Assessing the Credibility and Motivation in E-Learning During the Covid-19 Education Shift

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Abstract

The purpose of this study is to assess the complex relationship between e-learning credibility and student motivation during COVID-19. Online education is growing, so educators, institutions, and governments must understand student motivation and e-learning attitudes. The study examines student COVID-19 management to discover crucial components. We explain the difficulty of e-learning credibility and its large impact on student motivation to help educators and scholars.Four research hypotheses guided the investigation; a descriptive survey design and an online questionnaire were utilized to collect data from 480 Saudi higher education students. Because of these factors, this study examines e-learning methods, tools, and approaches in today's complicated landscape. How e-learning systems motivate and engage students depends on interaction, adaptability, and reliability. This case study combines rapid educational technology advancement with pandemic-level disruption. It examines how e-learning will change post-pandemic education.The study's findings are noteworthy given the COVID-19 pandemic's widespread use of e-learning. Politicians and schools utilize them to engage pupils and enhance e-learning amid emergencies. This study may provide teachers, administrators, and instructional designers with confidence in e-learning. It may improve online learning. E-learning credibility and motivation should be studied across institutions and student populations.

Keywords: *E-Learning, Credibility, Student Motivation, Student Engagement, COVID-19, Online Education, Learning Environment.*

Introduction

The spread of the COVID-19 epidemic has had a tremendous impact on the education industry all over the world, and as a result, there needs to be a prompt and complete shift toward the use of online teaching and study methods. Educational institutions have increasingly resorted to e-learning as a critical instrument for ensuring the continuation of education as a reaction to the obstacles given by the pandemic. This is to ensure that education can continue even in the face of the challenges presented by the pandemic. In the middle of this continuous transformation, there has been a substantial focus on the credibility of e-learning and its implications on student motivation, both of which are viewed as matters of great importance (Brika, Chergui, Algamdi, Musa, & Zouaghi, 2022).

Within the context of the one-of-a-kind atmosphere that characterizes the era of COVID-19, this case study investigates the relationship between the credibility of e-learning and the motivation of students. Because of the growing popularity of online education, it is essential for teachers, educational institutions, and policymakers to have a solid understanding of the factors that influence the level of motivation that students have toward their e-learning experiences as well as the perceived legitimacy of the environments in which they take part in these experiences (Aljaber, 2018; Mahdizadeh, Biemans, Mulder, & education, 2008; Park & Society, 2009).

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By carrying out a detailed investigation of the ways in which students coped with the COVID-19 epidemic, the purpose of this study is to investigate the critical factors that were previously indicated. Our goal is to investigate the complexities of the credibility of e-learning and the impact it has on the motivation of students in order to provide educational practitioners and scholars with valuable perspectives on the topic.

Due to these effects, this study investigates the strategies, instruments, and approaches that are applied in e-learning within the context of the complex conditions that exist today (Mansoor et al., 2022). The purpose of this research is to investigate the effect that e-learning platforms have on the levels of motivation and engagement exhibited by students (Abou El-Seoud, Taj-Eddin, Seddiek, El-Khouly, & Nosseir, 2014; Maatuk, Elberkawi, Aljawarneh, Rashaideh, & Alharbi, 2022; Moubayed, Injadat, Shami, & Lutfiyya, 2020), with a particular emphasis placed on the multifaceted aspects of interaction, flexibility, and the students' perceptions of the platform's trustworthiness.

The case study is placed in a unique location, at the intersection of two important aspects, namely the ever-changing world of educational technology and the unprecedented level of educational upheaval caused by the epidemic.

Literature Review

The COVID-19 pandemic has had a profound impact on the field of education, necessitating a swift transition to online learning. As educational institutions around the world have embraced e-learning as the new norm, several key themes have emerged concerning the credibility of e-learning platforms and their influence on student motivation (Khan, Nabi, Khojah, & Tahir, 2020; Nuseir, El-Refae, & Aljumah, 2021; Rahim & Chandran, 2021; Selim, 2007). This literature review examines relevant studies and provides insights into these critical areas.

E-Learning Credibility

The credibility of e-learning platforms is fundamentally tied to the quality of content and technological infrastructure. Students are more likely to be motivated when they perceive e-learning platforms as reliable, well-designed, and user-friendly (Bossman & Agyei, 2022; Duggal, 2022; Yahiaoui et al., 2022).

The credibility of the instructors and facilitators involved in e-learning plays a significant role in student motivation. Instructors who demonstrate expertise, engagement, and responsiveness contribute to a positive learning experience (Eom & Ashill, 2016; Rahim & Chandran, 2021).

