

Factors Affecting Online Learning Outcomes for New Normal Life of High School Students in Chengdu, China

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Received: July 29, 2023, Revised: December 22, 2023, Accepted: December 25, 2023

Abstract

This research aimed to investigate the key factors impacting online learning outcomes for students in Chengdu, China, in the context of the 'new normal' life brought about by the COVID-19 pandemic. The study predominantly involved male high school teachers, aged 31-35, teaching grade 6, with a monthly income range of CNY 4,001-4,500. The research identified the importance of perceived ease of use of technology, including using smartphones and tablets as essential teaching devices, the acceptance of recorded teaching by students, and the requirement of user-friendly teaching instruments. In terms of perceived usefulness, factors such as teacher motivation, students' perception of online teaching, and the efficacy of online teaching emerged as crucial components for enhancing online learning outcomes.

The study also highlighted the moderate impact of faculty capacity on online learning outcomes, emphasizing the need for schools' administration to understand and support online teaching and provide necessary teaching resources like Wi-Fi routers and teaching applications. Significant emphasis was placed on course content design, quality, and organization as factors affecting online learning outcomes. Learner characteristics, particularly the students' perception and enthusiasm for online learning, were also instrumental in determining these outcomes. Finally, online learning outcomes were explored, focusing on

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enhancing students' communication skills, exam results, knowledge broadening, and the importance of online discussions to improve learning quality.

Keywords: Online Learning Outcomes, faculty capacity, online educational system

Introduction

Recently, advances in modern computer and network technology have driven the development of distance education (L. Li, 2014). In addition, the COVID-19 pandemic, a public health crisis of worldwide importance, announced by the World Health Organization (WHO) in January 2020 as an outbreak, has made distance education through the E-learning system an urgent and irreplaceable requirement. Despite the current pandemic hindering education worldwide, online learning based on Internet services has become available and universal, facilitating the learning system. Colleges and universities use online resources to continue their educational journey through software applications such as Zoom and Microsoft Teams. (Thuong Pham et al., 2021)

As a result, the effectiveness of e-learning and students' online learning outcomes have become a matter of concern for universities in particular and society in general. There has been a significant increase in research on factors affecting students' online learning outcomes. According to (Habes et al., 2019), improved communication technologies enable easy learning systems since access to social media is a beneficial source of information and communication. Online technology is an active element of students' and lecturers' learning systems. Several nations used television broadcasts and online sources during the pandemic to promote distance education. Prioritizing distance education primarily through online systems is a "model change in education." (e jammed education wheel causes certain instabilities regarding learners' future, emphasizing the importance of technology in our lives. Online learning is a valuable tool for overcoming the challenges of the pandemic crisis and other general difficulties (Almuhausen et al., 2020). However, many argue that online learning

is an education crisis today. Most learners are not interested in online learning due to limited interactions, unstable sound and visual quality due to dependence on Internet quality, and technological equipment not meeting demand. (Thuong Pham et al., 2021)

(Farida et al., 2022) The outbreak of COVID-19 was a significant event that pushed educational institutions to transition from the traditional classroom environment to the various online learning options. COVID-19 has affected all spheres of human life (Chang et al., 2008; Mokter, 2020; Wong et al., 2020), including the delivery of education and learning (Panesar et al., 2020) ;) To avoid the spread of COVID-19, most educational activities, like classroom teaching, seminars, conferences, workshops, etc., were either delayed or canceled by educational institutions (Khachfe et al., 2020) until their online availability. Online learning is transferred through internet technologies by synchronous and asynchronous means. These modes help students interact with their teachers and colleagues while keeping a social distance (Dong et al., 2020). Online learning allows students to learn, interact, share their views, be independent, and use time independently (Azzi et al., 2021) (Wong et al., 2020). Using online technology to learn requires the students and teachers to have the ability to use technology to develop and maintain a sound social interaction (Andel et al., 2020). Apart from the effective use of technology, other factors, such as the availability of suitable facilities, infrastructure, and the financial state of the students, also play an essential role in online learning (Rusli et al., 2020)

(Farida et al., 2022) Argues that in this era of rapid development of Information and Communication Technologies (ICT) and their various applications, it is crucial to look at the quality of online learning (Zhafira et al., 2020). Information technology systems provide many facilities for fast, effective, and efficient online education delivery. While the prevailing pandemic (COVID-19) has forced students to use Information and Communication Technologies (ICT) (Mustakim, 2020), ICT systems enable students to learn more varied material while enjoying time and space flexibility (Laksana, 2021). Moreover, the online text

is generally aided by audio-visual enrichments (Hasibuan, 2016), further expanding the learning experience.

