructor. Guri-Rosenblit and Gros (2011) points out the potentially horizontal orientation of this pedagogical relationship, matching the support which students get from teaching staff and institution. Concurrently, Palloff and Pratt (2002), Kocdar et al. (2018) and Pilkington (2018) pointed out the necessity of giving aid to learners achieve independence and self-direction so as, to stimulate and hence improve their learning experience.

Learning conditions and technologies

Online learning demands a stable internet connection for the students. Berge (2005) highlights that students' online learning experience faces various difficulties due to lack of readiness for digital applications, and pedagogical approaches in different countries. Digital

readiness is referred to as the availability and acceptability of internet, information technology and organizational structures. Western nations like US (ranked third) are more prepared for digital technology than the Asian countries like China (54th; Cisco, 2019). The countries where the technological readiness is low may have some other tech-relevant issues. Basuony et al. (2021) documented in his research that Cairo, the capital of Egypt, had very low number of students who were having the problem of internet access. Contrary to that, in Indonesia more than two-third of rural students faced the problem of internet stability along with insufficient availability of digital equipment(Agung et al., 2020).

Availability of appropriate technology devices, particularly desktops or laptops, is another important factor in determining how well K–12 children adjust to online learning (Barbour et al., 2018). The majority of students are unlikely to meet this requirement. Just 15% of college students used computers for online learning, compared to almost 85% who used smartphones. Students reported that 76% of their devices were incompatible (Agung et al., 2020). Given that K–12 students rely on their parents to provide them with proper educational technology, it is quite probable that they also deal with the availability of devices.

Technical issues with technology equipment can also affect students' interactions and online learning experiences. Barbour and Reeves (2009) state that enhanced digital literacy is necessary for pupils to identify and use appropriate information and technology to interact with others. Students may find their online learning opportunities limited if they lack this expertise. Bączek et al. (2021) found that 54% of medical students reported having technical problems with IT equipment, and that these problems were more common among junior tertiary students.

Similarly, Niemi and Kousa (2020) found that during the exam period, Finnish high school students encountered a greater number of technical issues, including additional technical applications. These findings are concerning if we consider the fact that young students and adolescents, who have less experience with online learning at primary and lower- secondary level, are more prone to these tech-related issues (Barbour & LaBonte, 2017).

Learning experience and interactions

Technical issues with technology equipment can also have an impact on students' online learning and involvement. According to Barbour and Reeves (2009), students need to have advanced digital literacy in order to identify and use appropriate information and technology to interact with others. Lack of this ability may limit a student's opportunities for online learning. 54% of medical students reported having technical problems with IT equipment, and the frequency of these problems was higher among students in their junior year of tertiary education, according to Bączek et al. (2021). Two dimensions can be used to achieve qualitative interaction: I) Structure: This refers to the educational significance that directs how students engage with the content or with other students; and i) discussion: This describes the discussion that occurs between them.

In a study Lixiang Yan et al. assert that the focus is typically on the structure (i.e., pedagogy) that combines successful student material and student-student interaction in order to quantify online learning and prevent the increase in teaching expenses. In order to measure online learning and prevent the increase of teaching costs, the emphasis is usually on the structure (i.e. pedagogy) that combines effective student content and student-student Lixiang Yan et al. The role of media and technology is generally acknowledged as a way to ameliorate the impact of teaching (Lou, Bernard, & Abrami, 2006). New technological innovations – learning at scale grounded in personal feedback based on analytics– can also allow educators to endorse their communication with pupils (Pardo, Jovanovic, Dawson, Gašević, & Mirriahi, 2019). The sense of isolation caused by online education and learning can be detrimental to student development.

(McInnerney & Roberts, 2004). Ultimately, it is imperative to integrate the aspect of social interaction into the process of online learning, especially when students lack interpersonal, teamwork and communication skills. (Garrison, Cleveland-Innes, & Fung, 2010; Gašević, Adesope, Joksimović, & Kovanović, 2015). Unluckily, existing literature underscores that during the COVID-19 pandemic , online instruction often lacked the aspect of interaction and group projects (Bączek et al., 2021; Yates et al., 2020). Further, in an investigation carried out by Bączek et al. (2021) about half of those studying medicine reported a lack of interaction with their instructors, and only 4% of students were of the opinion that online learning classes are interactive. Along similar lines, a research on high school students by Yates et al. (2020) also exposed that over half of students preferred in-class collaboration over online or web-based collaboration because they valued immediate interaction and intimacy with instructors and peers over in-class interaction.

