A STUDY ON THE CULTURAL CONTEXTS OF E-LEARNING IN HIGHER EDUCATION IN CHINA AND FLANDERS, FOCUSED ON STUDENT AND TEACHER PERSPECTIVES.

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ABSTRACT

E-learning has grown into an important element of excellent educational programmes around everywhere, although cultural factors have a significant impact on its efficacy. The present research examines the cultural elements that affect the acceptance and effect of e-learning in Chinese colleges and universities from the standpoints of both students and teachers. In this quantitative investigation, a representative cross-section of Chinese university students and teachers filled out pre-designed questionnaires. The results show that cultural norms including testing-focused educational systems, collectivism, and authoritarian relationships between educators and pupils greatly impact learning in virtual classrooms. Students are emphasising cooperative educational practices including group work and assistance from peers, which are in line with China's collectivist cultural values. Autonomous education and active participation were hindered, nevertheless by an emphasis on instructor authorities and a lack of encouraging of free debate. Despite the benefits of e-learning innovations, educators have struggled to adapt their pedagogical practices to be more focused on students and participatory. Furthermore, pupils in urban areas have access to more advanced technology than students in the countryside due to demographic differences. The research found that for e-learning to work in China, it needs to take cultural factors into account. It also addresses the technological gap, suggests specialised instruction for educators that integrates cultural awareness with creative teaching methods, and suggests a balance between formal teacher direction and interactive and participatory components. Virtual teaching results in Chinese secondary institution can be more equitable, durable, and transformational if e-learning methodologies are aligned with cultural norms.

Keywords: E-learning; Culture contexts; Student perspectives; Online education; Higher education in China.

INTRODUCTION

Considering its adaptability, simplicity, and potential for fostering creativity in pedagogy, e-learning has grown into a crucial component of higher education. Nevertheless, cultural contexts significantly impact its efficacy by moulding the ways in which learners and educators view, utilise, and participate in online educational settings. The effectiveness of online learning programs in varied contexts is highly dependent on factors such as cultural norms,

communicative preferences, and historical practices. For example, online classrooms that prioritise cooperative effort, peers' assistance, and developing social resources may be ideal for learners from collectivist cultures who value teamwork and collective education. Autonomous courses and individualised courses of study may appeal learners from individualised cultures who place a premium on independence and self-sufficiency (Luppicini C Walabe, 2021). Students' reactions to student-generated or collaborative online learning environments may differ depending on whether they are from a society that values authoritative figures or not. Some of the other elements that cause cultural differences in the results of e-learning include linguistic proficiency, knowledge of technology, and financial standing. Learners from more technically developed communities may feel more comfortable using and have easier chances of finding internet-based educational materials, whereas students from areas where English is not the main language may find it more difficult to navigate global e-learning systems. Degrees of participation and enthusiasm in online learning environments can be influenced by cultural views concerning learning, which can be seen as either an autonomous endeavour or an obligation to the community (Mystakidis et al., 2021). If universities want to build comprehensive and successful e-learning platforms, they must first acknowledge these cultural disparities. Embracing different cultural backgrounds in the creation of courses, training tactics, and electronic resources allows institutions to create more inclusive educational environments, improve the learning process, and cater to internet-based education for students all over the world. The final objective of culturally competent e-learning is to make postsecondary educational opportunities more equitable, affordable, and transformational for all students.

BACKGROUND OF THE STUDY

With the emergence of technological innovation and the quickening growth driven on by the COVID-19 epidemic, e-learning has grown significantly in China's higher education sector. The cultural contexts of China greatly impact the ways in which educational activities are conducted via the internet, even though online learning has several advantages such as accessibility, creativity, and versatility. community organising, the authority of teachers, and test-oriented education have long been hallmarks of Chinese education. Learners' engagement in online learning settings is influenced by these principles. Independent, self-directed education is frequently advocated in Western e-learning paradigms, while numerous learners appreciate instruction led by instructors, identifiable systems, and organised direction. Therefore, Chinese students may be less likely to actively engage in internet-based debates or autonomous investigation and more likely to be dependent on educators' directions (Zhao et al., 2021). Meanwhile, significant cooperation among peers is fostered by the collectivist society. Chinese students thrive in collaborative education environments that encourage group work through online discussions boards, supportive peer networks, and project-based learning. The efficacy of platforms meant to promote intellectual curiosity, and free speech can be diminished, nevertheless, when open discourse is restricted due to cultural reverence for hierarchy. The results are influenced by language and computer literacy as well. Remote learners encounter

