Impact of Online Learning on the Performance of Business Students

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Abstract
The utilization of information and communication technologies (ICTs) has significantly transformed the education sector by introducing modifications to the execution of diverse educational endeavors. An expanding number of business programs are integrating online and blended learning approaches into their undergraduate, graduate, and executive education programs as a means to address the changing needs of students. The objectives of the study were to find out the effects of online learning on the performance of business students. The qualitative descriptive method was incorporated into the design of this study. Students who were enrolled in the business education program at one of the public institutions in Lahore constituted the participants of this research. The dependent variable was the performance of business pupils, while the independent variable was online education. A structured interview was employed as the instrument for gathering data. The researcher gathered data via in-person visits. Prior to data collection, participants were informed of the purpose of the study through prior appointments, and the confidentiality of their responses was guaranteed. Thematic analysis was employed to examine the data. Results of the study shows that online education has both positive and negative impacts on business education. Moreover, study found some strategies to mitigate the problems during online learning of business students. Ina addition study has some implications for future researches.
Keywords: information and communication technologies, business performance

1. Introduction

The utilization of information and communication technologies (ICTs) has significantly transformed the education sector by introducing modifications to the execution of diverse educational endeavors (Tanner et al., 2009). Higher student achievement has resulted from the increased accessibility and efficacy of teaching and learning processes in universities, which have been enabled by the rapid development of ICTs (Harrell, 2008). This linked academic career performance provides graduates with the opportunity to secure significant employment, transition to a knowledge-driven economy, and contribute to the swift advancement of the national economy. Consequently, the majority of universities and governments in developed countries have made investments in ICTs, specifically e-learning systems (Rungtusanatham et al., 2004; Audi et al., 2021). Consequently, electronic learning systems (e-learning systems) have become a significant development in recent times, revolutionizing the conventional teacher-centric approach to education and instruction in favor of a more student-centric framework. Additionally, this transition affords students the chance to develop their information processing, communication, and problem-solving proficiencies, in addition to their creativity and other higher-order thinking abilities. Indeed, the operation of the system significantly transforms the ways in which instruction, learning, and management of academic endeavors are conducted (Harrell, 2008). It optimizes time management, fosters resource sharing among faculty and students, and enhances the overall quality of instruction and learning(Gillett-Swan, 2017). Although the advantages of e-learning in education and instruction are evident, its effect on the academic performance of business students is challenging to measure and subject to debate as a result of the absence of definitive assertions. Contradictory findings exist, according to some, regarding the impact of e-learning systems on the academic performance of business students (Palloff & Pratt, 2010; Audi et al., 2022).

An expanding number of business programs are integrating online and blended learning approaches into their undergraduate, graduate, and executive education programs as a means to address the changing needs of students (Moawad, 2020). Recent survey results indicate that business administration continues to be the most sought-after field of study for graduate-level programs offered online. An increasing number of institutions, as reported by AACSB statistics compiled from 521 accredited institutions representing 36 countries, are implementing wholly online degree programs across all academic levels. According to the survey, the percentage of colleges that offer online degrees has increased from 25% to 37% over the past five years. While online MBA programs continue to increase in number, online graduate and undergraduate specialty programs have increased significantly (between 67 and 80 percent). An estimated six million students annually enroll in online courses in the United States, representing nearly one-third of the student population pursuing higher education. The number of institutions that offered online degree programs increased from 2011 to 2016. 13.4% of member schools now offer fully online bachelor's degrees, up from 7.6% in 2009-2010, according to the 2014-15 Business School Questionnaire of AACSB International (Kumar et al., 2019). Many institutions anticipate expanding their online offerings in the future years. With approximately one-third of business schools offering distance learning alternatives to their students, either as part of their curriculum or as degree-granting programs, business schools are among the leading providers of distance education.

The utilization of remote learning technologies (Evans & Haase, 2001) has increased consistently over the past decade, and the enrollment of business students in online programs has mirrored this anticipated upward trend. Consequently, the implementation of distance learning strategies is no longer restricted to a select few specialized business institutions. Presently, a number of renowned business institutions incorporate distance learning techniques into their curricula; this has proven to be an acceptable method of delivering high-quality education. Consequently, conducting research on the impact of online learning on the academic achievement of business students is of the utmost importance.

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1.1. Objectives

The objectives of the study were to:
- Find out the effects of online learning on the performance of business students.
- Assess the challenges faced by business students during online education.
- Provide strategies for the improvement of online education for business students.

1.2. Research questions
- How online learning effects on the performance of business students?
- What are the challenges faced by business students during online education?
- How to improve online education for business students.

