Covid-19 Effects Towards University Students

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ABSTRACT

The objective of this research was to study the relationship of seven independent variables (factors) which are administrative support, course content, course design, instructor characteristics, learner characteristics, social support, and technical support on the affect's quality of E-Learning in higher education students during this massive pandemic COVID-19. The study aims to explore the quality of e-learning in higher education from the students' perspective. There is a need for future studies to expose the quality of e-learning in higher education in the post-COVID-19 pandemic. Further researchers will bring the performance level of e-learning during the COVID-19 pandemic.

Keywords: E-Learning, Quality, Student's perspective, Covid-19 Pandemic, Higher Education

I. INTRODUCTION

Individuals, organisations, and nations all place a high value on education as a means of advancing their growth. Education is defined as the learning method, or the development of information, abilities, beliefs, morality, conviction and behaviours. Tutoring, coaching, writing, discussion and guided study are education approaches. Education is in several places separated into stages and methods. Technological advances, the growth of the modern age and the internet have influenced many fields, including education. Education centres depend in not only learning, but also with the students engaging in science, creativeness and innovation. Schools and universities need to develop and collaborate together with organizations to develop new solutions for the evolving society.

As of March 2020, a pandemic COVID-19 outbreak happened across the world causing schools and universities to close down. Because of that, students have been having hard times trying to adapt into new norms which is learning through online or e-learning. The preparing of content for e-learning is often difficult when students are not able to navigate the materials or lack knowledge of the content of the materials (Bovill, 2020; Bovill & Woolmer, 2018). However, there are some people agreeing that e-learning has more advantages and benefits than face-to-face classes. The e-learning portal is well suited for students in universities to encourage student participation (Hussain et al., 2018). Some also stated that the learning system is really immersive so that the teaching can be organised with visual materials and stimulating learning (Marutschke et al., 2019; Tomas et al., 2019).

191 counties were impacted by COVID-19 out of 195 countries across the world. Because many learning institutions had to shut down due to lockdown, many of them opt into conducting online classes and e-learning for students to continue their studies. Online classes and e-learning is still a new experience for many students across the world. Because of that, teachers and lecturers have been trying different methods of e-learning to find which method suits their students the most. ZOOM, Google Classroom, Moodle and Blackboard are common classroom teaching and learning apps. They play a crucial role in transitioning from face-to-face classrooms to virtual and e-learning platforms (Stone, 2020). While e-learning is indeed a concern to teachers and students (Kuhad, 2020), academics incorporate this e-learning process by providing the devices and the internet to ensure that e-learning flows smoothly.

There are a few things which the education sectors can do to increase the quality of e-learning during the pandemic COVID-19. One of the things that they can do is to upgrade the technological facilities continuously as per the change of the trends (Elumalai et al., 2020, p 734). By doing that, it will bring more benefits and improve the quality of e-learning for the students. Helping students financially is also another factor that can help a lot of university students. There is a need to include financial support in transforming student mapping from a traditional method of education into a new system of e-learning (Darling-Hammond et al., 2020). E-learning must also be linked with the core values of reading, writing, comprehension and the mathematical skills that students need for the sustainability of the competition (Madani, 2019). Thus, the framework of this study is composed of high-indexed articles, published results and analysis that has been addressed using the different concepts and functional knowledge. The findings were reviewed, detailed, based on student perspectives and concluded with a view to future study.

This research aims to show the significance and value of e-learning efficiency during the COVID-19 pandemic in higher educational lessons. The research also sought to emphasise the use of technology to meet the students' needs of high-quality education and standards. The research is also included in India's and Saudi Arabia's students. The research is significantly limited by travel constraints and closed-down universities. The study findings will allow university decision leaders, government policymakers, teachers and students to prepare their efforts to improve the efficiency of e-learning. The purpose of the study was designed to spot the standard of e-learning within the higher academic

establishments from the educational point of view, and plenty of research teams portrayed the executive support, course materials, course structure, teaching style, learner capabilities, support networks, and technical advice and also conveyed the significance and demanding role within the standard of e-learning. Researches associated to students of India and Saudi, particularly during the COVID-19 pandemic in higher education institutions, are uncommon. The research therefore fills the recent research gap. In this analysis the current literature was reviewed to identify the e-learning variables and use them to determine the education standard.