Although online resources offer countless benefits for students, the effectiveness and efficiency of online learning are affected by many variables (Pratiwi, 2020). These variables include the role of faculty, support from the university, learner readiness, and motivation. These variables can be perceived differently by different students. Many students face challenges that influence the smooth flow of educational services (Laksana, 2021). Students in regions with low internet quality and electricity outages generally experience a lower quality of online learning than others. The role of faculty, support available from the university, the study environment at home, and motivational factors are all essential factors that can affect the quality of online learning. Students, as learners, are central to online learning and experience the most significant impact of online learning (Chen et al., 2021; Laksana, 2021). Furthermore, the faculty members also play a pivotal role in online learning. They must prepare relevant teaching material and presentations based on facts and figures compatible with the online environment. Similarly, online educational services can only be delivered with the cooperation of the university authorities. Several resources are required for the smooth online delivery of learning resources and the learning process. The application of online teaching and learning in most developing countries has resulted from the constraints caused by the COVID-19 pandemic (Suprianto et al., 2020). However, several issues, such as limited internet access, discontinuous availability of electricity, and the lack of support from family and university (Djidu et al., 2021), may have hampered the students' learning journey. It is necessary to investigate the students' perceptions regarding their online learning experience during the COVID-19 pandemic to assess the quality of online learning in a developing economy. Earlier qualitative studies (Khalil et al., 2020; Djidu et al., 2021; Laksana, 2021) have empirically examined the factors influencing online learning quality. The literature suggests that there is much to learn about online learning environments. Previous studies have demonstrated that these environments positively and negatively impact

students' effectiveness and achievements (Franklin et al., 2001). Examining and illuminating the perspective of students directly involved in online courses could offer valuable insights by identifying the factors responsible for the quality of online learning. This research focused on the students using asynchronous technology to assess the quality of learning in online learning environments. In previous studies, students preferred web-based learning to face-to-face, as it offered convenience and flexibility. Students have also reported that web-based learning opened up a new world of information (Yang & Cornelius, 2004)

Ling (2022) Also studied in his research on December 31, 2019, a novel infection, coronavirus (COVID-19), stemmed from a unique etiology, commencing from the ground of Wuhan, the city of the People's Republic of China (Zhu et al., 2020). The magnificence of this causative agent (SARS-CoV-2) has driven the world to experience economic repercussions, thus articulating it as a global emergency on March 11, 2020 (WHO, 2020). The terrifying characteristics of COVID-19 susceptibility have refined the perception of vulnerability in youthful adults, admitting that the asymptomatic capabilities of the disease work as a catalyst while affecting worldwide institutions and communities. Undoubtedly, the widespread COVID-19 has reversed the term Global Village into the Global Pandemic, recognizing no cross-cultural limits, potentially impacting the Western nations with its adversity. The tall susceptibility of COVID-19 has chartered its phenomenal effects on the world's economic sector explicitly, plumbing all levels of education arrangements (Nicola et al., 2020). Therefore, to curb it is widespread, governments have employed defensive protocols coming about in a transitory closure of academic institutes (e.g., in 192 countries), thus influencing the learning of 1.7 billion students worldwide (UNESCO, 2020a). Indeed, the result shows that the momentary closure of educational institutions has caused huge unsettlement in the global education sector, causing middle developing countries to sense a hard hit, whopping a yearly loss of \$148 billion (Aziz et al., 2020). In particular, the COVID-19 catastrophe has massively disturbed the education system of developing nations such as Pakistan. The worldwide vulnerability wave has compelled educational institutes to transition