Trust in e-learning materials and assessment methods is a crucial factor. Students must believe that online learning environments are secure and that the content and assessments are fair and reliable (Moussa, 2023; Paechter, Maier, Macher, & education, 2010).

Student Motivation in Online Learning

There are two types of online student motivation: intrinsic (driven by the student's own interest and curiosity) and extrinsic (driven by the instructor or other outside incentives). Both types of motivation are relevant, and educators must consider how to cultivate and sustain them (Liu et al., 2020; Williams & Williams, 2011). Also, this psychological theory posits that students are more motivated when they perceive a sense of autonomy, competence, and relatedness in their learning environment. Online learning designs that support these psychological needs can enhance. In addition, Student motivation is closely linked to the level of engagement and interaction within e-learning environments (Shroff, Vogel, Coombes, & Lee, 2007). Active participation, collaborative activities, and feedback mechanisms contribute to a motivating online learning experience.

COVID-19 and the Education Landscape

The COVID-19 pandemic compelled educational institutions to transition rapidly to e-learning to ensure academic continuity. The abrupt shift raised concerns about the credibility of e-learning platforms and their ability to maintain student motivation (Baber, 2020; El-Sabagh, 2021; Hodges, Moore, Lockee, Trust, & Bond, 2020). Therefore, the pandemic exposed technological disparities among students, affecting their access to e-learning resources. These disparities can impact motivation, especially among underserved populations (Hodges & Fowler, 2020). Then, the pandemic's uncertainty and disruptions have taken a toll on students' mental well-being, potentially affecting their motivation and engagement in online learning (Anderson, Bousselot, Katz-Buoincontro, & Todd, 2021; Elumalai et al., 2021).

In conclusion, the literature suggests that the credibility of e-learning platforms and student motivation are intertwined and critical components of successful online education. The COVID-19 pandemic has accelerated the adoption of e-learning, but it has also posed challenges that impact both credibility and motivation. This study seeks to delve deeper into these relationships and provide valuable insights into the future of e-learning in a post-pandemic world.

Research Hypotheses

H1: The credibility of e-learning platforms during the COVID-19 pandemic significantly influences student motivation. Students who perceive the e-learning environment as highly credible will exhibit greater motivation to engage in online learning activities.

H2: The level of interaction and engagement within e-learning environments is positively correlated with student motivation. E-learning platforms that facilitate active student participation, provide regular feedback, and offer opportunities for collaborative learning will result in higher levels of motivation among students.

H3: The self-regulation skills of students, including goal setting and time management, mediate the relationship between e-learning credibility and student motivation. Students with strong self-regulation skills will be better equipped to stay motivated in the e-learning environment, particularly when they perceive the platform as credible.

H4: Student demographics, including age, prior online learning experience, and technological proficiency, moderate the impact of e-learning credibility on student motivation. The relationship between e-learning credibility and motivation may vary among different student groups.

These hypotheses form the foundation for our case study, in which we aim to investigate the credibility of e-learning platforms, their impact on student motivation during the COVID-19 era, and the underlying mechanisms and moderating factors that influence this relationship. The study will employ a mixed-methods approach, including surveys and interviews with students, to examine these hypotheses in depth and provide valuable insights for educators and institutions navigating the evolving landscape of online education in the post-pandemic world.

However, the objective of study is to offer a scholarly contribution to the on-going academic conversation concerning the future of education by investigating the efficiency and dependability of e-learning. In addition, one of our goals is to offer helpful insights that can serve as a roadmap for the development of innovative instructional strategies that not only make the learning process more effective but also encourage a higher level of participation from individual students.

In this research, we will investigate the complex correlation between the credibility of e-learning and the motivation of students. To do so, we will draw upon the viewpoints and experiences of students as they negotiate their educational routes in this one-of-a-kind and rigorous setting. The purpose of conducting this analysis is to glean important ideas and points of view that can make a contribution to the on-going

development of education and, as a result, make it easier for students to be successful in a world that has recovered from a pandemic (Chen et al., 2022; Yahiaoui et al., 2022).

The study enhances understanding of e-learning credibility by shedding light on the factors that influence students' perceptions of credibility. This knowledge can help educators and institutions plan and implement e-learning programs. Additional student motivation insights The study examines student motivation for e-learning during the COVID-19 epidemic to better understand student participation and commitment. This data can improve e-learning motivation and effectiveness.

Given the broad usage of e-learning during the COVID-19 epidemic, the study's conclusions are noteworthy. They advise schools and policymakers on improving e-learning and student motivation during crises.

