

**RESEARCH PAPER****AAGHI Learning Management System (LMS) Portal as E-Learning Forum During COVID-19: Exploring Perception about Use, Usefulness, and Acceptance****¹Dr. Babar Hussain Shah* ²Sana Rashid and ³Maham Shams**

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ABSTRACT

This study has been designed in the context of COVID-19 which resulted in a major shift from traditional face-to-face mode of learning to online mode of learning. Allama Iqbal Open University Pakistan took the initiative by introducing the AAGHI LMS Portal during the pandemic. This study aims to unearth the challenges being faced by the students and teachers at Allam Iqbal Open University Islamabad (AIU) by gauging through perception about the use, usefulness, and acceptance of the AAGHI Learning Management System (LMS). This study is aided by the Technology Acceptance Model. Fifty University teachers and the same number of students (n=100) were selected for this study through the purposive sampling method. The findings of this study revealed that there exists a positive attitude and perception of teachers and students toward the AAGHI LMS Portal.

Keywords: AAGHI Learning Management System Portal, COVID-19, E-Learning, Teachers, Students, Pakistan

Introduction

Today, we are living in an environment that is surrounded by technology, and we cannot escape from its usage. The changes in society are transpiring at such a rapid pace due to the arrival and expansion of new media technologies known as information communication technologies (ICT). Many aspects of modern life have been transformed and reshaped by information and communication technology (ICT). It has also had an impact on education and learning because of the integration of many technologies used for educational purposes, such as PCs, laptops, the Internet, and mobile technologies (Marshall, 2012). E-learning, also known as online learning, is defined as the use of any device with internet access to participate in the learning process from anywhere at any time (Dhawan, 2020). One approach to online learning is to use learning management systems (Almaiah et al., 2020). Learning Management Systems (LMSs) have been more popular among educational institutions and students as a software tool for planning, implementing, and assessing the whole educational process (Jamal & Shanaah, 2011). Knowledge management systems, course management software, and virtual educational or learning environments are all terms used to describe LMSs (Al Musawi & Abdelraheem, 2004). The well-known LMS software solutions used for online learning are Moodle, Sakai, Blackboard, and ATutor. Student enrollment, exams, quizzes, assignments, course management, messaging, and uploading course material are all features of these systems. (Almaiah, et al., 2020).

Since March 2020, when the COVID-19 virus became a worldwide pandemic (WHO, 2020), numerous public and private institutions, including schools, colleges and universities have been affected across Pakistan. From the start of the new academic year in 2020,

Pakistan's education sector faced a major challenge in teaching and learning. Since the commencement of the academic year in March 2020, when the country was quarantined, the Ministry of Higher Education Pakistan has required public universities to offer instructional materials via online platforms. The COVID-19 pandemic struck and nearly incapacitated all nations as far as social and monetary exercises, including Pakistan (Tim COVID-19 IDAI, 2020).

When more cases were reported in the country multitude of instructive organizations and public places, for example, markets, shopping centers, parks, and others, across the country were forced to shut down but the area that was significantly affected was the educational institutions of the country. This situation demanded a more efficient system of delivery of education by allowing the students to continue their education uninterruptedly.

In the backdrop of the above situation, some already introduced terms have become common in society which include online learning and or education from home. LMS (Learning Management System) is a framework or idea of instruction that uses data innovation in educating and realizing, where learning is orchestrated utilizing digital gadgets or PC framework to help the learning cycle (Alnssyan & Magel, 2020). Allama Iqbal Open University provides the AAGHI LMS portal for students and teachers as a strong e-learning platform in which a larger number of students and instructors altogether expanded their knowledge during the COVID-19 pandemic.

The guidelines through LMS influence the learning process of the students. Nonetheless, students on every level need to continue learning it is done through online platforms like Aaghi LMS. This is the LMS portal also provides audio-visual access to the students as well. (Sun et al., 2020) stated that visual properties make an interactive and informative platform for better learning. For the instructors, one of the basic objectives of educating in the class is to assist students with advancing their learning objectives (Han et al., 2020). AAGHI LMS portal also serves as a classroom and administration arrangement of educating and learning exercises that can be utilized effectively when users visit the AIOU (Allama Iqbal Open University) Official site (Ebner et al., 2020).