Education and Virtual Leaning Environment

Hands-on and Immersive learning has assumed substantial significance as a better approach for education worldwide. As a result of increased exposure to educational technology and the internet, as well as the flexible nature of such services and the benefits they offer to students, course instructors, and universities, majority of the higher education institutions are administering online programmes (Ellaway & Masters, 2008). A number of scholarly studies have examined e-learning courses and programs, including application selection and strategic planning, digital educational methods, pedagogical architecture, attitudes, interests, and desires of course instructors and students. As indicated by majority of scholarly investigations, the major barriers include a rapid change from traditional classroom learning to online education, ambiguous curriculum standards of school, limited student input to assist teachers improve instruction, and discrepancies in familiar teaching styles and methods that teachers and students encounter (ARTI, 2021). In order to assess the user's multiple senses, this system commonly employs hand controllers, and head-mounted displays with microphones as instruments. Enhancement of learners' concentration and focus is achieved through immersive learning environments that offer relevant learning opportunities for the acquisition of new skills and knowledge. The Multimedia Cone of Abstraction is based on Dale's Cone of Experience, which states that students become active learners when they engage in a meaningful simulation where they learn by doing predetermined tasks. Students can experiment using virtual reality technology.

Role of teacher

Yang (2011) proclaimed that course instructor must play the leading role to enhance interaction of learners with their teachers and peers actively during online education. The researcher further explained that online teachers must aware different kinds of teaching methods, techniques and strategies to engage the learners in long life and active learning. In this way the instructors can spent the more and result oriented time with the learners during teaching in online mode. Resultantly, online teacher succeed in focusing the attention of learners to significant ideas and topics. Thus, the online instructors require put their efforts in conveying positive and sole messages to specific students to build trust for online students.

Research Design

A research designs the supreme plan for carrying out a study that describes the steps for gathering and evaluating data (Leavy, 2022). In this research, researcher used cross sectional survey method for the collection of data, because cross sectional survey method has many benefits (Marshall 1996). The cross sectional design was applied to the research.

Findings

- The level of students' perception was medium online experiences. Similarly, the level of students' perception was medium about the subsidiary factors of online learning experiences like teacher, peers, assessment and feedback; and availability of online learning resources. Its means that the students were not highly satisfied through online learning experiences.
- The level of students' perception was medium about teacher related online experiences. Similarly, the level of students' perception was medium about the subsidiary factors of teacher related online learning experiences like 'teachers' mastery on content'; 'teachers'' confidence'; 'teachers' sense of humor' and teachers' use of technology'. Its means that the students were not highly satisfied through teacher related online learning experiences.
- The level of students' perception was medium about assessment and feedback related online experiences. Similarly, the level of students' perception was medium about the subsidiary factors of assessment and feedback related online learning experiences like 'quality of course'; 'helpful comments on daily homework'; 'new ideas for preparation of examination'; 'timely feedback on assignments' and 'overall classroom assessment'. Its means that the students were not highly satisfied through assessment and feedback related online learning experiences.
- The level of students' perception was medium about peers related online experiences. Similarly, the level of students' perception was medium about the subsidiary factors of peers related online learning experiences like 'group discussions'; 'role playing'; and 'cooperative learning'. Its means that the students were not highly satisfied through peers related online learning experiences.
- The level of students' perception was medium about availability of learning resources related online experiences. Similarly, the level of students' perception was medium about the subsidiary factors of availability of learning resources related online learning experiences like 'access of digital library'; 'online help by technical staff'; and 'availability of electronic and learning resources'. Its means that the students were not highly satisfied through availability of learning resources related online learning experiences.
- There was a notable difference between the maximum and perceived level of satisfaction of university students. The perceived level of students' satisfaction regarding online learning experiences was lesser than that of maximum level which 5. It means that the students were not satisfied with online learning experiences.

Discussion

The present study was designed to examine the self-perceived satisfaction of university students about online learning experience. Online learning is a specialized learning strategy that needs special arrangements so that students may get familiar themselves as a learning community and have a sense of belongingness (Revaie, 2002a; 2002b).This belongingness thus creates a certain level of satisfaction with the online learning resources. The table 1 of the study shows that the level of students' perception about online learning experiences was medium.The university students were not highly satisfied regarding teacher, peers, assessment and feedback; and availability of online learning resources as these are not interconnected. Previous researches claimed that online learning is all about interaction among teachers, peers and available resources. This finding coincides with the findings of Gray and Diloreto (2016) and confines that the interaction between teacher,peers and resources have a strong relationship which leads to active engagement of the students and ultimately leads to students' satisfaction with the online learning experiences.