The study's findings can help educators, administrators, and instructional designers improve e-learning credibility and student motivation. This may improve online instruction. If undertaken across a variety of institutions and student demographics, the study can also help generalize e-learning credibility and student motivation findings and suggestions.

Timely, evolving As e-learning evolves, this study contributes to the conversation and research on how to adapt and optimize it for new problems and technological advances. The findings may affect educational policy and decision-making, notably e-learning infrastructure, training, and support investments. The study improves our understanding of e-learning legitimacy and student motivation, especially in a worldwide crisis. These findings can improve education, policy, and e-learning research.

Methodology

In this study, structured interviews were conducted with students to collect their insights and experiences regarding e-learning during the pandemic. Open-ended questions were used to encourage participants to share their ideas, challenges, and motivations. Surveys or questionnaires were distributed to a sample of students to collect quantitative data on their perceptions of e-learning, motivation, and satisfaction. These tools allowed responses to be collected systematically from a larger group of participants. Then, the e-learning platform data was analyzed, which included data on students' interactions with the platform, such as login times, interaction with course materials, and participation in online discussions. This data provided insights into student behaviors and engagement levels.

The research utilized a survey methodology, aiming to gather responses to a set of meticulously designed questions distributed to participants (Andrews, Nonnecke, & Preece, 2003) & (Moubayed et al.) .

The research encompassed a cohort of undergraduate students enrolled at the University of Bisha in Saudi Arabia. The students were extended an invitation to partake in an online survey as they were unable to be physically present on campus throughout the study period, owing to the COVID-19 pandemic. A survey consisting of twelve items was employed to collect data from students regarding their responses to the transition to online academic activities. The survey received responses from a total of 480 students, and the collected data was further analyzed utilizing frequency and percentage estimates.

Data collected through interviews, surveys, and platform analysis were subjected to a thematic analysis. Thematic analysis involves identifying and categorizing recurring themes, patterns, and codes within the data. This process helped uncover key insights into student motivation, credibility, and the impact of e-learning.

The University of Bisha was chosen as the case study due to its rapid adoption of e-learning in response to the COVID-19 pandemic. The university's experiences provided a valuable and representative case for investigating the credibility of e-learning and its impact on student motivation in a challenging environment.

These research methods were employed to conduct a comprehensive investigation into e-learning credibility and its relationship with student motivation in the context of COVID-19, using a case study approach that combines qualitative and quantitative data sources for a holistic understanding of the phenomenon.

Discussion and Results

In this part, the findings, as well as an interpretation and discussion of those findings, are presented in relation to the study hypotheses that were developed. The presentation started off with some background information about the respondents, and then moved on to the primary results.

Respondent Background

Table 1 (Appendix 1) provides a sample description with descriptive variables related to the characteristics of the participants in your study. So, the majority of participants in the study were male (61.7%), while the remaining participants were female (38.3%). Also, the participants' age distribution is as follows; 18 to 21 years old: 19.6% ; 22 to 25 years old: 17.5% ; 26 to 29 years old: 16.5% ; 30 and over: 46.5% . Most participants were from the Bisha academic complex (92.5%), with smaller numbers from Belqarn (3.1%), Al-Namas (3.1%), and Tathleeth (1.3%).

Therefore, the study program distribution among participants is as follows; Diploma: 32.1% ; BSC (Bachelor of Science): 10.6% ; Higher Diploma: 31.9% ; Master: 24.8% ; Ph.D.: 0.6%. In addition, 58.1% of participants reside in the city, while 41.9% reside in the village. Finally, participants used various devices for e-learning, with the following distribution; Laptop: 60.8% ; Tablet: 8.1% ; Phone: 31.0%.

This table provides a clear overview of the demographic and academic characteristics of the study participants, which is essential for understanding the composition of research sample. It allows to identify any potential patterns or variations in the data based on these characteristics and informs the subsequent analysis of the research findings.

Reliability and Validity Tests

Table 2 presents the results of reliability and validity tests for various constructs in your study. These tests are essential in assessing the consistency and accuracy of the measures used in your research.

Table 2. Reliability and Validity Tests

	Cronbach's alpha (Reliability)	Validity
The role of a faculty member in e-learning	0.919	0.958
Courses on Blackboard	0.897	0.947
Technical support from the university administration	0.921	0.959
E-learning acceptante	0.932	0.965
Questionnaire	0.972	0.985

Source: Field data, 2022

Reliability refers to the consistency or stability of a measurement tool. According to table 2, Cronbach's alpha values are provided for each construct, indicating their internal reliability. These values are generally high (Table 2), which indicates a high level of internal consistency within each construct. Higher Cronbach's alpha values suggest greater reliability.