learning activities from conventional mode to remote learning. Perhaps the diversion of advanced countries from physical to online learning has made researchers uncertain about the challenges in the country's educational establishment. Indeed, COVID-19 is a dreadful illusion affecting Pakistan's education structure, secretly pervading socio-economic activities (i.e., physical distancing) (Johnson et al., 2020). This pandemic Shockwave has perhaps restrained educational activities, peevish Pakistan's education foundation. Indeed, this staging effect of the pandemic has overwhelmed Pakistan's education sector, imposing unprecedented socio-economic challenges (Noor et al., 2020). Unsurprisingly, these unusual challenges of the pandemic have disturbed the student learning schedule while reinforcing its misfortune on students of low-income backgrounds (UNESCO, 2020b). Moreover, in the wake of the COVID-19 crisis, results showed that students were found highly disappointed and wretched by the utilization of new learning technologies (Al-Tammemi et al., 2020), in this manner, confronting difficulty in shifting to remote learning (i.e., online classrooms) (Owusu-Fordjour et al., 2020). Conceivably, the COVID-19 pandemic has alleviated magnificent devastation in students' academic lives, compounding their academic performance. Nonetheless, this rapid spread of the malignant infection has caused unprepared students to switch to remote learning, creating a vulnerable learning experience for academic staff and students (Gacs et al., 2020). The study explains that during the COVID-19 pandemic, a substantial reduction was recorded in students' performance (Osipov et al., 2021), inevitably altering the learning outcome. Indeed, COVID-19 uncertainty influences student learning experiences, thus imparting academic performance (Ling, 2022).

(BARDAKCI, ARSLAN, & CAN, 2018) In the study of online learning, there is widespread adoption of online learning across the globe to complement “bricks and mortar” education (Selwyn, 2016). (McDermott, 2017) stated that appropriate pedagogical approaches and technology are at the forefront, excluding cultural dynamics during the operationalization of online learning. There are two primary considerations for the acceptance and use of

technology, one of which is technological, and the other one is socio-cultural factors (Venkatesh et al., 2016). On the one hand, technical factors might provide students and teachers diverse opportunities. For instance, online learning might facilitate students with the opportunity of self-paced learning, access to floating information over the internet, or the flexibility of “anytime, anyplace, any pace” learning (Lecluijze et al., 2015). Meanwhile, teachers may extend their potential to teach, share materials at a lower cost, or contact students more easily (Jayatilleke & Gunawardena, 2016; Selwyn, 2016). There is no doubt that technological factors might play a prominent role in the widespread adoption of online learning due to its inherent affordances. On the other hand, cultural factors may also intervene in the operationalization of online learning as learning benefits cannot be separated from one’s own social and cultural complex space (Boeri, 2016). For instance, students and teachers’ cultural backgrounds concerning various dimensions proposed by Hofstede (1986), such as power distance, individualism/collectivism, masculinity/femininity, or uncertainty avoidance, might play an essential role in teaching-learning processes are carried out. With this in mind, it is essential to reveal how technological and socio-cultural factors might facilitate an improved state of students’ learning and more effective teaching-learning practices. Although the inherent affordances of technical factors are not deniable altogether and are essentially necessary to be investigated, the primary concern of this study is how cultural considerations might be associated with online learning environments. From this view, this study aims to investigate the insights of high school students enrolled in an online learning environment in the margin of cultural dimensions proposed by Hofstede (Hofstede, 1986).

The significance of the problems from the COVID-19 pandemic strongly affected the education system worldwide, especially in China. The researcher was interested in studying the Factors Affecting Students’ Online Learning Outcomes for the New Normal Life in Chengdu, China. Reviewing many essential related pieces of literature, the researcher found

that the factors affecting students' online learning outcomes are perceived ease of use, usefulness, faculty capacity, course content, course design, and learner characteristics.

Research Objectives

1. To study the level of opinion of high-school students on the technology acceptance model (TAM).
2. To study the level of opinion regarding online learning outcomes of the students.
3. To find out the relationship between the opinions on TAM and online learning outcomes of the students.

Expected Benefit

1. To know the essential factors of the Online Learning Outcomes that affected the students in Chengdu Du, China.
2. To use the result of this research to improve the quality of online learning and make the educational system standard for the new normal life.

Research Hypothesis

H₁: Does the perceived ease of use positively affect the online learning outcomes of the students in Cheng Du, China?

H₂: Does the perceived usefulness positively affect the online learning outcomes of the students in Chengdu, China?