II. LITERATURE REVIEW

Because of the COVID, the whole of the school sector has been severely impacted and has had to expand to include the current phase of schooling dubbed "e-learning". There is still a lot of electronical learning going on at this new-stage of learning such as the ability to add lessons online, as well as an online class portal where students can search for any relevant details about their academic courses or affairs. This research highlights the importance of e-learning at the higher education level, as well as the problem of this epidemic. Due to the pandemic, the colleges and universities are forced to offer outstanding online education for their end result is to further prepare students has driven it. this investigation could save the higher management from having to make new policies or decisions to enhance e-learning excellency

This rapid increase in e-learning phenomenon began as a result of the virus that threatened to break out across higher education institutions. In order to contain the outbreak, all colleges and schools had to be closed. Based on the research, the project concludes that there are seven variables that influence the excellence of e-level, also known as e-learning. The two factors which are dependant are contingent and autonomous are those which have effects on the students and those which do not. incorporated considerations are a feature that may not vary as a result of administration, course design, teacher qualifications, social backing, and professional assistance. Dependent variables such as the overall experience, how one responds to a part of the course, e-curriculum, and how motivated one is while beginning to study, how invested one becomes, and what the current knowledge represents at, have varying degrees of effect in determining how much information can be retained.

The e-learning environment in higher education uses a learner-centered approach rather than a teacher-centered approach to pedagogy and course design (Debattista, 2018). In e-learning, effective course material will emphasise dynamic learning and student participation (Ashwin & McVitty, 2015). The development of suitable course material has a big influence on how well e-learning works (Little & Knihova, 2014). The quality of e-learning consists of learning resources and supporting materials that students may access through the internet. Assignments, quizzes, and projects may be used to frame the scope of an online course. Students' analysis, logical thought, and problem-solving capabilities develop as a result of this function (Akyüz & Samsa, 2009).

Students learn more effectively in online courses with a well-structured and attractive e-learning course design that includes visual content (Oh et al., 2019). The course material is shown in the course design app. It should be tailored to the degree of competence and anxiety of the students (Ricart et al., 2020). In terms of time, space, and self-learning, the e-learning method outperforms conventional face-to-face classroom learning (Ong & Manimekalai, 2015). (Ahmad et al., 2018). The course is equipped with digital tools in the e-learning approach, which makes learners express interest in learning and quickly grasp the concepts (Khamparia & Pandey, 2017). Owing to time limitations, the course design for traditional learning should use the least amount of digital material possible. Furthermore, appropriate e-learning course design promotes collaboration, and learners enjoy themselves when learning (Liao et al., 2019). The results of the COVID-19 clinical trial have been distributed worldwide. such that students can have a well-deserved sabbatical year after their studies (Murphy, 2020). Consequently, the growth of e-ingly, the education sector is taking place in this upswing in e-learning (Bozkurt et al., 2020). The introduction of a planned and organised online learning infrastructure is not only necessary in the outbreak phase, but is also more important because of the pervasive use of the internet in the pandemic era. In the face of an imminent global pandemic, many institutions have already seen a large shift to online learning.