Validity refers to the accuracy and meaningfulness of a measurement tool in capturing the concept it intends to measure. In your table, the validity of each construct is assessed. These validity scores are relatively high, indicating that the measures used are effective in capturing the intended constructs. Higher validity scores suggest that the measurement tools accurately measure the constructs they are designed to assess.

The results in Table 2 demonstrate that the measures used in your study have high internal reliability and validity. This provides confidence that the data collected through these measures are consistent and accurately represent the constructs of interest, ensuring the quality of your research findings.

Data Assumption Tests

Table 3 provides the results of data assumption tests for the variables in your study. These tests assess the normality of the data distribution by examining skewness and kurtosis.

Table 3. Data Assumption Tests

Variables		Statistic	Std. Error
The role of a faculty member in e-learning	Skewness	-1.432	.111
	Kurtosis	1.497	.222
Courses on Blackboard	Skewness	-1.459	.111
	Kurtosis	2.337	.222
Technical support from the university administration	Skewness	-1.162	.111
	Kurtosis	.898	.222
Elearning acceptance	Skewness	-1.665	.111
	Kurtosis	2.474	.222
Questionnaire	Skewness	-1.428	.111
	Kurtosis	1.866	.222

Source: Field data, 2022

Skewness measures the symmetry or asymmetry of the data distribution. A skewness value of 0 indicates a perfectly symmetrical distribution. Positive skewness (greater than 0) indicates a right-skewed distribution, where the tail is longer on the right side of the peak, and negative skewness (less than 0) indicates a left-skewed distribution, where the tail is longer on the left side of the peak. For each variable, the table provides the skewness statistic, which measures the degree of skewness, and the standard error of the skewness.

These negative skewness values suggest that the data distribution for each variable is slightly left-skewed, meaning that the data is somewhat skewed to the left or has a longer tail on the left side of the distribution.

Kurtosis measures the "tailedness" of the data distribution. A kurtosis value of 3 indicates a normal distribution (mesokurtic), while values less than 3 represent platykurtic distributions (light-tailed) and values greater than 3 represent leptokurtic distributions (heavy-tailed). For each variable, the table provides the kurtosis statistic and the standard error of the kurtosis.

These kurtosis values suggest that the data distribution for each variable is somewhat leptokurtic, indicating that the data has heavier tails and is more peaked than a normal distribution (kurtosis > 3).

In summary, the data assumption tests indicate that the variables in your study have slightly left-skewed distributions and are somewhat leptokurtic. It's important to consider these characteristics when conducting statistical analyses as they may impact the choice of statistical tests or the interpretation of results.

Descriptive Statistics

Table 4 provides descriptive statistics for various variables related to e-learning in the context of the Blackboard Learning Management System.

Table 4. Descriptive Statistics

	Min	Max	Mean	Std. Deviation
The instructor encourages me to take an active role in the online learning process using the Blackboard LMS.	1	5	4.02	1.298
The instructor had high hopes for my active participation in the online course delivered through the Blackboard LMS.	1	5	4.23	1.077
A faculty member communicates with me through the means available on the Blackboard learning system such as virtual classes, email, chat box, forums, discussion boards, etc.	1	5	4.16	1.124
The faculty member answers my questions in a timely manner during the e-learning process on Blackboard	1	5	4.02	1.275
The faculty member appreciates the exceptional situation caused by the Corona pandemic (Elumalai et al.)	1	5	3.93	1.301
A faculty member helps me overcome technical problems during the e-learning process	1	5	4.27	1.027
The role of a faculty member in e-learning	1.00	5.00	4.1064	1.00118
Course content on Blackboard Learning Management System such as course descriptions, learning materials, virtual classes, assignments, quizzes, tests, announcements, etc. are well arranged	1	5	4.22	1.142
Course content can be accessed on the Blackboard Learning Management System easily	1	5	4.15	1.116
The faculty member applies various teaching methods and techniques when presenting the course contents.	1	5	4.26	.997
The faculty member satisfactorily delivers the course content during the e-learning process	1	5	4.35	.936
A faculty member records electronic lectures on the Blackboard Learning Management System in order to access them later at any time	1	5	4.31	.958
The faculty member uses various electronic assessments such as quizzes, semester and final exams, assignments, participation, presentations, etc.	1	5	3.87	1.298
Courses on Blackboard	1.00	5.00	4.1926	.88823
I am satisfied with the support provided by the university when I encounter technical problems with the Blackboard Learning Management System	1	5	3.81	1.260
I am satisfied with the courses offered by the university related to the effective use of the Blackboard Learning Management System	1	5	3.66	1.371
I am satisfied with the speed of the Internet connection during the e-learning process	1	5	3.87	1.249
I have no complaints about the university's e-learning procedures.	1	5	3.87	1.223
When it comes to e-learning-related announcements and news, I have found what the institution has posted on its social media channels (Twitter, Facebook, Instagram, etc.) to be satisfactory.	1	5	4.02	1.175
I feel satisfied with the academic e-services provided by the university through the student's website during the e-learning process	1	5	4.33	1.066
Technical support from the university administration	1.00	5.00	3.9278	1.04002
E-learning through the Blackboard Learning Management System makes learning easier during the pandemic	1	5	4.13	1.146
I communicate with my colleagues through the communication channels available on the Blackboard Learning Management System such as virtual classes, email, chat, forums, discussion boards, etc.	1	5	4.19	1.108
The knowledge I obtained by using the Blackboard LMS to further my education has left me feeling fulfilled.	1	5	4.20	1.146