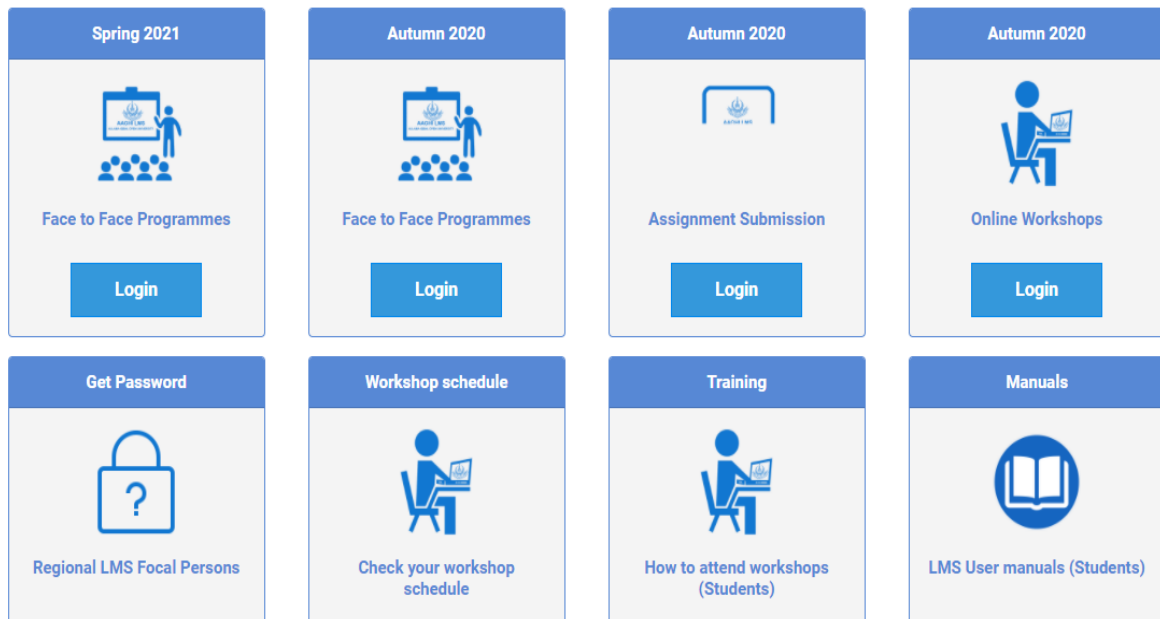
WHY AAGHI LMS Portal?

The pandemic of COVID-19 has affected every aspect of human life and activity. So, resultantly a dire need was felt to devise such a software that helps the students and tutors to continue the process of teaching and learning in an uninterrupted matter. As a result, this Learning Management System (LMS) was efficiently adopted by the University in the backdrop of the pandemic and to cater to the academic needs of the students of Allama Iqbal Open University (AIOU).

AAGHI LMS Portal

AAGHI LMS Portal of Allama Iqbal Open University provides online classes and students can also participate in these classes, teachers can upload presentations, and students not only attend their classes online but also make notes and submit their assignments to their assigned tutors. AAGHI LMS Portal is a blended learning approach that students can utilize freely (Suhada et al., 2020). Instructors can make their classes and offer the class code or welcome students to participate and make the interactive session. University students can be welcomed to join classes utilizing private codes or consequently imported from the University space (Dabbour, 2016). AAGHI LMS Portal provides a platform permitting students and teachers to take photographs and join tasks, share records from different applications, and access data. Resource person has access to control participants' presence and control to make students presenters as well. This portal also offers ease to Resource persons to manage and control all the activities of its students (Hamid et al., 2015).

AAGHI LMS PORTAL



Applications of the AAGHI LMS Portal

By using the AAGHI LMS Portal university students can listen, record, and watch online lectures and participate and give presentations on AAGHI LMS Portal. students can sign in on the framework utilizing a student ID and password provided by the Allama Iqbal Open University. After the class is made, instructors and the moderator can welcome University students to join the class by sharing a code, which is a blend of letters and numbers (Rae & O'Malley, 2017). AAGHI LMS Portal gives a spot to teachers to depict the profile of the class. In this part, teachers can likewise embed schedules, class rules, or different rules. Moreover, the AAGHI LMS Portal likewise gives Announcement highlights (Wash, 2014). Through this component, the moderator can undoubtedly share significant declarations for all understudies. In the task highlight, the AAGHI LMS Portal additionally makes it simple for speakers to give talks. Instructors can likewise finish the task with other data, for example, portrayal, cutoff time, and the addition of various pictures, directions, recordings, and videos (Muir et al., 2020). AAGHI LMS Portal additionally presents the Grading area, which provides complete details of their marks and attendance percentage. which is utilized to summarize university students' evaluations. (Trees & Jackson, 2007).