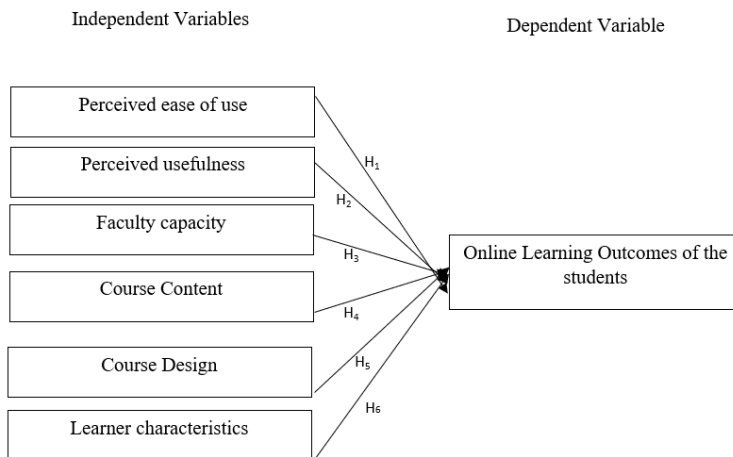
H₃: The Faculty capacity positively affects online Learning Outcomes of the students in Chengdu, China.?

H₄: Does the course content positively affect the online learning outcomes of the students in Chengdu, China?

H₅: Does the course design positively affect the online learning outcomes of the students in Chengdu, China?

H₆: Do the learner characteristics positively affect the online learning outcomes of the students in Chengdu, China?

Conceptual Framework



Literature Review

Concept and theoretical of TAM

The Technology Acceptance Model (TAM) has been a subject of extensive research and development since its conception by Davis in 1989 (Davis, 1989, as cited in Yi He & Sakawrat, 2018). Numerous studies have expanded on TAM's initial formulation through methods such as model generalization, comparisons, extensions, and integrations (Hess et al., 2010; Hess et al., 2014; Igbaria et al., 1997; Venkatesh & Davis, 2000; Venkatesh et al., 2003, as cited in Yi He & Sakawrat, 2018). Researchers have identified three primary methods for TAM's extension: the addition of constructs relating to IS adoption, examination of antecedents to TAM's key factors, and identification of factors that moderate the influence

of TAM's key components (Yi et al., 2018). Considering end users ' ever-changing nature and environment, the third method has been given significant attention (Yi et al., 2018). This focus has led to the identification of significant categories of TAM moderators, such as individual difference moderators (age, gender, prior experience) and situational influence moderators (voluntariness, subjective norms, task definition) (Wu & Lederer, 2009; Sun & Zhang, 2006; Venkatesh & Davis, 2000; Venkatesh & Morris, 2000, as cited in Yi He & Sakawrat, 2018). Yi He and Sakawrat's (2018) study introduces a new potential moderator, a self-regulatory focus. This moderator may affect the perceived ease of use versus the usefulness of technology acceptance. Efficacy theory, in this case, bridges self-regulatory focus to TAM, thereby expanding our understanding of how individuals' regulatory orientation may influence their technology acceptance (Yi et al., 2018). Adding two dimensions of efficacy, self-efficacy and response efficacy, further enhances our understanding of TAM. Self-efficacy refers to an individual's belief in their ability to perform recommended actions, such as IS adoption, while response efficacy refers to an individual's belief in the effectiveness of recommended actions towards achieving a specific goal (Witte, 1994; Bandura, 1982, as cited in Yi He & Sakawrat, 2018). Thus, the perceived ease of use and usefulness, the key constructs of TAM, align solidly with the two dimensions of efficacy. This alignment enhances the theoretical relationships and sheds light on how these factors may jointly shape user decisions on technology acceptance (Yi et al., 2018).

In conclusion, the research reinforces the extensive applicability and adaptability of the TAM framework. Exploring its various aspects, including perceived ease of use and perceived usefulness, contributes to understanding how technology acceptance may be influenced in the era of ever-evolving technology and user needs (Yi et al., 2018).

