

The Experiences and Challenges of Online Learning for Chinese Students and the Impact of Online Learning on Student's Motivation

Yihan Chen

School of Education, Durham University, Confluence Building, Lower Mountjoy, Stockton Road, Durham, DH1 3LE, United Kingdom

qjvv43@durham.ac.uk

Abstract. The massive COVID-19 pandemic has had an impact on people's lives all over the globe, but it has also posed significant difficulties for educational systems since students were required to complete their coursework at home. Therefore, this study aims to examine how students and related personnel perceive online learning in the context of the COVID-19 pandemic, as well as to thoroughly discuss students' motivation for learning. According to the study, despite the epidemic's rapid reform, online learning still faces some challenges, including issues with young children's or primary school students' self-control as well as the need for electronic devices to enable students in remote areas to pursue online learning and environmental factors. In addition, factors like the adaptability of courses and the variety of learning resources offered by online learning can help students feel more motivated. The study discovered that online students do not have the time to interact with their professors and that some process volatility will also have a detrimental effect on students' motivation to learn. As a result, this study concludes with forward-thinking recommendations and fixes for the issues.

Keywords: Online Learning, Motivation, Chinese students.

1. Introduction

The ongoing COVID-19 pandemic has significantly altered both society and the global economy [1]. Governments have announced social distancing measures, national lockdowns, and bans on contact with people who are not an immediate family in an effort to slow the spread of the virus. The pandemic has consequently had a significant impact on education all over the world. According to the Cultural Organization, the United Nations *Education 2020 Survey* reports that by July 2020, the pandemic will have affected more than 1.07 billion students, and 106 countries have already stopped sending their students to school. This will inevitably lead to a shift from primary education to higher education to online models [2]. China is not an exception. In February 2020, the Chinese government began implementing emergency remote teaching-learning (ERT), which means "suspending schools without stopping teaching-learning." Obviously, an in-depth understanding of the students' and stakeholders' experiences is also essential. Regarding the online learning experience of students, numerous researchers have examined their satisfaction and engagement with online courses in existing studies [3]. Concerns have been raised, however, about the experience of students learning online and the quality of instruction, making this an important topic for education research. The disruption of COVID-19 has precipitated a rapid transformation of the education system, such that the suspension of face-to-face teaching has precipitated a massive shift in learning patterns for both students and teachers [4]. For instance, the challenges that children in rural and remote areas face with online learning; the importance of parental support for younger students.

Moreover, the advantages of online learning in the future educational environment have been observed, and online learning has also developed rapidly in China. Numerous researchers are curious about the impact of online learning on learner motivation, as an increasing number of students and educational institutions have begun to experiment with the possibility of online learning. According to Paris and Turner, motivation is the "engine" of learning. Motivation influences when, what, and how students learn [5]. At present, futuristic research has been conducted on the online learning

experience and motivation of students. The majority of the preceding articles focus on K-12 education in Western countries, while there is relatively little research on the experience and motivation of Chinese students and stakeholders in online learning. Because there are so many Chinese students, research on their online learning motivation and experiences has a great impact and reference significance on the global education trend. This is especially true when considering the unique cultural background factors that influence Chinese education. This study primarily looks into the experiences and difficulties that Chinese online students and related staff faced during COVID-19. It then analyses the effect of online learning on students' motivation after COVID-19 and conducts a systematic analysis of these factors. Finally, it offers suggestions for the future of online learning in China.

2. Online Learning Experiences and Challenges for Chinese Students in the Context of COVID-19

Chinese schools required students to complete their coursework remotely because of the widespread constraints caused by COVID-19 during that time. Much research has been done on the advantages of online learning. For instance, students can access course material without going to the campus and learn more easily [6]. At the same time, educational formats are diversifying steadily, and students can revisit lectures to better understand the material. Despite the advantages of online learning, Paulsen and McCormick predict that, in comparison to traditional teaching, online learning will result in less interaction between students and teachers [7]. The amount of interaction and communication between teachers and students is greatly diminished because they are unable to learn about students' class situations in a most timely manner, but primarily through homework and exam results.

Students of different ages have different learning styles and dependencies on their families from the standpoint of students' learning status. Distance learning online means that young children and elementary school students will need parental support. According to Cui et al., the study on the online learning status of primary school students in grades 1 through 6 reveals that while the majority of students are enthusiastic about online learning, Grade 6 students are not happy with how online learning is set up, and many students' performance and results in online courses have significantly decreased [8]. Of course, parental satisfaction and pressure are equally important [9]. According to the survey, parents of sixth-graders are the least satisfied with online learning, followed by those of first-graders who believe that the curriculum is ineffective and leaves little room for in-depth practice and learning materials. The sixth-grade students must be aware of the pressure placed on them by exams as they move from elementary to middle school. Online learning can only impart basic knowledge; it cannot provide after-school tutoring to help students perform better. On the other hand, first-grade students are under pressure to accept cognition and knowledge gradually and are more likely to experience adjustment disorder [10]. As a result, they are less likely to communicate or accept information in online classes actively. Additionally, long-term online courses could lead to students becoming dependent on phones and other electronics [11]. Few primary school students have the self-control necessary to finish online courses without a fully developed cognitive.