AAGHI LMS Portal Highlights

AAGHI LMS Portal has numerous comforts for students and teachers, for example, a videos sharing option with direct links to YouTube videos, recordings, and audio of lectures and separate student ID which will help instructive organizations to even more effectively educate without actual material, for example, classroom and board, etc. (Yao et al., 2020). Here are a few highlights that truly uphold this web-based learning.

Students Assignments

Students easily upload their assignments and after checking tutors mention marks and remarks on the AAGHI LMS Portal. Each downloaded assignment will be saved. The submitted assignments are graded by tutors accordingly and students are provided with an option to preview their grades as well. Hence, the process of assignment submission is convenient for the students.

Rating (Grading)

There is an efficient way of grading that has been provided on the LMS Portal where students can upload their assignments and instructors according to their ease and convenience can grade the assignments in the stipulated period. In the grade section, instructors can write their comments as well which are communicated on students' dashboards as well.

Interactive Correspondence

The friendly interface of the portal provides an opportunity for interactive correspondence between both instructors and students as well. Different sorts of media from AAGHI LMS Portal items, for example, YouTube recordings and presentations and video and audio recordings of previous lectures documents can be appended to declarations and posts for sharing substance. The university additionally gives an ID with a password alternative to teachers to send messages to at least one understudy in the AAGHI LMS Portal interface.

After the adoption of the Learning Management System (LMS) which is branded as Aaghi LMS in Allama Iqbal Open University, it is also of vital importance to know the strengths and weaknesses of this system. In short, a SWOT analysis is required to make this LMS more efficient for tutors and students. As a result, this research is inevitable which is aimed at exploring perception, use, and usefulness in Pakistan. The outcome of this research is expected to help make the function of the LMS portal more efficient in terms of usefulness and usability as well.

Literature Review

Technology Integration in Teaching during COVID-19

The COVID-19 pandemic has affected all activities including the educational sector as all nations of the world, including Pakistan, have temporarily shuttered numerous preschools, schools, and colleges to prevent the spread of COVID-19, affecting 85 percent of pupils globally (UNESCO, 2020).

A study conducted by Alturki, & Aldraiweesh (2021) has found that the students' desire to use LMS during the pandemic had some beneficial effects on the students and their perceived closeness, reference of their peers, and subjective well-being were positively associated with their perceived usefulness perceived as ease of use. It was further elaborated that students' intention to use LMS is impacted by the perception of ease of use of LMS.

Trust & Whalen, (2020) study shows that some instructors used the ICT tool of video conferencing for teaching purposes. Many instructors, on the other hand, complained about technical issues with Learning Management systems.

Ebner, M., Schön, S., Braun, C., Ebner, M., Grigoriadis, Y., Haas, M., & Taraghi, B. (2020) have worked on E-Learning readiness keeping in mind barriers, enablers, and bottlenecks from the perspective of the department that was working or planning for the implementation of E-Learning in the backdrop of COVID-19. According to their research, an enabling environment was already available to adopt e-learning as a new normal in their university. They also mentioned the availability of hardware and poor internet connection were also among the problems being faced by the students and instructors.

Aisyah et al., (2020) stated in their study that there's a dire need for all educational institutes to provide suitable platforms for their pupils using digital resources and materials.

Mohammadi, Mohibbi,, & Hedayati,. (2021) have worked on the factors and challenges faced during the pandemic in Afghanistan. Researchers used qualitative research methods by conducting semi-structured interviews with 100 respondents which comprised of students and teachers from different universities of Afghanistan. According to them, technical issues influenced the use of LMS amongst the students and teachers. They further found that the university also faced the lack of documented policy about e-learning in different universities in Afghanistan. They observed the resistance to change among the faculty members who were not prepared to accept the change in the form of LMS. The study also found that economic factors, especially among the students, were also seen as hurdles due to the low or poor socio-economic status of the students.

During the COVID-19 pandemic, there is a dire need for a shift in terms of traditional to e-learning mode of teaching [UNESCO], (2020). For this shift most important role played by teachers and educational institutes, management is to motivate their students and faculty members to use online platforms for learning. As a result, professional training should be used to incorporate technology into education (Guillén et al., 2020). During this era of change, instructors were under pressure to obtain knowledge and skills to teach their pupils using digital virtual platforms. Meanwhile, integrating technology into educational institutions has been a hot subject on the world stage for decades (Daniela et al., 2018).