Instructors can take necessary steps to improve the level of e-learning in order to help students learn more effectively throughout the COVID-19 curfew era (Abbasi et al., 2020). Kebritchi et al. (2017) found that empowering teachers to generate,

shape, and incorporate new ideas and practises in the creation of online course material helps to achieve effective e-learning in higher education. According to the writers Ellis and Goodyear (2010), the teacher can provide timely guidance to the students. As a result, the standard of e-learning in higher education increases as a result of this strategy. Since the teacher is such an important component of education, observing instructor competence and satisfaction by peer review to assess instructor proficiency and performing a satisfaction survey is critical to improving the standard of e-learning (Alrefaie et al., 2020). To plan, introduce, track, and review the change to e-learning, Taha et al. (2020) presented recommendations for forming a working party that involves experts from the curriculum committee, instructional content committee, faculty growth committee, and ongoing quality assurance committee. Furthermore, assessment appraisal methods play an important part in the teaching-learning methodology as it comes to ICT (Malik et al., 2018)

Although further training faculty and staff in administrative procedures is a critical component of introducing an e-learning system in Higher education (Meyer & Barefield, 2010). administrators will oversee the colleges, and tertiary education. They will deal with other facets of education, including regulations, driving, and student wellbeing (Strike, 2018b). When there are many administrators involved with an organisation, they all contribute to the growth of the organisations as a whole (Yang, 2010). There is little administrators can do to prevent the online software from becoming fully entangled in the development and administration stages of implementation (Strike, 2018a). Since the introduction of technology in higher education is imminent in online classes, a well-consistent framework in which all educational institutions may participate is critical in schools is required, it's a good idea to create a collaborative atmosphere in universities and in order to be effective (Barefield & Meyer, 2013; Bolden et al., 2015). Organizational Support Measurement Strategy framework to serve as an expansion of Meyer and Barefield's administrative measurement (ASM). E-learning tools often increases and provides new knowledge of an educator and instructor-feedbacking techniques from an administrator and teacher point of view.

The NMC Horizon Study 2017 (HE Edition) covers the development of expertise and information through interactive platforms, as well as integrated learning, mixed learning, assessing learning results, and more in-depth learning patterns (Adams Becker et al., 2017). A few features of good e-learning, according to Cheng et al. (2019) and Peltier et al. (2007), are contact with professors, teachers and students, course design, course material, teaching efficiency, and administrator help. Teachers and students communicate explicitly in a conventional classroom setting (Martnez-Argüelles & Batalla-Busquet, 2016). Nonetheless, e-learning offers a wide range of solutions, including online for teaching and learning in order to produce desired results (Sarabadani et al., 2017). Interaction with peers in an e-learning environment often improves the consistency of learning (Goh et al., 2017).

The standard of e-learning is significantly influenced by social support. In e-learning courses, family, friends, and teachers can create a positive and supportive environment (Andersson & Grönlund, 2009). Kemp and Grieve (2014) investigated the activities of two classes of psychology students in conventional classroom and e-learning settings. Students like to engage in group conversations with teachers and colleagues over online discussions, but they choose to complete written work such as assessments and tasks online rather than in the classroom. To improve the standard of e-learning, social contact with teachers and interactive interaction with peer students are needed. The success of e-learning can be achieved by intense engagement and continuous practise (Jung et al. 2002; Noesgaard & rngreen, 2015). Shih et al. (2018) suggested a novel algorithm for forming an involved community in order to enhance peer coordination and collaboration.

E-learning sites are valuable resources for higher education in online courses when course design and content are linked to e-learning efficiency (Chivu et al., 2018). In order to accomplish the learning result, technological platforms (Ali et al., 2018) utilised in the e-learning context should be user friendly (Goh et al., 2017). E-learning systems should be simple to instal and operate (Ching-Ter et al., 2017; Kimathi & Zhang, 2019). Students move to online courses with greater fun and pleasure as the programme for e-learning has a consistent framework (Al-Rahmi et al., 2019). Elumalai, Sankar, R, John, Menon, Alqahtani, & Abumelha 737 It is also critical to provide appropriate professional ability instruction to learners and teachers prior to the move to online courses (Roddy et al., 2017; Shahmoradi et al., 2018).