It is evident that the proportion of high school students who use smartphones and computers is higher than that of younger students [12]. This means that high school students can use these media software to practise online learning more effectively. However, due to the traditional offline examination and the National College Entrance Examination (NCEE), students in China prefer to do a lot of papers and exercises with paper materials, and the change in learning style will make them feel uneasy because they will eventually take the NCEE in paper form.

Additionally, students in a survey conducted by Kapasia et al. reported some difficulties with online learning. Poor mental health, a spotty Internet connection, and an unlearning-friendly home environment are a few of these challenges. The ecological theory of online learning states that the resources students have access to, as well as their home learning environment, will have a major

impact on the outcomes of online learning [13]. This theory sees the physical, symbolic, and social dimensions of the learning environment as interdependent processes. It does have some drawbacks, though, like emphasising the environment too much and ignoring the individual initiative of education. Gu, therefore, thinks that semi-private spaces emphasise interaction with the unique environment and the online learning process, which can effectively overcome the drawbacks of environmental determinism [14]. According to the semi-private space theory, a student's living circumstances have a direct impact on their behaviour and learning ability [15]. For students from wealthy families, there are personal computers, smartphones, and reliable Internet access. Students who are underprivileged in China or who are from remote rural areas often borrow equipment and networks from neighbours, ask the government for assistance directly, or even run to the nearest mountaintop to receive signals for online learning when home Internet reception is poor.

Furthermore, most students will be bothered by noise and a lack of study space. Because housing space is limited, especially in China, indoor space will become crowded and unsuitable for online learning. For example, because of the large number of family members, several children will share a room, with interference from siblings, resulting in lower grades and a negative learning experience [16]. However, in the case of a large housing space, students can have their private room, conduct online learning in a relatively quiet environment, and avoid interruptions from family members during the learning process, thereby improving learning status and performance. Consequently, it is necessary for researchers to examine various living conditions and regional development conditions. For instance, students in remote areas should pay greater attention to their electronic devices, Internet connections, etc. For children in urban areas who have access to complete electronic equipment, the classroom environment and teaching methods must be enriched and more engaging. In addition, parents should support their children's education, create a good learning environment and conditions for their children, ensure that children can participate in online learning, and minimise interference from noise and trifles.

3. Learning Motivation for Online Learning

Chinese schools gradually resumed offline instruction in December 2022, but after the pandemic, the development of online education became more futuristic. Due to the prevalence of online education, examining the motivation of students to study online is also a topic worthy of study. The self-determined Theory (SDT) classifies learning motivation into three categories: external motivation, internal motivation, and regulated motivation [17]. SDT holds that individuals have the power and ability to determine their own mental state and behaviour and that these abilities depend on internal motivation and environmental factors. External motivation refers to the behaviour of a person who wants to receive a reward or avoid punishment, even if it is something he does not enjoy doing but which has its own benefits. For instance, putting in extra effort in class to earn parental favour. The motivation with the highest level of autonomy is internal motivation. It depicts a particular action taken by a person who is fully engaged in and satisfied by a particular activity rather than doing it to obtain rewards and satisfaction from the rewards. For example, a sincere interest in a particular topic [17]. A large body of literature has now established the importance of internal motivation in the learning process, and a more independent style of classroom motivation is directly correlated with academic achievement. Students' grades will improve if they demonstrate greater internal motivation. Hidi and Harackiewicz assert, however, that while appropriate external motivation can also foster learning engagement in online learning, internal motivation is more consistent and long-lasting [18]. It is clear that teachers can boost their students' motivation for learning while also promoting independent study through various activities, reward systems, and other methods.

4. Positive Effects of Online Learning on Students' Motivation

Online learning is more flexible and convenient than traditional learning, which has a positive impact on students' learning motivation [19]. Generally speaking, traditional Chinese education takes place at a specific time and location, and students are required to arrive on time per school regulations. Students have a great deal of free time thanks to online education. Students can choose the most convenient time to study on the basis of their own schedules, unrestricted by location and time, thereby fostering initiative and enthusiasm for education. This convenience also offers students more options, which increases their motivation to study.