Concept and theory of perceived ease of use and Perceived usefulness

Perceived usefulness and ease of use are critical factors in accepting or rejecting information technology. The former is the degree to which a person believes that using a

particular system would enhance their job performance, often incentivized by raises, promotions, bonuses, and other rewards (Davis, 1989; Pfeffer, 1982; Vroom, 1964). The latter is how much a person believes using a particular system would be effortless (Davis, 1989; Radner & Rothschild, 1975). Theoretical foundations for these concepts are evident in diverse research, such as the work of Schultz and Slevin (1975) and Robey (1979), which emphasized the impact of perceived usefulness on system utilization. The model presented by Robey (1979), which was built on the expectancy model of Vertinsky, Barth, and Mitchell (1975), parallels our understanding of perceived usefulness. An alternative expectancy-theoretic model was introduced and tested by DeSanctis (1983), further underscoring the importance of these factors (Vroom, 1964). Perceived ease of use is supported by Bandura's (1982) research on self-efficacy, a judgment of how well one can execute courses of action required to deal with prospective situations. Perceived ease of use is similar to self-efficacy, as both are considered proximal determinants of behavior (Hill et al., 1987). The cost-benefit paradigm from behavioral decision theory also relates to perceived usefulness and ease of use, explaining people's choice among various decision-making strategies in terms of a cognitive tradeoff between the effort required and the quality of the resulting decision (Beach & Mitchell, 1978; Johnson & Payne, 1985; Payne, 1982). In research on adopting innovations, perceived ease of use plays a prominent role. An innovation's complexity, defined as the degree to which it is perceived as challenging to understand and use, closely parallels perceived ease of use (Rogers & Shoemaker, 1971; Tornatzky & Klein, 1982). Furthermore, research within Management Information Systems (MIS) on evaluating information reports resonates with the distinction between usefulness and ease of use. Larcker and Lessig (1980) identify perceived importance and perceived usability as two distinct factors that collectively fall under perceived usefulness. Lastly, Swanson's (1982, 1987) "channel disposition" model for explaining the choice and use of information reports hypothesizes a psychological trade-off between information quality (perceived usefulness) and associated costs of access (perceived ease of use).

In conclusion, perceived usefulness and ease of use are critical determinants of user behavior and technology acceptance, validated by various theoretical foundations and research models (Davis, 1989).

The concept of faculty capacity

The concept of faculty capacity in a university context can be understood as the ability of educational institutions to equip faculty members with the necessary knowledge, skills, and abilities to deliver quality education, especially in an online learning environment. This is essential during unforeseen challenges such as the COVID-19 pandemic (Farida et al., 2022). Faculty capacity extends to include the provision of student support strategies to cater to their specific learning needs and styles, which have been recognized as crucial in enhancing the online learning experience (Curley & Strage, 1996; Moisey & Hughes, 2008; Rovai & Downey, 2010). Institutional support extends to admission, registration, scholarships, research, library services, help desks, and student life issues (Moore & Kearsley, 2005; Selim, 2007). Course support provides students with clarifications on course materials, assignments, activities, and assessments (Thorpe, 2002). A key aspect of faculty capacity is fostering meaningful interactions among students, instructors, and experts, promoting collaboration, debate, and concept exploration. This plays a pivotal role in enriching the learning experience and addressing points of confusion (Woo & Reeves, 2007). Hence, faculty capacity in a university context, contingent on the instructors' abilities and characteristics, is also deeply embedded in the institutional support provided by the university and its commitment to creating a conducive environment for student success.

Concept of Course Content

Course content is vital for ensuring students can learn the information. Therefore, it is essential to be concise when writing course content so that students are not overwhelmed and can retain the information. The format of the course content is also essential to ensure

that it is engaging and accessible to all students. Therefore, a mix of formats usually works best for courses. (Durant, 2022)

