DOI 10.20544/HORIZONS.A.30.1.22.P09
UDC378.018.43:004(497.7)"2020"

ONLINE LEARNING ADOPTION DURING COVID-19 PANDEMIC – THE EXPERIENCE OF THE UNDERGRADUATE STUDENTS IN NORTH MACEDONIA[1]

Kalina Trenevska Blagoeva, PhD
Faculty of Economics-Skopje, Republic of North Macedonia
e-mail: kalina@eccf.ukim.edu.mk

Marina Mijoska, PhD
Faculty of Economics-Skopje, Republic of North Macedonia
e-mail: marina@eccf.ukim.edu.mk

Marija Trpkova-Nestorovska, PhD
Faculty of Economics-Skopje, Republic of North Macedonia
e-mail: marija.trpkova-nestorovska@eccf.ukim.edu.mk

Abstract

Since spring 2020 when pandemic suddenly threatened the world in unexpected way, a dramatic shift in how people live, work, and learn/study is evident. Global pandemic restriction strategies like stay-at-home orders, social distancing and long periods of lockdowns have disrupted the traditional campus-based model of education i.e. the traditional in-classroom teaching, and have forced fast adoption of online learning systems as remote/distance learning. For most counties/universities worldwide, online learning was one of the efforts to minimize the spread of Covid-19 and convenient opportunity of continuing the educational process in those circumstances. This was the case in the country as well. In this sense, the goal of this paper is to analyze the adoption of online learning among university students in the country. The basis for the research model is the original Technology Acceptance Model (TAM). This fundamental model examines the crucial predictors/factors of technology adoption including the following constructs: perceived ease of use, perceived usefulness, attitude towards using, behavioral intention and actual use. In order to get insights

[1] original research paper

regarding the online learning adoption among university students in the country, a survey was conducted among more than 150 undergraduates during April and May 2022, while online learning was still undergoing. The results of this study capture valuable insights regarding the adoption of online learning and can be used as solid base for higher education institutions in the country to shape their online education offerings in order to remain competitive in a post-pandemic future. This research provides relevant practical implications by elaborating that the analyzed factors are critical towards online learning attitude in our country.

Keywords: Online Learning, Technology Acceptance Model, University Students, North Macedonia.

ONLINE LEARNING – BASIC ASPECTS, CHARACTERISTICS AND TRENDS

In the new normal era, the world of education continues to improve in order to deliver excellent educational services. Although the harmful consequences of COVID-19 are obvious, new opportunities may emerge. The university community's collective trauma during the pandemic must not be ignored, but the opportunity to rebuild stronger than ever is now more likely than ever. The lessons learned during harsh times will surely lead to more online services, a greater understanding of the impact of loneliness on the student experience, and a greater need to diversify services to meet the needs of a diverse range of student demographics. The change to virtual learning and student services may stimulate greater engagement. A distance learning approach based on online systems is created and gradually implemented. Educators are the driving force for the adoption of online learning. Still, those who should mostly benefit, the students should be asked to express their satisfaction of the online learning process.

To actualize a technology-based new normal education, various things must be addressed. In the paper, we are focused on factors that influence the adoption of this technology as new way of doing the teaching/learning process using TAM (Technology Acceptance Model). Therefore, we are paying attention on the students' opinions. We will only mention that teacher preparedness issues and infrastructure readiness issues are two major challenges that can hinder the introduction of online learning, among other problems. The use of an e-learning system in the learning process was anyway going to happen. The Covid-19 crises only accelerated the

inevitable. E-learning benefits include more flexible learning opportunities without regard to space or time, making education more accessible to people, enriching learning materials, enabling learning processes, making learning more open, improving learning effectiveness, and assisting learners in learning independently.

Higher education institutions' digital transformation should not be referred to as e-learning because online learning is merely one of several elements of higher education institutions' digital transformation. E-learning is defined as the use of ICT (information and communication technology) in the delivery of learning based on three criteria: (1) e-learning is a network with the ability to update, store, distribute, and share teaching materials or information, (2) deliveries to the last user via computer using standard internet technologies, and (3) focusing on a broader view (Rosenberg, 2001). However, the term e-learning does not only refer to the internet; it is a term that describes an educational system that uses electronic applications to support the learning process. The words electronic learning (e-learning), mobile learning (m-learning), and digital learning (d-learning) are used interchangeably to refer to technology learning. E-learning can be used as a substitute for traditional education or as a supplement to it. M-learning, on the other hand, is a supplement to both traditional and electronic learning. M-learning allows students to interact with their educational resources even when they are not in their usual learning environment (Clark, 2007). D-learning is a term that is increasingly replacing e-learning and it concerns the use of ICT in the open and distance learning. According to Bersin (2017) all great learning organizations should deliver learning solutions through simulations, collaboration, meeting other people and learning from experts, meaning digital learning is not fully digital, but it should use digital tools in an integrated way.