In such a manner (Jamil et al., 2020) examined the uses of e-learning platforms in the board frameworks at the Malaysian Open University. The researcher utilized the contextual investigation approach and chose a sample of n= 235 undergraduate students. Results uncovered that there were a positive attitude and e-learning platforms, and most students were satisfied by using different learning management systems.

Furthermore, particularly in wealthy nations, online learning has been proven to be beneficial (Basilaia & Kvavadze, 2020). While online teaching and learning have improved significantly in poor countries such as Pakistan, numerous hurdles still exist that limit the efficacy of ICT integration in education (Salam et al., 2017). According to (Shehzadi et al., 2020) many Pakistani universities and colleges use LMS for flexible learning approaches and findings also suggest that these learning management systems are convenient for learning purposes. Teachers' digital competency in terms of creating pedagogical lessons, on the other hand, is insufficient (Farid et al., 2015).

It is pertinent to mention that instructors in Pakistan did their best to continue educating pupils, but they faced many problems in remote teaching and were unable to effectively assign interactive activities among students This need demands a thorough evaluation of Pakistani tutors' online professional development. Different universities, schools, and colleges in Pakistan took different steps to adapt according to the everchanging situation that resulted from the unexpected pandemic of COVID-19. They adopted different strategies universities benefitted from Zoom meetings, schools also used WhatsApp to inform students about different activities related to homework. It was like a challenge both for the tutors/ educators and students as it required a shift from the traditional mode of the teaching-learning process. It was also the need of the hour as well to adapt according to the prevailing conditions. As a result, different institutions formulated strategies to cope with the ever-changing circumstances accordingly. Notwithstanding challenging circumstances, different countries of the world adopted strategies for online education, and likewise, Pakistan was also not lagging, Allama Iqbal Open University (AIU) took the initiative as well in the form of Aaghi Learning Management System (LMS).

To conclude the above literature, there still exist challenges for the instructors and students of developing countries, and one of those challenges is internet accessibility; specifically for students who belong to remote areas. There is a plethora of issues, problems, and challenges in developing countries regarding the adoption and application of new technologies. Different countries of the world strived accordingly. Available literature also suggests that there is a dire need to train the users extensively by conducting training workshops and on-hand training as well.

Perception about AAGHI LMS: Ease of Use and Effectiveness

In the scenario of COVID-19, most educational institutes used social networking sites and Google classrooms for educational purposes. (Nisar et al., 2019). It has been agreed with (Nisar et al., 2019) that an academic organization needs to focus on the adoption of e-learning tools like AAGHI LMS. We need to admit that in the new-normal situation, a Learning Management System is the need of the hour. According to (Ranginwala & Towbin, 2018) university teachers and students, both agree that e-learning is an effective model of the teaching-learning process. (Jarrahi, 2018) also agree with that conclusion in another research. Additionally, this was affirmed by a study in Veszprém, Hungary in which many respondents lean towards online stages to convey and share information. Moreover, (Ansari & Khan, 2020) explored the utilization of online platforms on cell phones to help information sharing between instructors and understudies in Higher Education. The specialists utilized a cross-sectional examination and chose an example of n= 360 members from Eastern India. Results demonstrated that because of convenience, openness, and proficient speed, members consider online media and cell phones as a significant piece of the learning process. Online media provide more flexibility for students and teachers and provide many platforms for learning and sharing data (Omalaja et al., 2011). Indeed, even in emergencies, internet learning gives unhindered learning and training options to the students. (Hart et al., 2019) additionally researched the probability of virtual learning and its likely results on understudies' scholastic execution. To examine this wonder, the analysts utilized quantitative research and found that many students and teachers have no knowledge of how to use online platforms for learning and have no idea about the study material available on online platforms. (Peach et al., 2019) investigated the acknowledgment and effects of LMS on college students. Results revealed that apparent usability and high adoption rates are present for e-learning platforms. Other than university students, instructors also use the eLearning platform to improve university students learning capacities (Istifci et al., 2011).

The above-cited studies provide support to unearth some new horizons regarding the ease and effectiveness of the LMS portal. It is also important to evaluate that Aaghi LMS at AIOU provided support to the students. We need to further explore the ease of use and effectiveness of the portal as well.