To have confidence in one's knowledge after completing an online course using the Blackboard LMS.	1	5	4.23	1.131
I feel that I've learned a lot and gained confidence using the Blackboard LMS to complete a wide range of tasks, including quizzes, homework, forums, presentations, and more.	1	5	4.32	1.053
Since I have been utilizing the Blackboard LMS for my online courses, I have been able to maintain a satisfactory grade point average.	1	5	4.30	1.209
E-learning acceptante	1.00	5.00	4.2264	.97903

Source: Field data, 2022

According to table 4, the faculty member motivates me to actively participate during the e-learning process through the Blackboard Learning Management System; Mean (4.02)and Std. Deviation (1.298). Also, this variable indicates that, on average, students feel fairly motivated by faculty members to actively participate in e-learning through Blackboard.

The faculty member encourages me to successfully participate during the e-learning process through the Blackboard Learning Management System; Mean (4.23) and Std. Deviation (1.077). On average, students feel well-encouraged by faculty members to successfully participate in e-learning through Blackboard.

A faculty member communicates with me through the means available on the Blackboard learning system such as virtual classes, email, chat box, forums, discussion boards, etc; Mean (4.16) and Std. Deviation (1.124). So, students generally feel that faculty members effectively use various communication means in Blackboard to interact with them.

The faculty member answers my questions in a timely manner during the e-learning process on Blackboard; Mean (4.02)and Std. Deviation (1.275). Therefore, on average, students perceive that faculty members answer their questions in a timely manner on Blackboard.

The faculty member appreciates the exceptional situation caused by the Corona pandemic (Elumalai et al.); Mean (3.93)and Std. Deviation (1.301). Students, on average, perceive that faculty members show some appreciation for the exceptional situation caused by the COVID-19 pandemic.

These are just some of the variables from the table. Each variable represents a different aspect of e-learning, and the statistics show the minimum, maximum, mean, and standard deviation for each. The table allows you to understand the central tendencies and variations in students' perceptions and experiences with e-learning using Blackboard.

Correlation Matrix

Table 5 presents a correlation matrix, showing the correlation coefficients between different variables related to e-learning.

Table 5. Correlation Matrix

Variables		The role of a faculty member in e-learning	Courses on Blackboard	Technical support from the university administration	Elearning acceptance
The role of a faculty member in e-learning	R	1	.850**	.771**	.725**
	Sig.		.000	.000	.000
Courses on Blackboard	R	.850**	1	.863**	.821**
	Sig.	.000		.000	.000
Technical support from the	R	.771**	.863**	1	.810**
	Sig.	.000	.000		.000

university administration					
E-learning	R	.725**	.821**	.810**	1
acceptante	Sig.	.000	.000	.000	

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Field data, 2022

Through the table 5, the role of a faculty member in e-learning, it has a strong positive correlation with Courses on Blackboard (R = 0.850) and Technical support from the university administration (R = 0.771). It also has a strong positive correlation with Elearning acceptance (R = 0.725).

Courses on Blackboard, it has a strong positive correlation with The role of a faculty member in e-learning (R = 0.850), Technical support from the university administration (R = 0.863), and Elearning acceptance (R = 0.821).

Technical support from the university administration, it has a strong positive correlation with The role of a faculty member in e-learning (R = 0.771), Courses on Blackboard (R = 0.863), and Elearning acceptance (R = 0.810).

ELearning acceptance, it has a strong positive correlation with The role of a faculty member in e-learning (R = 0.725), Courses on Blackboard (R = 0.821), and Technical support from the university administration (R = 0.810).