The universal approval of the WHO's social distancing policy, which was proposed as a tactic to combat the spread of Covid-19, has led schools and universities to close their doors, disrupting traditional teaching and learning methods in order to leave up to their objectives. The transformation process for universities engaged in digital transformation was smooth for some institutions, while some responded with crisis-response migration process due to the pandemic. The crisis-response migration methods employed by some universities can be classified into two parts, namely External-Assisted Migration and External-Integrated Migration (Adedoyin & Soykan, 2020). External-assisted migration refers to a situation in which colleges leverage Web 2.0 platforms created by external corporations or organizations. Some of these institutions gave data of students and faculty members for easy migration and implementations of various Web 2.0

platforms, as part of external-assisted migration. External-Integrated Migration, on the other hand, refers to a situation in which universities integrate Web 2.0 platforms created by external corporate bodies or organizations into their own personal online learning platforms (ex. Google Classroom). It's also worth noting that both External-Assisted Migration and External-Integrated Migration provide the appropriate capabilities for instructional delivery and evaluation via video conferencing, assignment submission, forum discussion, and assessment, among other things.

Online learning has both benefits and challenges. In the decades to come, the challenges will diminish mainly by encompassing technology improvements and enhancing the overall experience of the learners. Benefits can be viewed from the viewpoint of the universities and from the standpoint of the students. Most of the universities have begun to heavily engage in online instructions due to theirs several advantages, which include new markets, financial gains, global collaborations, expansion in education, shortened time to market, and faculty education. Additionally, online education appeals to various student populations with diverse academic needs that are the obvious shortcomings or limitations of standard classes. The push strategy of universities (and other education institutions) to offer online courses fuels the demand for them. Techers and students can engage both asynchronously and synchronously, modes that have been extremely beneficial when online courses are offered. According to Hewitt, (2005), thread structures are frequently used in asynchronous forums to connect related remarks, enabling students to follow several conversations taking place at once emphasizing the advantages of asynchronous courses over synchronous and face-to-face ones, including time-independent access and chances for higher levels of engagement. In addition, online learning is a useful strategy to remove barriers that prevent students from approaching their professors with questions. The online learning environment offers opportunity to students to pose more relevant questions, and that student who find it difficult to speak in front of others may desire to participate more in online discussions with instructors. However, some findings show that the students preferred the traditional mode rather than the online mode that provides a potential for disruptive innovation that could take into consideration of a live audience in university online courses (Yee *et al.,* 2022). Students benefit from teachers being more accessible in online learning and students won't worry if they miss an instructor's typical office hours and they can submit questions at any time, and instructors can respond at any time without being confined to a desk or office, which is especially useful if a student's schedule conflicts with office hours and a question comes up at the last minute. Despite the previously mentioned benefits,

online learning brings challenges to the stakeholders. The geographical distance between students and the college community can frequently affects students' achievement, experience, access to resources, and interactions. Students who take online courses are missing the experience of the interaction between the professor, other group members, and students and this fact may limit prospects for social and academic advancement. For instance, the absence of social engagement with teachers will make students feel isolated and it appears that online learning is an impersonal activity. Nonverbal cues, which are an important part of face-to-face communication, are absent from online connection, which may limit the amount of asynchronous conversation that takes place with significant delays in reply. Another challenge that deserves special attention is the assessment of student learning that encompasses how instructors assess student progress and distribute graded activities across entire course (Kearns, 2012). As a result, online learning could demotivate students having limited knowledge of assessment process. There are other more technical obstacles such as access to computers, broad band and usage skills.

In order to support the process of e-learning and its growth, especially in the last 2-3 years we will mention some statistics. By 2022, the global e-learning industry is projected to surpass $243 billion and digital learning is the quickest growing market in the education industry, with a 900% growth since 2000. (https://e-student.org/e-learning-statistics). 20% of American online college students use solely their phones or tablets to complete all their course-related activities, 39% of American undergraduate students consider online college-level education to be superior to classroom learning and 52% of American graduate students considered online college-level education to be better than classroom learning. (statista.com). Online learning platform Coursera has released its 2021 Impact Report, which shows more than 20 million new learners registered for courses in the year - equivalent to total growth in the three years pre-pandemic. (https://www.weforum.org/agenda/2022/01/online-learning-courses-reskill-skills-gap/)