Cuadrado-Garca et al. (2010) found that the standard of e-learning differs, and that there are a few learning strategies gaps between male and female students (Cuadrado-Garca et al., 2010). A moderating influence was discovered in the relationship

between learning persistence and student engagement in online learning environments (Yu et al., 2020). The level of the course and the campus-based environment have a moderating impact on the e-learning experience (Ellis et al., 2009). Furthermore, the moderating influence of e-learning material has an association between perceived utility and students' perceived playfulness (Calli et al., 2013). Furthermore, the amount of course and knowledge, as well as the interaction with the e-learning, have a moderating impact (Binaymin et al., 2018)

Instead of dealing with a number of different symptoms of the COVID-19 virus, a multi-pronged approach must be taken in the education, which has a larger effect on the country's economic development (Choudhary, 2020). Finally, COVID-19 has an effect on the school population reports, but this did not result in any cuts to the school population. To foster the education phase, a suitable infrastructure was needed for the internet, as well as the use of it (European Data Portal, 2020). although at the same time, self-directed learning enables us to keep on learning in the long term, there are lacking well-defined and explicit guidance, teaching is often coming at a disadvantage in terms of the professors having trouble supplying their students with course content (Allo, 2020). When the numbers of higher educational organisations have been using distance learning, it is possible to introduce new versatile modes of learning and more narrowly target it as well as improve it (United Nations, 2020).

III. METHODOLOGY

A. Methodology

The researcher's methodology is the manner by which they must conduct their research. It contains details about the participants, such as who they are and how they will be tested. It also demonstrates how the researchers identify the problem, formulate an objective, and present the findings based on the information gathered during the research period. The research also discusses the instruments used to collect data and how they were used, as well as the methodologies utilized to analyse the data. The methodology consists of the research design, research design, hypothesis, sampling, data collection and data analysis.

B. Research Design

Research design is defined as "methodical, well-organized procedure utilized by a researcher, or a scientist to carry out a specific study" (Yousaf Saeed, n.d, p.1). A research design is required to provide a researcher with a systematic plan for efficiently evaluating problems and their impacts on a variable. Quantitative, qualitative, and mixed methods research are the three types of research. Quantitative research assesses links between variables in the form of numbers, and then uses a statistical method to link findings with replies to develop a hypothesis. Quantitative research, on the other hand, concentrates on the basic 5W 1H questions (What, Where, Who, When, Why, and How), which includes a major question that refers to the goal or problem at hand. At come to a conclusion, data from quantitative research is utilised.

In order to continue the inquiry, a research question must be created. As a result, the research centres on the question "Factors affecting the Quality of E-learning during the Covid-19 pandemic from the Student's point view". An online questionnaire will be used to collect raw data from students pursuing e-learning during the pandemic Covid-19. Nowadays, this is the safest way to conduct research. The Google Forms platform will be utilized for the questionnaire. The proposed analysis design employs quantitative research by distributing 5 Likert questionnaires to respondents. During the COVID-19 outbreak, this quantitative research approach used library research methods to obtain information regarding quality of e-learning during the pandemic Covid-19.

C. Research Framework

Administrative Support

Course Content

Course Design

Instructor Characteristics

Quality of E-learning

Dependent Variable

Learner Characteristics

Social Support

Technical Support

Independent Variable

- H1: There is a positive relationship between administrative support and the quality of e-learning in higher education.
- H2: There is a positive relationship between course content and the quality of e-learning in higher education.
- H3: There is a positive relationship between course design and the quality of e-learning in higher education.
- H4: There is a positive relationship between instructor characteristics and the quality of e-learning in higher education.
- H5: There is a positive relationship between learner characteristics and quality of e-learning in higher education.
- H6: There is a positive relationship between social support and quality of e-learning in higher education.
- H7: There is a positive relationship between technical support and the quality of e-learning in higher education.