AAGHI LMS Portal relationship with perceived use and usefulness

According to (Yuen & Ma, 2008), successful scholastic utilization of innovation depends on instructors' and tutors' perspectives and acknowledgment of innovation. To examine teachers' acknowledgment of an Internet learning stage, analysts gathered information from n=152 instructors (in-administration) from Hong Kong. Discoveries demonstrated that apparent usability among teachers is immensely crucial. The specialists further reasoned that development in saw usability emphatically influences a person's goal to embrace an e-learning framework. As verified by (Chen & Tseng, 2012), e-learning isn't restricted to utilizing period or put and can convey an adaptable and reasonable learning climate for teachers to empower advanced proficient capability. The examination additionally found six measurements for the execution of e-learning frameworks in arising states, including association and administration quality, base and framework predominance, course, and data quality. To additionally approve this marvel, (Owusu-Ansah,

2013) led an online review and chose a sample of n=114 employees from Universities in the United Kingdom. Results uncovered that web self-viability is related to the use of web-based learning innovation among personnel. Moreover, the personnel's higher commitment to web-based learning innovation could prompt more prominent web self-viability. The analyst additionally suggested there is a need for training at the faculty level for Perceived Ease of Use and learning management systems Acceptance. (Alqudah et al., 2020) contended that eLearning is creating a novel worldview of traditional teaching systems to an improved method of getting and spreading information among understudies and educators.

Nonetheless, the contextual analysis of (Dash, 2019) finished up, which relies upon the ability of scholarly advancement to engage versatile responses towards continuous mechanical changes. The Perceived Ease of Use emphatically influences apparent value, which is fundamental to gauging the accomplishment of the e-learning framework. (Carter & Berlin, 2003) inspected the components ascribed to apparent convenience in learning. The specialist utilized quantitative methodology and chose an example of n=189 undergrad students. Results showed that e-learning depends on many factors, i.e., learning environment, course conveyance, instructor characteristics, and encouraging conditions. This study's findings supported three hypotheses out of four main hypotheses with 62.5% of the complete change in the pre-administration instructors' apparent convenience of e-learning. As indicated by (Karim, 2004), in the 21st century e-learning platforms are central components of an education system, which persuades students to acknowledge new ways of learning and provide knowledge in an easy-to-understand way. In light of the above-cited literature, the following four hypotheses are developed.

Hypotheses

H1: It is more likely that a positive connection exists between the perceived ease of use of the AAGHI LMS Portal and information sharing

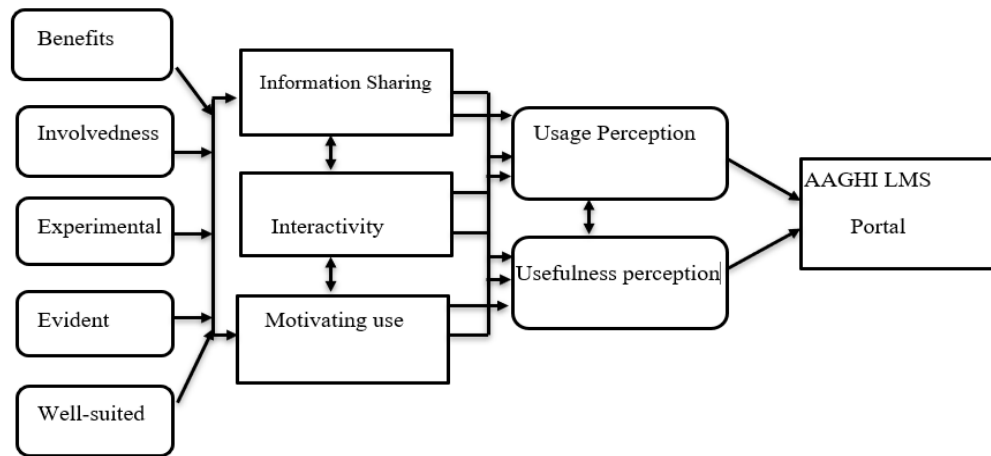
H2: It is more likely that there exists a positive connection between information Sharing and the Perceived Usefulness of the AAGHI LMS Portal

H3: There exists a positive connection between perceived ease of use and AAGHI LMS Portal acceptance

H4: There exists a positive connection between perceived usefulness and AAGHI LMS Portal acceptance

Theoretical Framework

Several examinations explored students' insights concerning LMS (Habes et al., 2021). Notwithstanding, not many or no examinations enquired about the instructors' point of view concerning acknowledgment and reconciliation of the Learning management portal during COVID-19 in Pakistan (Luke, 2020). The researcher utilized the Technology Acceptance Model (TAM) with the expressed theories. Hassan et al., (2019) study verified TAM clarified apparent convenience and saw value as far as "psychological cycle and social impact." Thus, Figure 1 underneath upholds the innovation acknowledgment, particularly during COVID-19.