difficulties because of material inequality, in contrast to their urban counterparts who enjoy easier availability of cutting-edge technology and global networks. Additionally, e-learning platforms mainly concentrate on exams instead of improving skills because of the cultural emphasis on education to achieve social advancement. Designing culturally adaptable platforms is crucial for Chinese higher education to enhance the effect of e-learning (Osadcha et al., 2021). Chinese institutions may better prepare learners for international prosperity while honouring regional institutional traditions through e-learning that is more efficient, affordable, and revolutionary by adjusting to different cultural contexts. The piano, as a popular and all-ages musical instrument,

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PURPOSE OF THE RESEARCH

This study aimed to examine, from the viewpoints of students, the cultural factors that influence the uptake and efficacy of online training in China's higher education institutions. With the rise of online schooling around the world, e-learning has grown into an integral part of university curricula. Technology progress is important, but cultural values, societal standards, and instructional practices are just as crucial to ensure the success associated with these platforms. Cultural factors have a significant impact on e-learning techniques in China due to the country's firmly ingrained authoritarian interactions between educators and students, collectivist attitudes, and testing-centred methodologies. In addition to this, it investigated the advantages and disadvantages that both categories face when attempting to find a middle ground between more traditional instructional strategies and more modern technical tools. Through the incorporation of a variety of perspectives, the purpose of this research was to provide a more in-depth knowledge of the ways in which culture influences the adoption as well as consequences of e-learning.

LITERATURE REVIEW

E-learning has grown in importance in the academic world in the last several years. Investigators are exploring new ways to enhance educational aspects through e-learning. Nevertheless,

complete reviews of the literature on e-learning in the academic setting remain lacking, even if there has been an uptick in e-learning studies. e-learning in educational institutions was the focus of earlier research that sought to aggregate relevant articles and reviews. This study organised the chosen papers based on their research techniques, conceptual paradigm and structure utilisation. The literature also detailed the challenges and potential prospects of e-learning in the field of high-quality education. Most of the conceptual designs and paradigms were utilised after acceptance, according to the data (Baig et al., 2022). Lastly, this study drew attention to several constraints and offered some suggestions for additional investigations that could help advance the fields of e-learning and educational institutions. Previously conducted research also attempted to develop a framework for the efficacy of e-learning in the setting of the COVID-19 pandemic. This was accomplished by evaluating the productivity of e-learning and by analysing the primary factors that contribute to the efficiency of e-learning (Jaoua et al., 2022). The outcomes of the analysis suggested that the effectiveness of e-learning can be determined by relationships between four components consisting of the e-learning platform, preparedness for e-learning, engagement, and rejection to transformation. Another study was conducted with the purpose of determining the benefits and drawbacks of utilising e-learning in the context of higher education in different universities. Although each learner has a distinctive approach to learning on the internet, the findings showed that there were similarities among the responses of the students. The investigations have brought to light the characteristics of the e-learning programmes that prospective students with an interest in online education ought to take into consideration to determine their preferences (Al Rawashdeh et al., 2021). According to these results, it was important for individuals who are considering making the transition to e-learning to have a thorough understanding of the distinctions that exist between a traditional educational scenario and an e-learning educational settings.

RESEARCH QUESTION

How do cultural contexts of e-learning influence higher education in China from student perspectives?

RESEARCH METHODOLOGY

Research Design

Utilising SPSS edition 25, the quantitative data were examined. To ascertain the magnitude and trend of mathematical relationships, the odds ratio and 95% confidence interval were utilised. Results were deemed to have statistical significance when $p < 0.05$. While quantitative approaches were utilised for structured survey questionnaires to assure accuracy and credibility, descriptive statistics were employed to organise the important parts of the information available.