Second, online teaching will provide more diverse learning resources, including online textbooks, video-recorded courses, interactive learning tools, etc. [20]. Diversified learning resources can accommodate a variety of student learning styles, allowing students to select learning materials according to their personal preferences while simultaneously providing them with additional learning methods and directions to help them comprehend and master knowledge, thereby enhancing their learning motivation.

5. The Negative Effects of Online Learning on Students' Motivation

Online education does, however, have some volatility [21]. Although flexibility and autonomy have been acknowledged, they may also cause students to act clumsily and put off tasks occasionally. For instance, a student might put off turning in an assignment until the very last minute. Students must have strong self-control and the ability to plan their learning because there is no set time or location. However, some young children struggle with self-control, which can result in learning procrastination and lower learning motivation.

Additionally, less face-to-face interaction between students and teachers will result from online learning [22]. Teachers typically provide feedback on student learning, grade homework, and even assess students' learning performance in traditional classroom settings. However, because online learning takes place in isolation, it is challenging for teachers to give each student their undivided attention. Teachers and students may even have to wait a long time to receive feedback and evaluation because they are unable to communicate their true thoughts to one another in a timely manner. Students will become less motivated to learn as a result, and will become uncertain towards learning.

Furthermore, because online learning relies on technical infrastructure and network, there are some regional and temporal variations in the speed of the Internet. Because of the unstable Internet environment in some regions, the frequent occurrence of technical issues may have a detrimental effect on students' motivation. The abrupt removal of the Internet from the classroom and the delayed video could also make students feel drained and impatient, seriously harming their learning outcomes. Using online course platforms will frustrate some students in remote parts of China who have limited access to the Internet, and this will lower their enthusiasm for learning because of their lack of technical knowledge.

6. The Prospect and Suggestion of Online Learning in China in the Future

The training of teachers, who must have knowledge of and experience with online teaching, should first be strengthened by educational institutions. Using equipment, enhancing teaching methods, etc., are a few examples. Chiu et al. contend that pertinent staff members ought to assist and motivate instructors to actively engage in online teaching activities and raise the standard of instruction in online courses [23].

The learning platform should also increase the interactivity of online instruction. The network platform should continuously optimise and enhance the service exchange system. For instance, online forums, group chat rooms, and also chat rooms for teachers. The instructor is able to ask students questions right away and facilitate academic communication in this manner. Current online learning research emphasises the value of collaborative learning, particularly the requirement for peer support

[24]. In order for students to understand that they are in a positive online learning environment, it is crucial that there is good communication between teachers and students, that they cooperate with one another and with their classmates, and that pressure and loneliness are reduced.

Third, governments need to talk about social equity in online education [25]. The majority of online teaching research studies have taken place in cities. There are not many studies on online education in China's remote rural areas or special education, and more research is required to examine remote students and minority educational groups in the future.

Fourthly, the learning platform should offer technical assistance and support for students. The majority of students will experience technical challenges while learning online. The stability and continuity of students' education should be guaranteed in the event of these issues by schools and educational institutions, who should also promptly offer technical support.

7. Conclusion

In conclusion, after the covid-19 pandemic in recent years, Chinese students have experienced an unprecedented educational transformation. Schools and educational institutions switched to online teaching, through online learning platforms, so students began to receive home schooling. With this novel teaching model, it is also very important to understand students' sense of experience. Students have more convenient access to classes, and learning resources have become more diverse. However, online learning also faces some challenges in practical application. For example, the interaction between students and teachers is insufficient; The involvement of parents in the child's learning and the child's self-control; Not conducive to study in the home environment and Internet signal problems. Therefore, this study also put forward some corresponding solutions to some of the problems.

In addition, online learning has gradually emerged as an important way of learning in Chinese education, which has also had a positive impact on learning motivation. Convenience and flexibility, rich and diverse learning resources and tools have a positive impact on students' learning motivation. However, the study also identified potential problems with online learning's impact on motivation. For example, the volatility of learning motivation, the instability of the Internet, and the reduction of face-to-face communication time with teachers will have a negative impact on learning motivation. Therefore, this study also puts forward suggestions for the future of online learning. Teachers must have online teaching experience, and should strengthen the training of teachers when necessary. Secondly, enhance the interaction of online learning. In addition, for relevant workers, the government should also address the issue of social equity in online learning, and the learning platform should also provide corresponding technical support to students.