Concept and theoretical Learner characteristics

(Hendrik & Paul, 2014) They argued that learner characteristics are used in the sciences of learning and cognition to designate a target group of learners and define those aspects of their personal, academic, social, or cognitive self that may influence how and what they learn. Learner characteristics are essential for instructional designers as they allow them to design and create tailored instructions for a target group. By considering learners' characteristics, more efficient, effective, and motivating instructional materials are expected to be designed and developed. Learner characteristics can be personal, academic, social/emotional, and cognitive. Personal characteristics often relate to demographic information such as age, gender, maturation, language, social, economic status, cultural background, and specific needs of a learner group, such as particular skills and disabilities for and impairments to learning. Academic characteristics are more education and learning, such as learning goals (of an individual or a group), prior knowledge, educational type, and educational level. Social/emotional characteristics relate to the group or the individual concerning the group. Examples of social/emotional characteristics are group structure, place of the individual within a group, sociability, self-image (also feelings of self-efficacy and agency), mood, etc. Finally, cognitive characteristics relate to attention span, memory, mental procedures, and intellectual skills, which determine how the learner perceives, remembers, thinks, solves problems, organizes, and represents information in her/his brain. Concerning learner characteristics, there are often significant differences between the characteristics of different learners and groups of learners, such as children, students, professionals, adults, older people, and disabled persons. These groups differ in motivation, prior knowledge, expertise level, study time, and physical abilities. The differences within the learner characteristics impact the structure of the instruction and the degree of support and guidance of the learning process.

Research Methodology

The population is 1,791 teachers in 33 Chengdu, China high schools. The sample group is teachers in Chengdu, China. The sample size used in this questionnaire was determined using Krejcie and Morgan's (KREJCIE & MORGAN, 1970) tables using purposive sampling and simple random sampling. The sample size is 377 samples.

Research Results

Table 1 Characteristics of Respondents

Gender	Frequency	
		Percen
	t	
Male	205	54.4
Female	163	43.2
LGBTQI+	9	2.4
Total	377	100.0
Age		
Under 23 years	16	4.2
24-30 years	80	21.2
31-35 years	191	50.7
36 years Above	90	23.9
Total	377	100.0
Teaching Level		
Grade 4	111	29.4
Grade 5	130	34.5
Grade 6	136	36.1
Total	377	100
Income		
Below CYN. 4,000	18	4.8

CYN. 4,001 – 4,500	203	
	53.8	
CYN. 4,501 – 5,000	138	
	36.6	
CYN. 5,001 above	18	
	4.8	
Total	377	100

The respondents are high school teachers in Chengdu, China. Most are Male 54.4 percent, aged 31-35 years 50.7 percent, teaching level in high schools in grade 6 is 36.1 percent, and income is CYN. 4,001-4,500, 53.8 percent.

Table 2 Analysis of the predictive ability of the independent variable and dependent variable

Model	R	R Square	Adjust R Square	Std. The error of the estimate	Dublin- Watson
1	.852*	.726	.721	.21707	2.056

Table 3 Correlation Coefficient factors of Satisfaction of students analyzed by multiple regression

Independent Variable	b	S.E.	β	t	P	Zero- order	Tolerance	VIF
Constant	.315	.148	-	2.134	.034			
Perceived Ease of used	.031	.036	.029	.867	.387	.353	.656	1.525
Perceived Usefulness	.495	.047	.505	10.561	.000**	.480	.324	3.091
Faculty Capacity	.333	.029	.404	11.615	.000**	.585	.613	1.632
Course Content	.487	.029	.644	16.939	.000**	.575	.513	1.949

Course Design	.017	.043	.016	.392	.695	.499	.469	2.131
Learning Characteristics	.437	.042	.565	10.333	.000**	.250	.247	4.042

The result of data analysis of the Online learning outcomes of factors affecting Students' Online Learning Outcomes for the new normal life in Chengdu, China. Found Perceived Usefulness (X_2), Faculty capacity (X_3), Course Content (X_4), and Learning Characteristics (X_6) are positive influences of the Online learning outcomes factors affecting Students' Online Learning Outcomes for the new normal life in Cheng Du, China. However, perceived ease of use (X_1) and Course Design (X_5) negatively Influence the Online learning outcomes of factors affecting Students Online Learning Outcomes for the new everyday life in Chengdu Du, China. By most positive influence, 72.6% (R Square) are Perceived usefulness = .495, Course Content = .487, Learning Characteristics = .437, Faculty Capacity = .333, and Course Design = .333 respectively. It can illustrate regression equations as follows:

$$\hat{Y} = 0.031x_1 + 0.495x_2^{**} + 0.333x_3^{**} + 0.487x_4^{**} + 0.017x_5 + .437x_6^{**}$$

$$\widehat{ZY} = 0.029zx_1 + 0.505zx_2^{**} + 0.404zx_3^{**} + 0.644zx_4^{**} + 0.016zx_5 + 0.565zx_6^{**}$$

$$R^2 = 0.721$$

Conclusion

The respondents are high school teachers in Chengdu, China. Most are Male 54.4 percent, aged 31-35 years 50.7 percent, teaching level in high schools in grade 6 is 36.1 percent, and income is CYN. 4,001-4,500, 53.8 percent. The significant level of the Perceived ease of use factors affecting Students' Online Learning Outcomes for the new normal life in Chengdu, China. They were consistent with smartphones or tablets as essential teaching devices; students accepted the teaching by recording and needed easy teaching instruments.