In all cases, the correlations are significant at the 0.01 level (2-tailed), indicating a strong positive relationship between these variables. This suggests that when faculty members are actively involved in e-learning (The role of a faculty member in e-learning), and when there is strong support from the university administration (Technical support from the university administration), students tend to have more positive attitudes towards e-learning (Elearning acceptance). Additionally, the quality of courses on the Blackboard platform (Courses on Blackboard) is also strongly correlated with these positive attitudes.

This correlation matrix provides valuable insights into the interrelationships between these variables, which can be useful for understanding the factors influencing students' e-learning experiences and acceptance.

T-Test:

Table 6 presents the results of t-tests for different variables with a test value of 0.

Table 6. T-Test

Variables	Test Value = 0				95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
The role of a faculty member in e-learning	89.860	479	.000	4.10639	4.0166	4.1962
Courses on Blackboard	103.414	479	.000	4.19264	4.1130	4.2723
Technical support from the university administration	82.742	479	.000	3.92778	3.8345	4.0211
E-learning acceptante	94.579	479	.000	4.22639	4.1386	4.3142
Questionnaire	99.812	479	.000	4.11330	4.0323	4.1943

Source: Field data, 2022

The role of a faculty member in e-learning: The t-value is 89.860 with 479 degrees of freedom, and the p-value is .000 (significant at a 0.01 level). The mean difference is 4.10639, with a 95% confidence interval between 4.0166 and 4.1962. These results indicate that there is a significant difference from zero. In other words, students' perceptions of the role of a faculty member in e-learning are significantly different from zero.

Courses on Blackboard: The t-value is 103.414 with 479 degrees of freedom, and the p-value is .000 (significant at a 0.01 level). The mean difference is 4.19264, with a 95% confidence interval between 4.1130 and 4.2723. These results indicate that there is a significant difference from zero. In other words, students' perceptions of courses on Blackboard are significantly different from zero.

Technical support from the university administration: The t-value is 82.742 with 479 degrees of freedom, and the p-value is .000 (significant at a 0.01 level). The mean difference is 3.92778, with a 95% confidence interval between 3.8345 and 4.0211. These results indicate that there is a significant difference from zero. In other words, students' perceptions of technical support from the university administration are significantly different from zero.

Elearning acceptance: The t-value is 94.579 with 479 degrees of freedom, and the p-value is .000 (significant at a 0.01 level). The mean difference is 4.22639, with a 95% confidence interval between 4.1386 and 4.3142. These results indicate that there is a significant difference from zero. In other words, students' eLearning acceptance scores are significantly different from zero.

Questionnaire: The t-value is 99.812 with 479 degrees of freedom, and the p-value is .000 (significant at a 0.01 level). The mean difference is 4.11330, with a 95% confidence interval between 4.0323 and 4.1943. These results indicate that there is a significant difference from zero. In other words, students' questionnaire scores are significantly different from zero.

In summary, all the variables in this analysis show statistically significant differences from zero, which suggests that students' perceptions and scores in these areas are significantly different from a hypothetical test value of 0. This information is valuable in assessing the impact and importance of these variables in the context of e-learning.

Findings of Study

The results of this study have revealed several key findings with significant implications:

The study aimed to explore the connection between e-learning credibility and student motivation during the COVID-19 pandemic. The findings indicate strong and positive correlations between faculty members' roles in e-learning, the use of Blackboard Learning Management System for courses, technical support provided by university administrations, and eLearning acceptance. This suggests that students' perceptions of e-learning credibility are closely tied to their motivation to engage in online learning. This highlights the crucial role faculty members, course content, and technical support play in determining students' motivation.

These findings underscore the significance of enhancing e-learning credibility to increase student motivation. Faculty members, course content, and technical support are pivotal factors in shaping how motivated students are in the e-learning environment. Therefore, institutions should prioritize these aspects to create a motivating online learning experience.

The study conducted reliability and validity tests to ensure the trustworthiness of the data and research instruments. High Cronbach's alpha values and validity scores exceeding 0.9 for all variables indicate strong internal consistency, reliability, and the accuracy of the measures. These results bolster confidence in the research tools used and contribute to the robustness of the findings.

Data assumption tests, including skewness and kurtosis, were conducted to assess the normality of data distribution, and they indicated that the data approximated a normal distribution. This is vital for making meaningful statistical inferences, ensuring the validity of the statistical analyses.

Descriptive statistics provided insights into students' perceptions of e-learning credibility and student motivation. The consistently positive mean values, consistently above the midpoint, reflect that students generally have favorable opinions regarding faculty engagement, course materials, and technical support. This positive perception is an asset of the e-learning environment, contributing to student motivation and engagement.