Sampling

There was a fair chance for each member of the specified community to be chosen for this study because a simple random sampling procedure was used. It was necessary to build an investigation that included 753 participants employing the Rao-soft software. One thousand surveys were sent out undetermined times to people who were qualified to participate based on the framework of sampling. Researchers received 890 responses altogether; however, 66 were not included in the ultimate analysis since they were inadequate. This meant that 824 respondents were considered valid. With this method, researchers were able to reduce the impact of sampling error and increase the data's generalisability.

Data and Measurement

A structured questionnaire survey was the main tool for gathering information. The survey's two main components are: (A) demographic data, and (B) respondents' opinions of the qualities of online as well as offline platforms, determined by a 5-point Likert scale. The main results were further supported by secondary data gathered from trusted resources including internet-based resources and official documents.

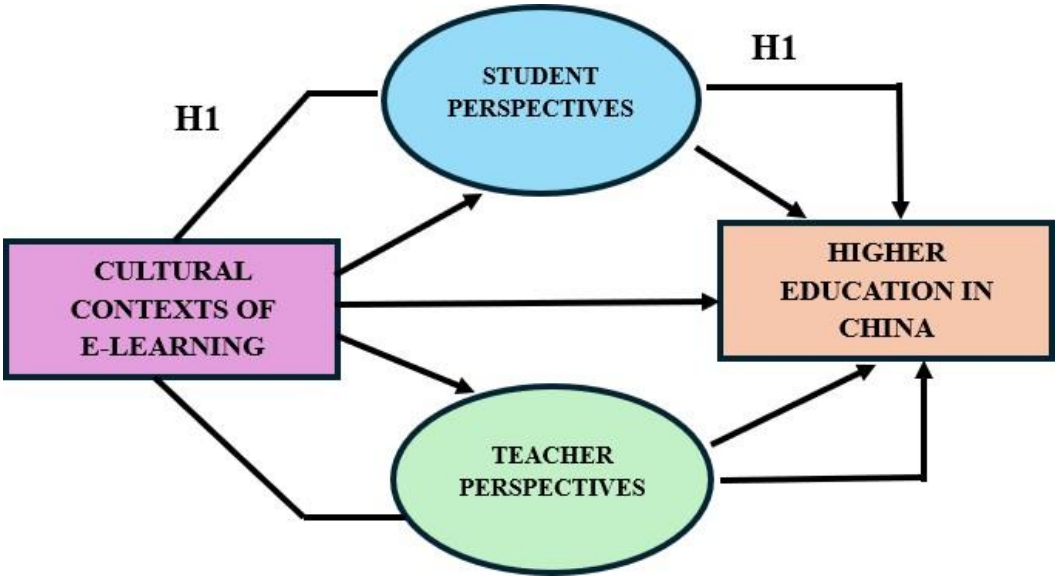
Statistical Software

MS Excel and SPSS edition 25 were the tools used for data analysis.

Statistical Tools

The information collection was interpreted by a thorough study. Researchers utilised factor analysis (FA) to confirm the validity of the construct of the measure, as well as utilised analysis of variance (ANOVA) to look for distinctions among the groups. Researchers also used descriptive statistics to help people comprehend the data better and spot important trends and correlations.

CONCEPTUAL FRAMEWORK



RESULT

Factor Analysis (FA): Factor Analysis (FA) seeks to uncover hidden characteristics within visible data. Regression values are often used for evaluations when clear graphical or clinical signs are unavailable. Simulation entails identifying weaknesses, infractions, and possible visible connections. The Kaiser-Meyer-Olkin (KMO) Examination is used to assess records that have been acquired via numerous regression studies. The mathematical framework and its sample variables have demonstrated to represent reliable estimations. The information might reveal the presence of duplicates. Reducing the proportions makes the data more obvious. A number among 0 and 1 is provided by KMO to the investigator. An adequate sample population is defined as a KMO value among 0.8 and 1.

In Kaiser's opinion, following represent the acceptable ranges: Here are the certification requirements that Kaiser possesses set:

An appalling 0.050 to 0.059; well below the usual range of 0.60 to 0.69; The typical range for middle grades is between 0.70 and 0.79.

A quality point score between 0.80 and 0.89. The interval from 0.90 to 1.00 astounds them.