Keeping the nature of the study in mind the Diffusion of Innovation hypothesis by E.M Roger (Lanlan et al., 2019) gave a baseline for the study which has further been endorsed and supplemented by the Technology Acceptance Model (TAM) as both depict the foundation factors, working primarily as the elements of innovation acknowledgment (Al-Emran et al., 2018) intricacy, similarity, perceptibility, relative preferred position, and trialability. So, TAM is ideally applied in the backdrop of the diffusion of innovation model.

Material and Methods

The researcher conducted this investigation through a survey research method when COVID-19 badly influenced the educational social structure of Pakistan and it has been used by (Saqlain et al., 2020) in their research study as well. It is reiterated that to acquire information, the researcher utilized the survey research method and collected data by closed-ended questionnaire as the same method has been used (Panday, 2020).

Research Design

This study is quantitative as it gathers data in numeric form and results were also interpreted through descriptive and inferential statistics.

Research Tool

To ensure the validity of research data researcher designed a research tool under the supervision of subject experts. This tool is a self-administered questionnaire that is developed to analyze the responses of students and tutors about the LMS portal. Intercoder reliability analysis was conducted to ensure reliability. (Lavrakas, 2012) stated that intercoder reliability analysis is important to know the validity of interpretation in survey research design and without intercoder reliability data collected by the survey are not valid and reliable. The researcher used the Cronbach Alpha test and the value $\alpha=0.880$ of Cronbach alpha affirmed the reliability of the research instrument.

Population

The population of this study comprises the students and resource persons/instructors of the University.

Sample

The sample consists of (n= 100) students and resource persons who participated in the online workshop organized by the University through the usage of the LMS AAGHI Online Portal.

Sampling Technique

The purposive sampling technique is a sampling technique that is purely based on the researcher's judgment about the sample to be chosen. The purposive sampling technique was used for sample selection as this sample comprised only those respondents who were using the LMS Portal (Etikan I., et al., 2016).

Variables of the Study

Perceived Ease of Use

It is about how the respondents consider or think that they can easily use the LMS portal and it's the independent variable.

Information Sharing

It means that information sharing will depend on the perceived ease of use which means that information sharing is a dependent variable.

Perceived Usefulness

It is about how the respondents consider or think that the LMS portal is useful for study-related purposes.

Portal Acceptance

It will depend on the usefulness of the portal. So the more the portal is useful the more respondents are likely to accept the LMS portal.

It is further to mention that the researcher used regression analysis as it is used to predict the association of the Aaghi LMS Portal with other factors like perceived ease of use and usefulness.

Results and Discussion

Demographical Data

Table1
Demographic Data

S.no	Criteria	Factors	Percentage
1	Gender	Female	13%
2		Male	87%
3	Age	(26 to 35) years old	79%
4		(36 to 44) years old	17%
5		Above 44 years	4%
6	Studies level	Graduate	60%
		Undergraduate	30%
		Others	10%

Table 1. shows the demographic data of respondents 87% male and 13% female. Similarly, 79% belonged to the 26 to 35 age group, 17% were between 36 to 44 years 4% of respondents belonged to 45 or above ($M= 1.23$, $SD= .504$). Furthermore, 60% of respondents belonged to graduate level 30% were allied with undergraduate level studies only 10% belonged to other courses. IBM 22 version statistical package of social sciences used for data analysis.

It is pertinent to mention that the Likert scale for effectiveness was developed after reviewing different scales of effectiveness. In this study effective means that LMS is effective but the respondent is not telling or elaborating the extent of effectiveness, very effective means more effective, and moderately effective means that LMS has an average level of effectiveness (Linacre, 2002).

Table 2
Effectiveness of AAGHI LMS Portal as a Learning Medium

s.no	Perception about the effectiveness of the Aaghi LMS portal	Effective	Very effective	Moderately effective	Total
1	Helpful in downloading and recording of lectures	41%	52%	7%	100%
2	Aaghi LMs portal provides easy learning techniques	36%	48%	16%	100%
	Speedy learning process	31%	43%	26%	100%

Table 2 shows that the execution of the AAGHI LMS Portal as a learning medium helps download and record lectures in general has been very viable with a pattern level of 52% of respondents believing the AAGHI LMS portal is very effective 41% believe AAGHI LMS Portal is effective and only 7 % believe that AAGHI LMS Portal is moderately effective. The viability of the AAGHI LMS Portal provides easy learning techniques as an e-learning stage for every factor is successful and 48% of respondents believe the AAGHI LMS portal is very effective 36% believe AAGHI LMS Portal is effective and only 16 % believe that AAGHI LMS Portal is moderately effective. The Effectiveness of the AAGHI LMS Portal as a speedy learning process 43% of respondents believe the AAGHI LMS portal is very effective 31% believe AAGHI LMS Portal is effective and only 26% believe that AAGHI LMS Portal is moderately effective.