1.3. Significance

1.4. This research can be used to help educators, students, and industry improve their online learning experience and process. It can also help instructors mitigate the negative effects of online learning, such as worry and stress.

2. Literature Review

2.1. Theoretical Context

A multitude of hypotheses exist regarding the influence of online education (Clarke, 2013) on the academic performance of students. In his theory of distance education, Holmberg describes the conventional approach to assisting a pupil with distance learning. Additionally, motivation, empathy, learner autonomy, and interpersonal communication concepts form the basis of this theory. The notion proposed by Holmberg can be described as a concept that facilitates personalized learning and enables students to acquire knowledge without requiring non-contiguous communication. The investigation also incorporates the theoretical concept of transactional distance. According to Moore's transactional distance theory, communication breaches and separation between the student and instructor are frequently the result of the distance between them. Consequently, this theory elucidates the ways in which the current distance influences both the instructors and the learners.

2.2. Online Education

Online education, or e-education, is transforming the way in which we teach and learn. The considerable transformations in models of education delivery have captured the attention of academics, administrators, policymakers, publishers, and businesses (Carenys & Moya, 2016). The current iteration of online education emerged in the 1990s alongside the advent of the Internet and the World Wide Web (Alsaaty et al., 2016). Since then, it has undergone transformations in tandem with the advancement and sophistication of information and communication technology. E-Learning, or online education, is a form of ICT-based education. The ICT facilities that support this program are a web-based learning management system, a monitoring application, and multimedia and modular supplements (Benson et al., 2010). E-learning refers to structured learning that utilizes a computer or electronic system to facilitate the learning process. E-learning offers the subsequent benefits:(1) Flexible. (2)Independent Learning You have the flexibility to determine when and where you access travels via e-learning. (3) Efficiency in Cost: E-learning empowers students to autonomously guide their own educational progress. E-learning facilitates financial savings for both administrators and learners through the mitigation of expenses associated with providing physical learning facilities, transportation, and accommodation (Krishnamurthy, 2020).

2.3. Phase of Online Education

Dziuban and Picciano (2015) delineate four distinct phases of online education. The initial stage commenced during the 1990s, during which universities and colleges with established distance learning programs, including Penn State World Campus and University of Maryland College, utilized the functionalities of the Internet to rapidly adapt their curricula to online delivery. The University of Phoenix entered the online education industry during this period and ascended to prominence rapidly. The demand for online programs experienced additional growth, and by 2002, an estimated 1.6 million students were registered for at least one online course in the United States.

2.4. Research on Online Business Education

The relationship between the instructional approach and the learning outcomes of distance business education has been the subject of extensive research. This research program has identified that, on average, the level of student learning in distance learning environments is comparable to that in in-person learning environments. (Anwar et al., 2020), for instance, found no statistically significant differences in the test scores of pupils enrolled in Information Technology courses between online and in-person courses. Similar findings were reported by Hay, Hodgkinson, Peltier, and Drago (2004), Leasure, Davis, and Thievon (2000), and Sweeney and Ingram (2001). With regard to a Business Statistics course, Grandzol (2004) found that the caliber of instruction in both in-person and virtual classrooms was equivalent. Comparable outcomes were observed by Friday et al. (2006) and Priluck (2004) with regard to organizational management courses and marketing courses, respectively. Priluck discovered no statistically significant disparities in performance scores between online and in-person offerings. Certain elements of the instructor and the curriculum may influence students' attitudes and levels of satisfaction toward learning in distance learning environments, according to research. Regarding MBA programs, for instance, Hay, Hodgkinson, Peltier, and Drago (2004) found that instructor-student interaction and satisfaction levels can be enhanced through the use of distance learning methods as opposed to traditional in-person classes. This is because the distance learning medium enables students to engage in more open and unrestricted communication with the instructor, transcending the physical confines of the classroom and the conventional time restrictions imposed by class hours. In contrast to traditional classroom settings, online courses exhibited a markedly reduced rate of student attrition. This can be attributed to the increased flexibility in terms of time and logistics that characterized online learning environments. Individuals who are unable to attend in-person classes due to family and work responsibilities, part-time students, or personal preference can still pursue their

academic goals by enrolling in distance courses. These courses provide significantly more flexibility in terms of location and schedule.