According to the Kaiser-Meyer-Olkin scale: 0.951

The results of Bartlett's test of Sphericity are as follows: 3768.753; 190 is degrees of freedom (df); sig =.000 is the approximate chi-square value.

Table 1. Examination of KMO and Bartlett's Sampling Adequacy.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.951
Bartlett's Test of Sphericity	**Approx. Chi-Square**	3768.753
	df	190
	Sig.	.000

Most instances, this renders things straightforward to implement criteria for selection. Utilising Bartlett's Assessment of Sphericity, the investigators assessed whether the correlation arrays exhibited numerical significance. If the Kaiser-Meyer-Olkin score is 0.951, then the sample is large enough. The p-value that comes out of Bartlett's Sphericity analysis is 0.00. The affirmative result of Bartlett's Sphericity examination indicates that the correlation matrices is not a distinctive matrix.

INDEPENDENT VARIABLE

Cultural contexts of e-learning: Students' interactions with online environments, pedagogical materials, and instructional techniques are significantly influenced by the cultural contexts of e-learning, which serve an essential part in moulding these interactions. Not only is e-learning a movement in technology, but it additionally represents an experience of culture that is affected by the cultural norms, modes of communication, and academic practices of the students. Collective education and teamwork, for instance, may be more successful in cultures that are more collectivist, whereas in cultures that are inclined towards independence, autonomous education and solitary study are frequently preferable (Jung, 2023). It is possible that online courses heavy on text won't resonate as much with highly contextualised societies as those that place a premium on visual or interactive elements. Cultures that place a premium on straightforward speech and low background may, on the other hand, find material based on text more natural. Additionally, cultural views on understanding and hierarchy impact the relationships between students and educators; for example, certain cultures promote free debate between educators and pupils, while others discourage it (Mutambik et al., 2020). To create successful and comprehensive e-learning systems, it is crucial to comprehend the variety of cultures. Learners are more engaged when courses are tailored to their cultural background, there is multinational assistance, and instances are used in context.

MEDIATING VARIABLE

Student perspectives: The cultural contexts, prior knowledge, and standards of students all play a role in shaping their perspectives on e-learning. Regarding its affordability, simplicity, and adaptability, numerous learners have a favourable impression of e-learning. It is much simpler to manage schoolwork with other obligations when students could access course materials through internet-based resources, which they can use whenever and whenever they like (Nikou C Maslov, 2021). Possibilities for independent learning allow students to customise their learning experience according to their requirements, while a choice of multimedia instruments and collaborative materials can improve involvement even further. Yet, student perspectives frequently emphasise difficulties. Without constant, one-on-one guidance, some students may find it difficult to maintain focus, stay motivated, and complete assignments on time. Furthermore, students do not always trust evaluation on the internet and do not always believe that online instruction is of excellent standards (Lin C Nguyen, 2021). Although these drawbacks, numerous learners view e-learning as a beneficial substitute for or supplement to more conventional classroom settings. Online learning is becoming more important around the entire globe as a means of acquiring knowledge because it motivates students, increases engagement, and ensures that everyone can gain entry to quality learning when it is built with cultural sensitivity, engaging material, and solid assistance infrastructures.

DEPENDENT VARIABLE

Higher education in China: As a result of tremendous growth and change over the last several years, China's educational system is now one of the biggest in the entire world. Chinese colleges

have grown in magnitude, stature, and recognition because to the federal government's generous funding. Growth, creative thinking, and modernisation in China's economy are propelled in large part by the country's educational system. Academic institutions place an emphasis on Technological fields while also encouraging study in the arts, social sciences, and humanities. Collaboration with foreign educational institutions, programmes for student initiatives, and the incorporation of international viewpoints into curricula have all been pushed for by the entire system (Mei C Symaco, 2022). Nevertheless, there are still obstacles to overcome, including ensuring integrity while rapidly expanding, reducing accessible gaps among regions, and helping students cope with the immense educational strain they endure. Regardless of these challenges, China's higher education system is booming, adding greatly to the country's standing in the worldwide education sector and the academic industry while also creating skilled employees. Educational autonomy, geographical accessibility inequities, and intense intellectual competitiveness are some of the current issues that influence discussions about China's higher education system's prospects (Mok et al., 2021). However, China's university system is well-positioned to influence the development of the global educational economy because of its persistent emphasis on quality, creativity, and international cooperation.