Table 3
Teaching assessment and planning by using the AAGHI LMS Portal

S.no	Teaching assessment and planning	Percentage	Status
1	AAGHI LMS Portal met all capabilities	87%	Very Suitable
2	Students and teachers have full access to the AAGHI LMS Portal	78%	Suitable
3	Standard of Content and HEC Policy	76%	Suitable
4	The learning management system represents all documentation and study material properly	79%	Suitable

In the above table suitable means that suits the needs of the students but it does not elaborate on the extent of suitability, while very suitable indicates the strength of suitability which indicates that the portal is more or highly suitable and meets the needs of the students to a greater extent. Table 3 presents that the Implementation of Learning as indicated by RPS (87%) has met the capabilities. For teachers and understudies approaching the AAGHI LMS Portal is proper (78%), and the satisfaction of the cycle norms and the substance principles of the execution of instruction dependent on the National Education Standards and Standards of the important tertiary organizations has been suitable (76%). Besides, learning can be recorded and can likewise be represented appropriately (79%).

Table 4
Reliability test

S.no	Items	Construct	Cronbach Alpha	Status
1	H1	The positive connection between perceived ease of use of AAGHI LMS Portal and information sharing	.758	Supported

2	H2	The Positive Connection Between Information Sharing and the Perceived Usefulness of AAGHI LMS Portal	.757	Supported
3	H3	There is a positive connection between Perceived Ease of Use and AAGHI LMS Portal Acceptance	.751	Supported
4	H4	There is a positive connection between Perceived Usefulness and the AAGHI LMS Portal	.763	Supported

The scientists utilized Descriptive Data analysis for the complete recurrence, and level of the reactions by utilizing the SPSS (Mohammadi, 2015) The scientists directed the measurable investigation in two stages. Firstly the researcher determined rates and frequency of demographic data (ii) Secondly the researcher utilized Regression Analysis (Multiple) to survey the proposed research speculations. As per (Šumak et al., 2011), it is an amazing asset to inspect the anticipated exploration propositions. Further, it can likewise assist the analysts with featuring the unique systems by showing which variable affects others and how they are linked with each other.

Table 5
Hypotheses Testing by Multiple Regression Analysis

H	Connection	β	P-v	t-v	Track	Results
H1	Information sharing > Perception about ease of use of AAGHI LMS Portal and usefulness	.468	.004	5.061	Positive**	Supported
H2	Interactivity > Perception about ease of use of AAGHI LMS Portal and usefulness	.517	.000	8.004	Positive***	Supported
H3	Motivating use > Perception about ease of use of AAGHI LMS Portal and usefulness	.624	.001	7.041	Positive***	Supported
H4	Learning Management Acceptance > Perception about ease of use of AAGHI LMS Portal and usefulness	.851	.000	15.760	Positive***	Supported

Hypotheses Testing

In this study independent and dependent variable analyses with regression analysis. As (Uyanık & Güler, 2013) Güler, 2013) stated Multiple Regression analysis is the most suitable method for detecting relationships. To address the results, Table 3 below features the R-square, P, and t-values to test the hypothesis. In this manner, observational information fundamentally underpins **H1**, **H2**, **H3** and **H4** ($\beta=.468$, $p=.004$), ($\beta=.517$, $p=.000$), ($\beta=.624$, $p=.002$) ($\beta=.851$, $p=.000$) separately.

The outcomes uncovered a solid critical connection between information sharing, correspondence, inspiration, and utilization, and AAGHI LMS Portal acknowledgment among instructors and students in Pakistan. These outcomes are in line with the study conducted by (Papaj et al., 2018) as they found a solid positive connection between information sharing, correspondence accessibility, inspiration, and use, Learning Management framework acknowledgment, simplicity of use, and saw convenience. As per the scientists, the AAGHI LMS Portal is exceptionally serious and, some of the time, a superior substitute for customary learning techniques.