In 2021, 27% of people aged 16 to 74 in the EU reported that they did an online course or used online learning material in the last three months prior to the survey, a 4% increase compared to 2020. In 2021, among all EU Member States, Ireland had the highest share (46%) of people aged 16 to 74 doing an online course or using online learning material, Finland and Sweden both registered a share of 45%, followed by the Netherlands with 44%, but, doing online courses or using online learning material was not very common in Romania (10%), Bulgaria (12%), and Croatia (18%). In EU, young people aged 16 to 24 have taken more to online learning than the

average adult population. In 2021, 39% of young people reported doing an online course and 49% used online learning material, compared with 23% and 27% among adults aged 25 to 34, and 20% and 23% among adults aged 35 to 44. The shares continue a downward trend as age increases, hitting the lowest point among older people (aged 65 to 74), where 3% did an online course and 4% used online learning material. (https://ec.europa.eu/eurostat/web/products-eurostat-news/-/edn-20220124-1). Approximately 18 % of individuals in the European Union did an online course of any subject in 2021 (The Netherlands had the highest share of people doing an online course, at 41%, and Romania has the lowest of 5% (https://www.statista.com/statistics/1099445/internet-use-in-schools-in-the-european-union/).

RESEARCH MODEL AND HYPOTHESIS DEVELOPMENT

In the literature, there are number of theories and subsequent models that are in broad use to provide an understanding of the determinants of technology usage i.e. end users' acceptance of a new technology. Davis's technology acceptance model (TAM) is one of the most influential approaches used to explain and predict user acceptance of information systems (Davis, 1989). TAM has become one of the most widely used and empirically validated models within information systems research (King and He, 2006). This model (TAM) is based on the Theory of Reasoned Action (TRA) and to some point on the Theory of Planned Behavior as an extension of the TRA proposed by Ajzen (Ajzen, 1980). This generic theoretical model has been widely applied in many fields of information system domain (Ajzen, 1991).

According to Davis (1989), the goal of TAM is "to provide an explanation of the determinants of computer acceptance that is generally capable of explaining user behavior across a broad range of end-user computing technologies and user populations, while at the same time being both parsimonious and theoretically justified" (Davis, 1989, p. 985). This model assumes that the intention to use any technology is affected by two constructs: perceived usefulness and perceived ease of use (Davis, 1989). According to TAM, one's actual use of a technology system is influenced directly or indirectly by the user's behavioral intentions, attitude, perceived usefulness of the system, and perceived ease of the system. TAM also proposes that external factors affect intention and actual use through mediated effects on perceived usefulness and perceived ease of use. Perceived ease of use refers to "the degree to which the user expects the target system to be free of effort" (Davis *et al*., 1989: 985), while perceived

usefulness is defined as the user's "subjective probability that using a specific application system will increase his or her job performance within an organizational context" (Davis *et al*., 1989, p.985). The perceived usefulness of a technology increases with perceived ease of use. The more ease of use a user thinks a new technology is, the stronger his or her intention to use the technology is; furthermore, the stronger the usage intention, the greater the actual usage behavior. TAM also proposes that perceived usefulness is influenced by perceived ease of use. Both perceived ease of use and perceived usefulness predict attitude, defined as the user's evaluation of the desirability of his or her using the system. Attitude and perceived usefulness influence the individual's intention to use the system. Actual use of the system is predicted by the intention to use.

In the context of online learning, TAM and its extended versions (TAM2, TAM3, GETAMEL) have been extensively used as theoretical frameworks in different studies to explain technology acceptance of online learning (Al-hawari & Mouakket, 2010; Abdullah & Ward, 2016; Sukendro *et al*., 2020, Patricia Aguilera-Hermida, 2020, Mailizar *et al*.,. 2021; Weerathunga *et al*., 2021, Utami, 2021 etc.).

The research model developed in this study aiming to predict the users' (students') adoption of online learning systems is based on TAM (Davis, 1989) extended by the construct perceived satisfaction. Online learning is an inevitable trend in the development of education, and learners'(students') perceived satisfaction is one of the core indicators to measure the assessment of online learning (Shao, 2020, Karim *et al*., 2021). It is confirmed that perceived satisfaction can actively facilitate cooperation and sharing among learners, and effectively improve the effect of online learning (Shao, 2020). Investigating driving factors of learners' perceived satisfaction with online learning is important in the new digital era. Online learning satisfaction is of vital significance to enhance online learning efficiency (Yu, 2022). In this context, learning satisfaction is defined as a feeling or attitude of learners toward learning activities, which directly reflects the degree to which learners' expectations are fulfilled during the learning processes (Yu, 2022), it is a subjective psychological state formed after the comparison between the learner's learning expectation and the actual perceived learning effect (Fernandes *et al*., 2013; Jiang *et al*., 2017). While online learning satisfaction refers to the evaluation of opinions and feeling experiences of learners toward the quality of online learning service provided by online learning providers, a cumulative psychological response to online learning contents and learning environment, formed after a rational and emotional comparison between the actual perceived online learning effect and

expectations of the perception (Yao *et al*., 2016, Zeng and Wang, 2021, Yu, 2022).