Relationship between cultural contexts of e-learning and higher education in China considering student perspectives: The educational practices, attitudes, and standards of Chinese learners have a significant impact on the cultural contexts of e-learning and higher education. Through the years, testing-based achievement, mechanical memorisation, and the authority of teachers have all played a role in China's higher educational system. Learners' dependence on organised supervision from teachers may clash with their newfound independence and self-direction in online educational activities, which can be a significant adjustment for them (Mao C Lee, 2024). Increased independence, better schedule organisation, and proficiency with technological tools are all areas where students will need to grow because of this cultural transformation. Virtual collaborative endeavours and peer encouragement are generally highly valued by Chinese students due to their collectivist cultural heritage. Their enthusiasm and feeling of connection are both boosted by the opportunities for collaboration, discussions, and collaborative tasks offered by e-learning settings. Cultural traditions that forbid challenging authorities or presenting opposing views may make certain learners hesitant to participate meaningfully in digital conversations (Swanson C Valdois, 2022). Considering these drawbacks, numerous learners have a favourable impression of e-learning, praising its adaptability, variety of materials, and chances for international education. Distance learning in Chinese higher education is more engaging and effective when culturally appropriate aspects of design are used, such as images that students may communicate with, collaborative tasks, and real-world experiences.

The researchers in the present investigation intended to assess the following hypothesis about the relationship between cultural contexts of e-learning and higher education in China considering student perspectives depending upon what has already been stated at this point:

"H_{01}: There is no significant relationship between cultural contexts of e-learning and higher education in China considering student perspectives."

"H_1: There is a significant relationship between cultural contexts of e-learning and higher education in China considering student perspectives."

Table 2. H1 ANOVA Test.

ANOVA					
Sum					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	56,874.626	312	9,128.594	924.321	0.000
Within Groups	371.344	511	9.876		
Total	57,245.970	823			

The investigation found some significant things. The F-value is 924.321 and the p-value is 0.000, indicating that there is a statistically significant difference under the 0.05 alpha standard. The findings indicates that the ***"H_1: There is a significant relationship between cultural contexts of e-learning and higher education in China considering student perspectives"*** has been accepted, and the null hypothesis has been rejected.

DISCUSSION

This research's findings showed that cultural contexts significantly affect how well e-learning works at Chinese colleges and universities. Learners and educators equally have come to understand that cultural norms like socialism, authoritarian interactions between educators and pupils, and examination-focused instruction affect the effectiveness of distance learning, even though it provides creative thinking, affordability, and versatility. Numerous international e-learning methods emphasised individual learning, although these cultural traits frequently emphasise reliance on formal assistance from instructors. The collectivism tendency of Chinese society was reflected in the learners' assessed value of e-learning settings that promote cooperation and peer assistance. Participants' interest and enthusiasm were both boosted by group work, online forums, and assigned responsibilities. Unfortunately, chances for important discussion and student-driven exploration were diminished in online learning spaces due to the customary reverence for leadership, which occasionally inhibited open discussion. Unlike students, teachers felt that the system's history of teacher authority and evaluation-based results made it difficult to transition to student-driven and participatory pedagogies, even while e-learning presented fresh educational potential. Differences between students in both rural and urban settings were also shown to be substantial. Learners in rural areas encountered challenges owing to inadequate facilities and technological knowledge gaps, in contrast to their urban counterparts who enjoyed easier accessibility to materials and

innovation. This underscored the ongoing relevance of demographic and cultural elements in determining e-learning settings. Taken together, this research's findings indicated that cultural adaptation of platforms and tactics was crucial for the success of e-learning in China. Improve the accessibility and efficacy of digital education by bridging cultural standards and contemporary educational requirements were essential through the combination of organised, instructor-directed techniques with cooperative, technologically driven instruments. In general, the research indicated that for e-learning to be successful in China, systems and approaches must be adjusted to reflect cultural norms. By integrating organised, instructor-driven methodologies with interactive, technologically enabled instruments, it was possible to reconcile contemporary educational requirements with cultural standards, thereby enhancing the effectiveness and inclusivity of digital educational programmes.