As AAGHI LMS coordination, reception, and acknowledgment essentially rely upon different social, mental, and attitudinal variables, and these elements are the determinants of innovation acknowledgment. Particularly today, when correspondence, schooling, amusement, and data profoundly depend on online frameworks, the maximum number of teachers and students favor e-learning to proceed with their process of teaching-learning. (Vululleh, 2018).

Bao, (2020) concludes that online education requires a relevance between student learning and instructional design, a strong support system must exist that provides support by teachers/teaching assistants to the students. It further demands higher participation from tutors and students.

As per (Finch & Hernández Finch, 2020), the Covid-19 emergency is making a few difficulties for the instructive framework around the world. Because of the closure of schools, colleges, and universities, it is becoming more challenging for students and teachers to adapt new normal of LMS more effectively (Ebner et al., 2020).

During the Covid-19 flare-up online training appeared to be the lone way and it seemed filled with hurdles, especially for the developing nations. Non-industrial nations bridled all the potential ways to proceed with the instructive cycle through the innovation of LMS. Against the backdrop of COVID-19, governments digitized the instructive climate, and tutors also embraced e-learning to convey existing course content through newly devised LMS. It has also been discovered that agricultural nations also faced issues in the adoption of innovation of LMS because of the poor infrastructure. It is important to mention that in today's world distant learning with the help of LMS is proving helpful for students and teachers alike (Tim COVID-19 IDAI, 2020) Particularly, Pakistan is a non-industrial nation, where the instructive framework exceptionally depends upon conventional homeroom learning framework Covid-19 antagonistically influenced the proper learning climate. Conventional learning designs restricted mechanical openness, and less innovation mindfulness among educators, additionally raising numerous worries for the instruction framework in Pakistan. Similarly, just 11% of instructive foundations have a Learning management framework, with just 68% of students having the monetary help to incorporate Learning management. Concerning advanced education, universities in Pakistan do not have an efficient and state-of-the-art Learning Management System to adapt to the current difficulties. In any case, receiving e-learning during the lockdown was the best and most accessible alternative. Essentially, the Government of Pakistan additionally acquainted instructive substance with broadcast on TV stations for an unhindered instructive interaction (Bialek et al., 2020). In this specific circumstance, an improved, adaptable, and open learning climate needs the incorporation of a relative multitude of current procedures. In the context of the Technology Acceptance Model and Learning, it has been found that e-learning is profoundly appealing.

Almaiah et al., (2020) similarly asserted in the study that there is a lack of agreement about the significant challenges and factors that affect the successful usage of e-learning systems during the COVID-19 pandemic.

Despite numerous difficulties likewise exist, the learning management system offers a few advantages that guarantee its acknowledgment. Learning Management System (LMS) despite issues offers flexibility to students and teachers both in comparison with traditional classrooms' environment. It likewise contains a relatively favorable position, discernibleness, intricacy, trialability, and similarity that recognize it from the conventional classroom learning environment. Numerous ideas credited to innovation reception similarly exist both in TAM and the Diffusion of Innovation hypothesis. So, both models-diffusion of innovation and technology acceptance can be used regarding the acceptance and adoption of any innovation in society (Dhawan, 2020).

Conclusion

There is indeed a greater reliance on internet technologies during the Covid-19 pandemic. Users throughout the globe rely significantly on digital networks to interact, educate, & learn. The study found that perception about ease of use greatly influenced motivation and sharing of information as well. Some challenges exist regarding the effectiveness of the portal as well, and technical issues stand more prominently with other challenges explored. Even though in comparison to other nations, Pakistan seems to have a relatively poor technical infrastructure but also the ICT uptake is sluggish, the Education Ministry places great value on LMS as just a tool for teaching and learning (Ibrahim et al., 2020). Moreover, educators could indeed play a significant role in attempting to persuade learners to apply & accept e-learning systems even during the COVID-19 disease outbreak. However, at the moment, it is extremely important to assess instructors' perspectives on technological adoption as well as its possible impact on students' academic achievement (Abbasi et al., 2020). Furthermore, This study also fills the gap of the study conducted by (Hart et al., 2019) in which researchers found that most students found virtual learning troublesome and inadmissible. However, the findings of this study elaborate on the effectiveness of the LMS Portal which has been supported by the hypotheses as well. This portal has been equally helpful for understudies and tutors/resource persons; especially in the backdrop of the COVID-19 pandemic. The study further highlighted that there exists a relationship between perceived ease of use and information sharing as well.

Recommendations

1. Research ought to be conducted to ensure the efficacy of LMS being used by AIOU.
2. There is a margin to conduct a study on the same area with larger sample size to ensure the generalizability of the study.

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