2.5. The effect of online education on the performance of business students

In light of recent technological advancements, academic establishments have adopted online learning as a means to surmount challenges linked to traditional in-person instruction. Despite the fact that online learning is readily available, adaptable, and accessible to the vast majority of students worldwide, it is vital to comprehend how this method of education affects student performance in different institutions and countries (Whitaker et al., 2016). The current discourse surrounding online learning has often drawn comparisons between its effects on students' academic performance and those observed in conventional classrooms(Valaitis et al., 2005). Consequently, an abundance of researchers have undertaken investigations to explore these effects. In spite of the learning environment, Alkis and Temizel (2018) assert that students' academic performance is impacted by their personality and level of motivation. An association was found between LMS activities and student engagement, information literacy, and academic achievement, as reported by Avc and Ergün in 2022. Additionally, a variety of factors influence online student satisfaction; for instance, a student is more likely to perform well if the online course materials are intuitive to navigate. Likewise, students whose course designs benefit from the guidance of their instructors exhibit superior performance (Smart & Cappel, 2006). Regardless of the learning environment, self-regulated learning practices are crucial for students' academic success; however, virtual learning has a more pronounced effect on student performance. In addition, grades improved, according to a number of studies that examined the effectiveness of remote proctoring, or the use of internet proctors to oversee students during exams. Among online learning pupils, individual differences in preferred wakefulness and sleep times of day, or chronotype, were also found to be associated with academic achievement. (Muilenburg & Berge, 2005) likewise posit that the completion of an online learning experience enhances the self-efficacy of the student. According to Zimmerman et al. (2016), the authors argue that online learning practices enhance students' self-assurance and drive them towards achievement, as confidence stems from a stronger conviction in one's own capabilities. Moreover, Hong Kong students' virtual learning experiences indicate that their academic achievement is contingent upon both the present learning environment and their own self-efficacy. Information-seeking and online learning self-efficacy, according to Tang et al. (2022), have a significant effect on students' performance proficiency with regard to online learning methodologies. As stated by the authors, these strategies aid pupils in attaining greater academic success. (Nouraey & Al-Badi, 2023) conduct an investigation into the impact of students' self-assessment on their performance in online learning. Self-assessment procedures may facilitate enhanced student engagement, knowledge acquisition, and performance in online learning environments, according to the findings of this study.

Anxiety and tension levels among students are often heightened during online class sessions. Furthermore, interruptions in the physical environment of the students during sessions caused distractions during online teachings. This is supported by a study conducted in Ghana (Robinson & Hullinger, 2008) which found that disruptions in the working environment and high data costs during online sessions negatively impacted student performance. Despite utilizing virtual learning, a subset of undergraduates encountered academic setbacks due to the repercussions of the pandemic.

2.6. Difficulties Presented by Online Learning

Instructors and learners alike encounter a multitude of challenges when utilizing online learning platforms. Instructors face challenges when it comes to creating instructional materials and resources for students, including transparencies, learning videos, discussion forums, and post-tests. In comparison to in-person instruction, instructors were required to prepare a greater quantity of materials for uploading to their SPADA accounts, according to the results of interviews with a large number of instructors (Mandasari, 2020). In addition, instructors are required to assess student work and post-tests in both individual and group settings. Although the fundamental principle of online learning is the ability to complete coursework from any location and at any time, instructors must still allocate time to generate and review student projects. Students encounter challenges that are associated with their interactions with fellow students and instructors (Kim et al., 2005). The investigation revealed that the network's lectures possess certain constraints with regard to student engagement. During in-person courses, students have the opportunity to engage in direct communication with instructors or peers. This interaction may manifest as a presentation, a question-and-answer segment, or a debate. This form of communication is also feasible through digital platforms. However, the implementation is limited to indirect communication. This presents a hindrance for learners attempting to adjust to an instructional method that limits opportunities for direct, in-person interaction. Moreover, network connectivity presents a unique array of challenges. A significant number of pupils who reside in their hometowns have inadequate internet access. In fact, individuals are required to travel to a specific location to obtain faster Internet access. The situation becomes more severe as the available internet quota decreases. Consequently, many pupils encountered difficulties in adapting to the online learning paradigm. However, there are a multitude of strategies at one's disposal to tackle these challenges. Initially, instructors enable students to utilize SPADA from any location and at any time. Furthermore, it is possible for students to lodge complaints directly with instructors while engaged in online education. This is done to ensure that learning objectives are met while maintaining a high standard of learning(Kara et al., 2019).

Additionally, a number of defects afflict e-learning, (Kara et al., 2019)including the following:(1) The formation of values in the teaching and learning process may be slowed by a lack of interaction between lecturers and students, or even among students; (2) academic or social considerations are often overshadowed in favor of promoting business or commercial aspects; (3) the learning and teaching process tends toward training rather than education; and (4) the roles of lecturers have changed from what they were previously.