Another findings of the study reveals the level of students' perception about teacher related online learning experiences was medium .Similarly, the level of students' perception was medium about the subsidiary factors of teacher related online learning experiences like 'teachers'

mastery on content'; 'teachers'' confidence'; 'teachers' sense of humor' and teachers' use of technology'. Its means that the students were not highly satisfied through teacher related online learning experiences. Online learning is new mode of learning and demands new teaching expertise of teachers. The study results shows lower level of satisfaction regarding teacher related online learning experience. This finding is contrary to the previous research by Kuo,et al.,(2013) that teachers' role in online learning is like the backbone of the whole system and help to involve students in online learning tasks actively.It is important for the educational institution to make necessary training of teachers regarding online teaching in university according to the demands of the new online teaching demands and expertise. This finding open up the new horizons for future research to find out the reasons and for appropriate practical implications to be implemented.

The results shows the level of students' perception about assessment and feedback related online learning experiences was medium. Similarly, the level of students' perception was medium about the subsidiary factors of assessment and feedback related online learning experiences like 'quality of course'; 'helpful comments on daily homework'; 'new ideas for preparation of examination'; 'timely feedback on assignments' and 'overall classroom assessment'.Assessment and feed back are the key elements of any online learning system.This finding coincides with Kelly & Rutherford (2017) that online platforms helps teachers to give immediate feed back on their collaborative course tasks and projects along with monitoring students' individual performance in online learning.

The results shows the medium level of satisfaction of students' perception about peers related online learning experiences and it;s subsidiary factors such as 'group discussions'; 'role playing'; and 'cooperative learning. In online learning collaborative and communicative tasks such as discussions, chats, cooperative learning tasks among peers are very important to make them feel connected to the course and online tasks.This finding coincides with the finding of previous research that concludes that sense of learning community is very necessary in online learning (Lie et al., 2007) and is a fundamental element of any online learning platform (Baker& Moyer,2009).

Recommendations

- It was found that the satisfaction level of students about teacher related online learning experience was not high so it is recommended that an intensive training for teachers may be arranged by the higher education commission (HEC) or administration of the universities.
- The universities may improve the availability of online learning resources and recruit the technical staff for the technical help of the students.

References

Agung, A. S. N., Surtikanti, M. W., & Quinones, C. A. (2020). Students' perception of online learning during COVID-19 pandemic: A case study on the English students of STKIP Pamane Talino. *SOSHUM: Jurnal Sosial Dan Humaniora*, *10*(2), 225-235.

Anderson, T., & Rivera Vargas, P. (2020). A critical look at educational technology from a distance education perspective. *Digital Education Review, 2020, num. 37, p. 208-229*.

ARTI, N. K. (2021). AN ERROR ANALYSIS OF NOUN PHRASE IN STUDENTS'WRITING SKILLS IN DESCRIPTIVE TEXTS (A case Study of the X TKJ 2 Students of SMK N 1 Wonosegoro in the academic year 2019/2020).

Baker, K. Q., & Moyer, D. M. (2019). The relationship between students' characteristics and their impressions of online courses. *American Journal of Distance Education, 33*(1), 16-28. https://doi.org/10.1080/08923647.2019 .1555301

Barbour, M., Huerta, L., & Miron, G. (2018). Virtual schools in the US: Case studies of policy, performance and research evidence. Society for information technology & teacher education international conference,

Basuony, M. A., EmadEldeen, R., Farghaly, M., El-Bassiouny, N., & Mohamed, E. K. (2021). The factors affecting student satisfaction with online education during the COVID-19 pandemic: an empirical study of an emerging Muslim country. *Journal of Islamic Marketing*, *12*(3), 631-648.

Bates, A. T. (2019). Choosing and using media in education: the SECTIONS model. *Teaching in a Digital Age-Second Edition*.

Berge, Z. L. (2005). *Virtual schools: Planning for success*. Teachers College Press, Columbia Univ.

Chu, R. J.-c. (2010). How family support and Internet self-efficacy influence the effects of e-learning among higher aged adults–Analyses of gender and age differences. *Computers & Education*, *55*(1), 255-264.