References

- [1] Krishnamurthy, S. The future of business education: A commentary in the shadow of the Covid-19 pandemic. *Journal of business research*, 2020. 117, 1-5.
- [2] Van Lancker, W., & Parolin, Z. COVID-19, school closures, and child poverty: a social crisis in the making. *The Lancet Public Health*, 2020. 5(5), e243-e244.
- [3] Al-Fraihat, D., Joy, M., & Sinclair, J. Evaluating E-learning systems success: An empirical study. *Computers in human behavior*, 2020, 102, 67-86.
- [4] Carolan, C., Davies, C. L., Crookes, P., McGhee, S., & Roxburgh, M. COVID 19: Disruptive impacts and transformative opportunities in undergraduate nurse education. *Nurse education in practice*, 2020, 46, 102807.
- [5] Schunk, D. H., & Usher, E. L. Social cognitive theory and motivation. *The Oxford handbook of human motivation*, 2012, 2, 11-26.
- [6] Becker, C., Cooper, N., Atkins, K., & Martin, S. What helps students thrive? An investigation of student engagement and performance. *Recreational Sports Journal*, 2009, 33(2), 139-149.

- [7] Paulsen, J., & McCormick, A. C. Reassessing disparities in online learner student engagement in higher education. *Educational researcher*, 2020, 49(1), 20-29.
- [8] Cui, S., Zhang, C., Wang, S., Zhang, X., Wang, L., Zhang, L., ... & Zhou, X. Experiences and attitudes of elementary school students and their parents toward online learning in China during the COVID-19 pandemic: Questionnaire study. *Journal of medical Internet research*, 2021, 23(5), e24496.
- [9] Shen, D., Cho, M. H., Tsai, C. L., & Marra, R. Unpacking online learning experiences: Online learning self-efficacy and learning satisfaction. *The Internet and Higher Education*, 2013, 19, 10-17.
- [10] Barbour, M. K. The landscape of K-12 online learning: Examining what is known. *Handbook of distance education*, 2013, 3, 574-593.
- [11] Barrot, J. S., Llenares, I. I., & Del Rosario, L. S. Students' online learning challenges during the pandemic and how they cope with them: The case of the Philippines. *Education and information technologies*, 2021, 26(6), 7321-7338.
- [12] Yan, L., Whitelock-Wainwright, A., Guan, Q., Wen, G., Gašević, D., & Chen, G. Students' experience of online learning during the COVID-19 pandemic: A province-wide survey study. *British Journal of Educational Technology*, 2021, 52(5), 2038-2057.
- [13] Drane, C., Vernon, L., & O'Shea, S. The impact of 'learning at home' on the educational outcomes of vulnerable children in Australia during the COVID-19 pandemic. Literature Review Prepared by the National Centre for Student Equity in Higher Education. Curtin University, Australia. 2020.
- [14] Gu, J. Impact of living conditions on online education: Evidence from China. *Sustainability*, 2022, 14(6), 3231.
- [15] Rooney, E. A semiprivate room. differences: *A journal of feminist cultural studies*, 2002, 13(1), 128-156.
- [16] Fuadia, N. N. Parenting Strategy for Enhancing Children's Self-Regulated Learning. *Journal Pendidikan Usia Dini*, 2020, 14(1), 109-124.
- [17] Deci, E. L., & Ryan, R. M. The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological inquiry*, 2000, 11(4), 227-268.
- [18] Hidi, S., & Harackiewicz, J. M. Motivating the academically unmotivated: A critical issue for the 21st century. *Review of educational research*, 2000, 70(2), 151-179.
- [19] Al Rawashdeh, A. Z., Mohammed, E. Y., Al Arab, A. R., Alara, M., & Al-Rawashdeh, B. Advantages and disadvantages of using e-learning in university education: Analyzing students' perspectives. *Electronic Journal of E-learning*, 2021, 19(3), 107-117.
- [20] Lau, K. H., Lam, T., Kam, B. H., Nkhoma, M., Richardson, J., & Thomas, S. The role of textbook learning resources in e-learning: A taxonomic study. *Computers & Education*, 2018, 118, 10-24.
- [21] Van Nuland, S., Mandzuk, D., Tucker Petrick, K., & Cooper, T. COVID-19 and its effects on teacher education in Ontario: a complex adaptive systems perspective. *Journal of Education for Teaching*, 2020, 46(4), 442-451.
- [22] Ayu, M. Online learning: Leading e-learning at higher education. *The Journal of English Literacy Education: The Teaching and Learning of English as a Foreign Language*, 2020, 7(1), 47-54.
- [23] Chiu, T. K., Jong, M. S. Y., & Mok, I. A. Does learner expertise matter when designing emotional multimedia for learners of primary school mathematics? *Educational Technology Research and Development*, 2020, 68, 2305-2320.
- [24] Sormunen, K. From inclusive practices to personal strategies: Teachers and students designing together digitally supported science learning. *Helsinki Studies in Education*, 2020, number 76.
- [25] Chiu, T. K., & Lim, C. P. Strategic use of technology for inclusive education in Hong Kong: A content-level perspective. *ECNU Review of Education*, 2020, 3(4), 715-734.