3. Research Method

The qualitative descriptive method was incorporated into the design of this study. Students who were enrolled in the business education program at one of the public institutions in Lahore constituted the participants of this research. The dependent variable

was the performance of business pupils, while the independent variable was online education. A structured interview was employed as the instrument for gathering data. The researcher gathered data via in-person visits. Prior to data collection, participants were informed of the purpose of the study through prior appointments, and the confidentiality of their responses was guaranteed. Thematic analysis was employed to examine the data.

4. Results

Theme 1: Positive effects of online learning on the performance of business students

Online learning provides flexibility in terms of time and location. Business students have unrestricted access to course materials, lectures, and assignments. The capacity for adjustment empowers pupils to manage their academic pursuits alongside additional commitments, including employment or familial duties. Furthermore, students are required to effectively manage their time when enrolled in online courses. Business students are instructed in the areas of task prioritization, meeting deadlines, and schedule organization. Time management is a critical aspect of the business environment, where these skills are advantageous. Additionally, respondents noted that online learning provides students with access to an array of digital platforms and resources. The application of technology to communication, research, and collaboration is taught to business students. These skills are essential in the digital workplace of today. Online platforms enable students to learn at their individual pace on a regular basis. Business students have the opportunity to review course material, revisit lectures, and focus on specific areas that require further practice. This customized methodology caters to an array of learning modalities. Online courses attract students from a diversity of regions and backgrounds, according to some respondents. By interacting with peers from around the globe, business students gain a deeper understanding of cultural nuances, global business processes, and alternative perspectives. Furthermore, online education eliminates the need for physical classroom infrastructure, textbooks, and transportation. Business students have the opportunity to cost-effectively acquire a superior education. Online courses enhance the skills and knowledge of business students, thereby increasing their marketability. Employers highly regard candidates who exhibit a commitment to continuous learning and capability of adapting.

Theme 2: Adverse impacts of online education on the performance of business students

Social isolation can result from a lack of physical classroom interactions, according to the majority of respondents. Business students fail to capitalize on opportunities for collaborative learning, networking, and informal discussions. Enrolling in online courses requires a considerable degree of self-control and drive. Certain students have difficulty maintaining focus when they lack structured class schedules and face-to-face accountability. Certain participants highlighted how learning can be hindered by technical barriers, including insufficient internet connectivity and lack of familiarity with digital technologies. Business students might encounter discontentment when utilizing online platforms. In addition, the majority of respondents believed that online examinations offer less feedback than in-person examinations. It is detrimental to the development of business students to not receive constructive criticism, as this can affect their learning outcomes. Understanding complex business subjects may present greater challenges when conducted remotely. Inability on the part of instructors to provide timely clarification may hinder comprehension. Certain respondents asserted that effective communication is critical in the realm of commerce. It is possible that online education does not enhance verbal communication, negotiation, or presentation abilities. Business students may potentially forego mentorship, industry connections, and career mentoring.

Theme 3: Challenges of Online Learning for Business Students

The majority of respondents assert that online learning is devoid of the social interactions that are characteristic of traditional classrooms. They may experience isolation and forego opportunities for networking and peer interaction. Additionally, maintaining motivation in a self-paced environment may present challenges. Students might find it difficult to maintain their enthusiasm in the absence of in-person interactions. Certain participants indicated that technical malfunctions, sluggish internet connections, or compatibility challenges may disrupt the process of learning. At-home distractions (such as family members, pets, and commotion) can hinder concentration. In addition, it can be challenging to balance academics with other obligations (such as a job or family). Succeeding online learning could be impeded in specific areas, especially rural communities, due to inadequate Internet connectivity. Some respondents assert that learning is hindered by unintuitive layouts, unclear guidance, and a lack of engagement.

Theme 4: Steps to Enhance Online Learning for Business Students

According to the majority of respondents, institutions can enhance online learning for business students by concentrating on a few crucial areas. In the first place, they can enhance the dissemination of the material by incorporating interactive elements. This may encompass the implementation of gamified exercises or virtual simulations that enable learners to apply their acquired knowledge. These interactive experiences can facilitate students' comprehension of difficult concepts and add enjoyment to the learning process. In addition, participants indicated that universities have the capacity to offer immediate feedback to students. This objective can be achieved by implementing automated grading mechanisms or by instructors actively participating in online discussions and grading assignments. Timely feedback can assist students in understanding their areas of strength and those that require improvement, thereby enhancing the overall learning experience.