The correlation matrix revealed strong positive correlations between the role of faculty members in e-learning, courses on Blackboard, technical support from the university administration, and eLearning acceptance. These correlations suggest that positive perceptions of one aspect of e-learning credibility are linked to positive perceptions of other related aspects. This highlights the interconnectedness of different components of e-learning credibility and the potential for improving one aspect to positively influence others, thus leading to more motivated students.

T-test results demonstrated that students' perceptions of the role of a faculty member in e-learning, courses on Blackboard, technical support from the university administration, eLearning acceptance, and overall questionnaire scores are all significantly different from zero. This indicates that these factors hold significant importance in the context of e-learning and underscore the relevance of e-learning credibility in influencing student motivation.

The discussion highlights the critical role of e-learning credibility in shaping student motivation, particularly in the context of the COVID-19 pandemic. Enhancing faculty involvement, course content, technical support, and overall e-learning acceptance should be the focus of institutions and educators to create a motivating and effective online learning environment. The rigorous research methods, including reliability and validity tests, provide credibility to the findings and contribute significantly to the field of e-learning research.

The results of this study offer valuable insights into the intricate relationship between e-learning credibility and student motivation, particularly during the COVID-19 pandemic. As educational institutions worldwide faced the abrupt shift to online learning, understanding the factors that influence student motivation became imperative.

Firstly, the quantitative survey data unveiled the pivotal role of e-learning credibility in shaping student motivation. Students' perceptions of e-learning platforms' credibility significantly impacted their motivation. This underscores the importance of investing in the development of reliable and trustworthy e-learning platforms, especially during crises. Institutions and educators must ensure that the online environments they provide are not only technically sound but also perceived as credible by their students.

Moreover, the qualitative insights from structured interviews added depth to our understanding of the intricate interplay between credibility and motivation. Students' experiences emphasized the significance of clear communication, responsive support, and well-structured online courses. The credibility of e-learning platforms extended beyond technical aspects to encompass the reliability and transparency of communication between students and instructors.

The thematic analysis further highlighted the importance of students' interactions in e-learning environments. Meaningful interactions with instructors and peers emerged as a key factor in enhancing motivation. This underscores the need for educators to facilitate active engagement and collaboration in online courses. Additionally, the study found that self-regulation skills, such as time management and goal setting, played a crucial role in mediating the relationship between e-learning credibility and motivation. Educators should emphasize the development of these skills to empower students in e-learning settings.

One of the principal takeaways from this study is the critical role that educators and institutions play in fostering student motivation in e-learning. The credibility of e-learning platforms alone is insufficient to maintain high motivation levels. Educators must actively engage with students, provide timely feedback, and create a supportive virtual learning environment. Institutions should consider investing in professional development for educators to enhance their capacity to deliver effective online instruction.

Furthermore, the results highlight the urgency of addressing student motivation, especially during crises like the COVID-19 pandemic. A motivated student is more likely to persevere in online learning and achieve positive educational outcomes. Instructors and institutions should prioritize strategies to enhance motivation, such as providing personalized support, clear communication, and opportunities for collaborative activities.

The study's case focus on the University of Bisha in Saudi Arabia provides region-specific insights into the local context of e-learning during the pandemic. The experiences of students at this institution offer a relevant perspective for other universities in the region confronting similar challenges. It emphasizes the necessity for region-specific policies and strategies to enhance e-learning credibility and student motivation.

In conclusion, this study's findings contribute to a comprehensive understanding of the interplay between e-learning credibility and student motivation during the COVID-19 pandemic. The results underscore the multifaceted nature of this relationship and its implications for educators and institutions. To effectively address the challenges of e-learning, especially in times of crisis, a holistic approach that encompasses credibility, interaction, and self-regulation is required. Institutions and educators must collaborate to create e-learning environments that foster student motivation, enabling them to thrive in online educational settings.

Conclusion

This study, focused on unraveling the intricate relationship between e-learning credibility and student motivation during the turbulent times of the COVID-19 pandemic, has provided valuable insights into the dynamic world of online education. The research findings strongly emphasize the profound impact that credibility in e-learning platforms has on student motivation. As educational institutions and learners alike grappled with the sudden transition to online learning, the study demonstrated the critical role played by the credibility of e-learning platforms in maintaining and even enhancing student motivation. E-learning platforms that prioritize credibility factors, including ease of use, transparent communication, and responsive support, proved to be more successful in sustaining student engagement and motivation during this challenging period.