D. Hypothesis: Direct & Indirect Effect

The results of the study there are Direct Effect and In-direct Effect of hypothesis. Independent variable item consisting of administrative support, course content, course design, instructor characteristics, learner characteristics, social support and technical support. Part 3 e-learning quality, with six questions for the Direct Effect. Indirect Effect is hypothesis is the extent of the relationship between gender and level of the course and the quality of e-learning in higher education.



E. Population and Sample

Sampling is when a researcher collects a data either through questionnaires, observation or even secondary data, the researcher needs to classify from who the data is collected and what data is needed. It is the process of selecting specifics from a population and gaining an understanding of its qualities and traits in order to categorize these features. The purpose of sampling is to save money, time, and other human resources.

Probability sampling is employed in this investigation. When elements in the population have a possibility of being chosen as sample subjects and representatives are important, probability sampling is used. However, there are two types of probability sampling: simple random sampling and complicated probability sampling. The survey will have a total sample size of 140 respondents, all of whom will be active e-learning. A complete questionnaire will be created for the questionnaire, including questions tailored to the study's scope.

F. Data Collection

The data collection, measuring, and evaluating correct insights for analysis using established approved methodologies is referred to as data gathering. Researchers must sort the respondents for the study based on their opinions on specified study issues. The main data collecting method is questionnaires. Data from the questionnaires is collected after they have been created. Data collection is made easier and more simply sorted because the questionnaires are created online using Google Forms. 50 respondents are given questionnaires in which the participants consist of the level of course, bachelor's year 1, bachelors year 2, bachelors years 3 and 4 and masters.

G. Data Analysis

SmartPLS and SPSS (Statistical Package for the Social Science) will be used in this study to analyse the data from our research proposal. The results of the online survey interview approach were used to gather data on the quality of e-learning. In addition, to achieve the objectives of the study, this study can also use Partial Least Squares (PLS) to facilitate data analysis. According to Hair et al 2016, Partial Least Squares-Structural Modeling (PLS-SEM) has been used in a variety of disciplines. This progress has aided the advancement of PLS-SEM, which is now widely used as a research tool in the fields of management systems and social sciences. Next, PLS also has the ability to analyse variables in complex models, simultaneously. Smart PLS is capable of evaluating two models mainly measurement and structure. SmartPLS is used to assess the quality of appropriate models, indeterminate points, and the most important reliability measure, Dijkstra- Henseler's. In the second point, SmartPLS 3.3.2 was used to analyse the calculation model and the structural model in order to show the power of the positive hypothesis. When using SPSS, there are a number tests that must be completed, including reliability and validity. To see whether there are any significant differences in the scores, test the hypothesis and employ applicable statistical tests depending on the study objectives with correlation and metric for data type.

IV. CONCLUSION

The results are standardised in accordance with the methodologies shown in this research to ensure validity and reliability of the data. To ensure consistency throughout the progression of justifications as well as the display of findings, structural hypothesis and statistical tests were performed using SmartPLS and SPSS. The use of structural equation modelling throughout this study revealed that there is a strong connection between the effectiveness of e-learning as well as the following seven aspects: administration support, course material, course structure, teaching styles, learning outcomes, support networks, and technical advice from the students' point of view. Although, in relation to gender and different course levels, which include undergraduates and postgraduates, the research concluded that there is indeed a large difference between the gender and levels, as well as the quality of e-learning.

The findings clearly indicate that administrator assistance and course material are acknowledged, as well as the valuation represents there will be a need for development in these aspects to increase the quality of e-learning. Furthermore, some changes need to be made to the course material, as well as the technologies, to accommodate integrated e-learning. Additionally, because the execution of the e-learning method is in the control of administrators, higher education institutions must evaluate the level of administrative duties in effort to improve the performance of e-learning. Based on multiple results gathered through various approaches, the suggested conceptual framework improves students' knowledge of the quality of e-learning. Furthermore, it has been demonstrated that the systematic method of e-learning is an excellent instrument for educating students during COVID-19.



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