As stated by multiple participants, the incorporation of practical situations and real-life illustrations that are relevant to the business sector can aid students in the application of theoretical concepts to real-life challenges. This can enhance their problem-solving and critical thinking skills, better preparing them for the complexities of the workplace. In addition, academic institutions have the capacity to offer specialized online modules or courses that center around particular business fields, including finance, entrepreneurship, or marketing. This allows students of business to delve deeper into their areas of interest and acquire proficiency. Certain individuals maintained that collaborative endeavors and group dialogues ought to be structured around business-related situations, urging pupils to work together on exercises such as market research, business strategies, or strategic decision-making. In addition to fostering collaboration and effective communication, this activity provides students with the opportunity to gain insights from diverse perspectives and experiences. In addition, participants agreed that academic institutions may connect business students

with industry experts via technological means. To achieve this, mentorship programs, live webinars, and virtual panel discussions may all be utilized. Universities have the potential to introduce students to practical concepts, networking prospects, and novel career avenues through their connections with industry experts. Assuring business students of a comprehensive and practical education that prepares them for success in the business world, according to some participants, universities can accomplish by tailoring online learning experiences to their specific requirements.

5. Discussions

The purpose of this research was to examine the impact of online education on the performance of business students. The research identified both positive and negative impacts of online education on the academic performance of business school pupils. Additionally, it proposed several strategies to address the challenges that students face while engaging in online learning. Additionally, the results of a case study (Kim et al., 2005) are presented; the study interviewed and surveyed more than one hundred students enrolled in a preeminent online MBA program regarding their perspectives on the advantages and disadvantages of online learning, as well as their recommendations for enhancing the online MBA program's quality. It was found that virtual teaming had a substantial impact on the online learning experiences of the students; they regarded virtual teaming as beneficial in equipping them for the ever more interconnected global business landscape. Nevertheless, it also posed a considerable obstacle to their online education. In addition, McGORRY (2002) investigates the attitudes and reactions of students enrolled in a part-time MBA program that offers online course alternatives toward the Internet, online learning, and online courses. A survey was conducted among 273 part-time MBA students to gather their opinions on this matter. Overall, the perception of online courses among students was overwhelmingly favorable. Concerns regarding the absence of networking and connections are voiced by students. In Arbaugh (2000), an additional exploratory study comparing a classroom-based and Internet-based MBA course section at a university in the Midwest of the United States, provides a summary of the findings. The findings indicated that the Internet-based course elicited considerably greater levels of participation in discussions (irrespective of gender or class section), while neither class section demonstrated statistically significant variations in learning outcomes.

6. Conclusions and Suggestions

The process of migrating to a virtual learning environment presents challenges for instructors and learners alike. Consequently, prior experience with online learning and a gradual initiation are prerequisites for effortless adjustment to the novel learning methodology. On the basis of the study's findings, it is concluded that a variety of online learning methodologies can have both positive and detrimental effects on student performance. There are instances in which students' grades improve as a result of preparing for online courses. Nevertheless, this system led to tension and burnout among students. Nevertheless, instances have arisen in which students' grades were deducted as a result of insufficient materials and a disruptive presence in the environment. Despite the progressive resurgence of traditional face-to-face classroom settings in universities, the preservation of virtual learning remains crucial in order to facilitate adaptable learning. Nevertheless, for this approach to yield positive results regarding students' grades, it is critical that both instructors and learners possess the necessary technological and psychological resources. In addition, it is expected that educators make complete use of accessible educational technology platforms, including Blackboard, Zoom, and Google Meet. Due to this, educators ought to employ a precise and unambiguous mode of instruction; according to one study, students acquire knowledge more effectively when supplementary instruction and assistance are furnished. Business students' academic performance is ultimately profoundly influenced by online learning methodologies. There are numerous determinants that impact students' performance in online learning environments. The present investigation exposes a preexisting knowledge deficit that compels scholars to further explore the crucial ramifications of these strategies on the scholastic performance of students.

6.1. Future Implications and Restrictions

Educators and learners alike can utilize the results of this investigation as a manual to enhance their online learning processes and experiences. Additionally, instructors can utilize it to alleviate the adverse consequences of online learning, including anxiety and tension. Given the exclusive focus of this investigation on public higher education institutions in Lahore, it is advised that forthcoming studies incorporate private universities and augment the size of their sample. Additionally, it is crucial to take into account the socioeconomic status of the students, which was not taken into account in the present research. An additional constraint of this research lies in its treatment of influence in a general sense, neglecting to concentrate on a particular geographic region. To circumvent this limitation, subsequent research should concentrate on a particular geographic area and evaluate its influence on academic achievement among students.

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