The significant level of the Perceived usefulness of factors affecting Students' Online Learning Outcomes for the new normal life in Chengdu, China, is agreed, which consists of Teacher motivation of the students to study while teaching online, Students perceived the online teaching, and The online teaching is learning efficacy for the new normal, by respectively.

The significant level of faculty Capacity factors affecting Students' Online Learning Outcomes for the new normal life in Chengdu, China. It is moderate and agrees, which consists of Schools' administrators' understanding that teaching online is the new normal, the adequacy of School support for online teaching, and Schools providing electronic devices for online teaching (e.g., Wi-Fi routers, teaching applications, etc.), respectively.

The significant level of the Course Content in of factors affecting Students' Online Learning Outcomes for the new normal life in Cheng Du, China, which consists of Teachers constantly updating course content, the course was well organized (e.g., timely access to materials, notification of change, etc.), and Couse content interesting is necessary, respectively.

The significant level of the Course Design of factors affecting Students' Online Learning Outcomes for the new normal life in Chengdu, China. It is moderate and agrees that the Course follows the syllabus, the course project work is interesting for the students, and the course assignments (reading, assign problems, laboratory, etc.) are appropriate for online teaching.

The significant level of the Learner Characteristics of Factors Affecting Students' Online Learning Outcomes for the new normal life in Cheng Du, China. It is moderate and agrees, which consists of Students' perceiving the contents from online teaching; the learning perceived is not different between online and on-site teaching. Students are enthusiastic to learn when studying online, by respectively.

The significant level of the Online Learning Outcomes for the new normal life in Chengdu, China. It is moderate and agrees, which consists of Students being able to improve their communication skills, Students having better results on the examination, Online Learning broadening the student's knowledge, and Learning quality being improved by online discussion, respectively.

Finding and Discussion

From the quantitative research analysis, the researcher would like to present as follows:

The study of the Online Learning Outcomes of Factors Affecting Students' Online Learning Outcomes for the New Normal Life in Cheng Du, China.

Gender, age

There is a relationship between gender difference and age; age positively affects online learning outcomes of factors affecting Students' Online Learning Outcomes for the new everyday life in Cheng Du, China. This means all the different genders of teachers are focused on the online learning outcomes of factors affecting Students' Online Learning Outcomes for the new normal life.

Factors that influence online outcomes that affect the students' online learning.

From the multiple regression analysis, the researcher found the factor that most influence online outcomes is Perceived Usefulness, which means that in online teaching, the teachers should pay attention to students' perceived content and keep them motivated to study online; the second influence is Course Content, mean teachers are intended to update the course content and make the content attractive for students, the third factor that influence to the online outcome is Learner's characteristics mean teachers will respect to the students' characteristic if students are curious, teacher will not hesitate to answer because the participation in online learning is obstacle to communicate each other. The fourth factor is Faculty capacity, which means teachers need faculty support, such as Teaching online

devices and support from the administrators to make the support measure for online teaching. However, the perceived ease of use and Course Design factors are negative influences on the online outcomes affecting the students' online learning; it describes that the teachers are not focused on the students' ease of using the content and the teaching instruments, and also the course content is not necessary, were consistent with the studied of (Ismail, 2021) schools are switching to online education, there is an increased need of studying these variables in different, controlled, environments as well as looking into other variables that may have catalytic role. Also, with the ever-growing technological improvement, there is a need to update the knowledge pool continuously.

Suggestion

The following research should study the university administrators' response to the online outcome of online teaching.

1. In the following study, the researcher should study the relationship between online teaching and student satisfaction in Chengdu, China.
2. For the subsequent research, we ought to study the different area in the Chinese country

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