CONCLUSION.

The investigation concluded that cultural factors represent a significant role e in determining the success of e-learning in Chinese institutions. Despite the many advantages that online resources offer in terms of availability, innovation, and ease of use, cultural norms like collectivism, authoritarian interactions between educators and pupils, and test-driven education limited their effect. Students placed a premium on working together and receiving assistance from their peers, which is consistent with collectivist principles, but their dependence on teacher authority prevented them from engaging in thoughtful debate and empathetic listening. Teachers were also aware of e-learning's possibilities, but many struggled to make the transition from instructor-focused to student-focused engaging techniques. Following are a few suggestions to make e-learning even more successful. As an initial move towards empowering students, schools should create culturally sensitive systems that strike a good mix between instructor direction and student participation. Secondly, to make the most of collectivist qualities, it is important to enhance learning through cooperative mechanisms like peer mentorship, collaborative tasks, and online discussions. Third, to make sure everyone has a comparable opportunity, institutions and lawmakers need to work on the rural region's resources and skills to close the technological gap. Fourth, for instructors to be successful in online settings, their career growth should centre on how to combine cultural awareness with creative instructional techniques. Internet-based educational experiences in college and university settings can be made easier to access, successful, and affordable by adjusting e-learning methodologies to fit China's cultural circumstances and promoting incremental improvement.

REFERENCES

1. Al Rawashdeh, A., Mohammed, E., Al Arab, A., Alara, M., C Al-Rawashdeh, B. (2021). Advantages and disadvantages of using e-learning in university education: Analyzing students' perspectives. Electronic Journal of e-learning, 107-117.

2. Baig, M., Shuib, L., C Yadegaridehkordi, E. (2022). e-learning adoption in higher education: A review. Information Development, 570-588.
3. Jaoua, F., Almurad, H., Elshaer, I., C Mohamed, E. (2022). e-learning success model in the context of COVID-19 pandemic in higher educational institutions. International Journal of Environmental Research and Public Health, 2865.
4. Jung, I. (2023). Cultural influences on online learning. Culture and online learning (pp. 15-24). Routledge.
5. Lin, Y., C Nguyen, H. (2021). International students' perspectives on e-learning during COVID-19 in higher education in Australia: A study of an Asian student. Electronic Journal of e-learning, 241-251.
6. Luppicini, R., C Walabe, E. (2021). Exploring the socio-cultural aspects of e-learning delivery in Saudi Arabia. Journal of Information, Communication and Ethics in Society, 560-579.
7. Mao, Y., C Lee, K. (2024). A systematic review of Chinese students' online learning experiences. European Journal of Open, Distance and e-learning, 41–59.
8. Mei, W., C Symaco, L. (2022). University-wide entrepreneurship education in China's higher education institutions: Issues and challenges. Studies in Higher Education, 177-193.
9. Mok, K., Xiong, W., Ke, G., C Cheung, J. (2021). Impact of COVID-19 pandemic on international higher education and student mobility: Student perspectives from mainland China and Hong Kong. International journal of educational research, 101718.
10. Mutambik, I., Lee, J., C Almuqrin, A. (2020). Role of gender and social context in readiness for e-learning in Saudi high schools. Distance Education, 515-539.
11. Mystakidis, S., Berki, E., C Valtanen, J. (2021). Deep and meaningful e-learning with social virtual reality environments in higher education: A systematic literature review. Applied Sciences, 2412.
12. Nikou, S., C Maslov, I. (2021). An analysis of students' perspectives on e-learning participation–the case of COVID-19 pandemic. The International Journal of Information and Learning Technology, 299-315.
13. Osadcha, K., Osadchyi, V., C Spirin, O. (2021). Current state and development trends of e-learning in China. Information Technologies and Learning Tools, 208-227.
14. Swanson, B., C Valdois, A. (2022). Acceptance of online education in China: A reassessment in light of changed circumstances due to the COVID-19 pandemic. International Journal of Educational Research Open, 100214.
15. Zhao, Y., Wang, N., Li, Y., Zhou, R., C Li, S. (2021). Do cultural differences affect users'e-learning adoption? A meta-analysis. British Journal of Educational Technology, 20-41.