Davis, D., Chen, G., Hauff, C., & Houben, G.-J. (2018). Activating learning at scale: A review of innovations in online learning strategies. *Computers & Education*, *125*, 327-344.

Duderstadt, J. J., Atkins, D. E., Van Houweling, D. E., & Van Houweling, D. (2002). *Higher education in the digital age: Technology issues and strategies for American colleges and universities*. Greenwood Publishing Group.

Ellaway, R., & Masters, K. (2008). AMEE Guide 32: e-Learning in medical education Part 1: Learning, teaching and assessment. *Medical teacher*, *30*(5), 455-473.

Fallon, C., & Brown, S. (2002). *E-learning standards: a guide to purchasing, developing, and deploying standards-conformant e-learning*. CRC Press.

Gray, J. A., & DiLoreto, M. (2016). The effects of student engagement, student satisfaction, and perceived learning in online learning environments. International Journal of Educational Leadership Preparation, 11(1), 98-119.

Guri-Rosenblit, S., & Gros, B. (2011). E-learning: Confusing terminology, research gaps and inherent challenges. *International Journal of E-Learning & Distance Education/Revue internationale du e-learning et la formation à distance*, *25*(1).

Kelly, D. P., & Rutherford, T. (2017). Khan Academy as supplemental instruction: A controlled study of a computer-based mathematics intervention. *International Review of Research in Open & Distance Learning, 18*(4), 70-77. https://doi.org/10.19173/irrodl.v18i4.2 984

Kocdar, S., Karadeniz, A., Bozkurt, A., & Buyuk, K. (2018). Measuring self-regulation in self-paced open and distance learning environments. *International Review of Research in Open and Distributed Learning*, *19*(1).

Kuo, Y., Walker, A. E., Belland, B. R., & Schroder, K. E. E. (2013). A predictive study of student satisfaction in online education programs. *The International Review of Research in Open and Distance Learning*, *14*(1), 16-39.

Lee, K. (2019). Rewriting a History of Open Universities: (Hi) stories of Distance Teachers. *International Review of Research in Open and Distributed Learning*, *20*(4), 21-35.

Liu, X., Magjuka, R. J., Bonk, C. J., & Lee, S. H. (2007). Does sense of community matter? An examination of participants' perceptions of building learning communities in online courses. *The Quarterly Review of Distance Education, 8*, 9- 24. https://eric.ed.gov/?id=EJ875048

Moore, M. G. (1989). Three types of interaction.

Niemi, H. M., & Kousa, P. (2020). A Case Study of Students' and Teachers' Perceptions in a Finnish High School during the COVID Pandemic. *International journal of technology in education and science*, *4*(4), 352-369.

Oproiu, G. C. (2015). A study about using e-learning platform (Moodle) in university teaching process. *Procedia-Social and Behavioral Sciences*, *180*, 426-432.

Palloff, R. M., & Pratt, K. (2002). *Lessons from the cyberspace classroom*. Wiley.

Peters, M. F. (2002). Racial socialization of young Black children.

Pilkington, C. (2018). A playful approach to fostering motivation in a distance education computer programming course: Behaviour change and student perceptions. *The International Review of Research in Open and Distributed Learning*, *19*(3).

Rivera-Vargas, P., Anderson, T., & Cano, C. A. (2021). Exploring students' learning experience in online education: analysis and improvement proposals based on the case of a Spanish open learning university. *Educational Technology Research and Development*, *69*(6), 3367-3389.

Rivera Vargas, P., & Cobo Romaní, J. C. (2019). La universidad en la sociedad digital: entre la herencia analógica y la socialización del conocimiento. *REDU: revista de docencia universitaria*.

Rovai, A. P. (2002a). Building sense of Community at a Distance. *The International Review of Research in Open and Distance Learning, 3*(1). https://doi.org/10.19173/irrodl.v3i1.79

Rovai, A. P. (2002b). Development of an instrument to measure classroom community. *Internet and Higher Education, 5*(3), 197-211.

Sangrà, A., Vlachopoulos, D., & Cabrera, N. (2012). Building an inclusive definition of e-learning: An approach to the conceptual framework. *International Review of Research in Open and Distributed Learning*, *13*(2), 145-159.

Selwyn, N. (2019). *What is digital sociology?* John Wiley & Sons.

Yang, X.-J. (2011). *Local Fractional Functional Analysis & Its Applications*. Asian Academic Publisher Limited Hong Kong.