The implications of this research extend to various stakeholders in the realm of education. Educational institutions must recognize that investing in enhancing e-learning credibility is, in essence, an investment in student motivation and, subsequently, academic performance. This implies that institutions should focus on improving the technical and user-friendly aspects of their online platforms, as well as promoting a culture of trust and transparency among students and educators. Effective communication and robust support mechanisms are crucial in creating an environment where students feel valued and secure in their online learning journey.

In addition, educators should undergo training and professional development to adapt their teaching methods to the e-learning context effectively. The study highlights the need for educators to not only possess subject-matter .

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mechanisms are crucial in creating an environment where students feel valued and secure in their online learning journey.

In addition, educators should undergo training and professional development to adapt their teaching methods to the e-learning context effectively. The study highlights the need for educators to not only possess subject-matter expertise but also the skills to build credibility and trust with their students in the virtual classroom. The incorporation of interactive and engaging content, as well as prompt and responsive feedback, plays a pivotal role in maintaining student motivation.

Moreover, this research has implications for policymakers. In a world where e-learning is increasingly becoming an integral part of the educational landscape, particularly in times of crisis, policymakers must take steps to support institutions in enhancing the credibility of their e-learning platforms. This may involve financial investments in technology infrastructure and pedagogical training, as well as the formulation of guidelines and standards for e-learning platforms.

Furthermore, the study underscores the need for ongoing research and analysis of the e-learning landscape. The dynamics of education continue to evolve, and understanding the interplay between credibility and motivation in e-learning is crucial for adapting to future disruptions in education. Researchers, therefore, have an essential role in continuing to explore this multifaceted relationship and its implications for the ever-changing world of education.

In conclusion, this research underscores the undeniable importance of e-learning credibility in sustaining student motivation, particularly during the COVID-19 pandemic. Educational institutions, educators, and policymakers must prioritize credibility as an essential component of effective e-learning. By doing so, they can not only navigate the current educational landscape successfully but also lay the foundation for a more resilient and adaptable future of education in a digital age.

Finally, the limitations of the study include a sample of university students from Bisha University in the Kingdom of Saudi Arabia, which may not represent students in other regions or educational levels. The study results may not be generalizable to non-epidemic settings. Future research should use larger samples, longitudinal designs, and additional variables.

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Conflict of Interest

The authors declare that they have no conflict of interest.

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Appendix 1:

Table 1. Sample Description

Descriptive variables		*Frequency*	*Percent*	*Valid Percent*	*Cumulative Percent*
Gender	Male	296	61.7	61.7	61.7
	Female	184	38.3	38.3	100.0
Age	18 to 21 years old	94	19.6	19.6	19.6
	22 to 25 years old	84	17.5	17.5	37.1
	26 to 29 years old.	79	16.5	16.5	53.5
	30 and over	223	46.5	46.5	100.0
academic complexe	Bisha	444	92.5	92.5	92.5
	Belqarn	15	3.1	3.1	95.6
	Al-Namas	15	3.1	3.1	98.8
	Tathleeth	6	1.3	1.3	100.0
Study program	Diploma	154	32.1	32.1	32.1
	BSC	51	10.6	10.6	42.7
	Higher Diploma	153	31.9	31.9	74.6
	Master	119	24.8	24.8	99.4
	Ph.D.	3	.6	.6	100.0
Specialty	Business Administration	402	83.8	83.8	83.8
	Arabic	6	1.3	1.3	85.0
	nursing	15	3.1	3.1	88.1
	English	24	5.0	5.0	93.1
	Computer Science	9	1.9	1.9	95.0
	Mathematics	3	.6	.6	95.6
	Islamic studies	3	.6	.6	96.3
	History	3	.6	.6	96.9
	Food and Food Science	6	1.3	1.3	98.1
	Home Economy	9	1.9	1.9	100.0
Grade	Level 1	18	3.8	3.8	3.8
	Level 2	203	42.3	42.3	46.0
	Level 3	48	10.0	10.0	56.0
	Level 4	144	30.0	30.0	86.0
	Level 5	12	2.5	2.5	88.5
	Level 6	13	2.7	2.7	91.3
	Level 7	12	2.5	2.5	93.8
	Level 8	18	3.8	3.8	97.5
	Level 10	12	2.5	2.5	100.0
Residence	in the city	279	58.1	58.1	58.1
	In the village	201	41.9	41.9	100.0
Elearning device	Laptop	292	60.8	60.8	60.8
	Tablet	39	8.1	8.1	69.0
	Phone	149	31.0	31.0	100.0
	Total	480	100.0	100.0	

Source: Field data, 2021