The proposed model is presented in Figure 1 and includes nine hypotheses.

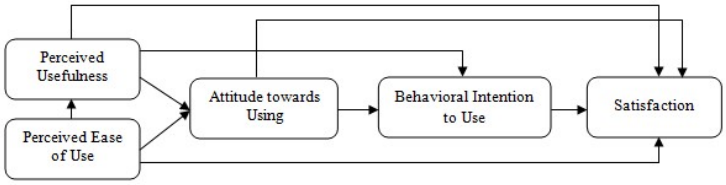

Figure 1. Proposed theoretical/research model

Hypothesis 1: Perceived ease of use of online learning has a significant effect on attitude toward using online learning.

Hypothesis 2: Perceived ease of use of online learning has a significant effect on perceived usefulness of online learning.

Hypothesis 3: Perceived usefulness of online learning has a significant effect on attitude toward using online learning.

Hypothesis 4: Perceived usefulness of online learning has a significant effect on behavioral intention to use of online learning.

Hypothesis 5: Attitude toward using online learning has a significant effect on behavioral intention to use.

Hypothesis 6: Perceived ease of use of online learning significantly affects online learning satisfaction.

Hypothesis 7: Perceived usefulness of online learning significantly affects online learning satisfaction.

Hypothesis 8: Attitude towards using online learning significantly affects online learning satisfaction.

Hypothesis 9: Behavioral intention to use online learning significantly affects online learning satisfaction.

METHODOLOGY, ANALYSIS AND RESULTS

This analysis examines the effects of potential determinants in online learning adoption by application of several statistical techniques: survey, descriptive statistics, reliability analysis and linear regression model.

The survey entails 147 respondents – undergraduate students at the Faculty of Economics in Skopje. Students could take the survey in April – May 2022 while attending their online lectures. The initial analysis includes descriptive statistics regarding demographic characteristics. They are presented in Table 1.

Table 1. Demographic characteristics of the survey respondents

CHARACTERISTIC	NUMBER OF RESPONDENTS	%
GENDER		
Male	45	30.6
Female	102	69.4
DEVICE FOR ACCESS		
Computer	116	78.9
Mobile phone (using application)	11	7.5
Mobile phone	6	4.1
Computer, mobile phone (using application)	11	7.5
Computer, mobile phone	2	1.4
Mobile phone, Mobile phone (using application)	1	0.7
ACCESS TO INTERNET		
From home	137	93.2
From home, from university/library/student dormitory	3	2.0
From university/library/student dormitory	5	3.4
From home, other	2	1.4
RESIDENCE		
Skopje	80	54.5
City other than Skopje	49	33.3
Rural area	18	12.2

Source: Authors' calculation

Presented data shows that most of the respondents had access to online learning technology from home (93.2%) by mainly using a computer (78.9%). Most of the respondents are from the capital Skopje (53.1%), while one-third come from cities other than the capital. As shown before, TAM model uses five constructs. They are all tested for their reliability, where their scale should consistently reflect the construct it is measuring (Field, 2005). Results from the reliability analysis with calculated Cronbach's alpha are presented in Table 2. For a reliable construct scale, Hair *et al.,* (2005) recommends a reliability coefficient greater than 0.7. All constructs presented in the table satisfy this condition. Thus, they can be derived as variables for the regression models.

Table 2. Constructs scale reliabilities

CONSTRUCT	CRONBACH'S ALPHA
Perceived usefulness	0.894
Perceived ease of use	0.858
Attitude towards using	0.919
Satisfaction	0.752
Behavioral intention to use	0.763

Source: Authors' calculation

TAM model defines nine hypotheses which are tested with nine linear regression models. Table 3 has the estimated regression coefficients.

Table 3. Simple regression models for testing of the TAM model hypotheses

HYPOTHESIS	COEF.	STD. ERROR	T-STAT.	R^2	DURBIN-WATSON
H_1: Perceived ease of use has a significant effect on attitude towards using online learning	1.02	0.07	14.99 ***	0.61	1.82
H_2: Perceived ease of use has a significant effect on perceived usefulness	0.89	0.06	15.86 ***	0.63	2.02
H_3: Perceived usefulness has a significant effect on attitude toward using online learning	0.97	0.06	17.35	0.68	1.92
H_4: Perceived usefulness significantly affects behavioral intention to use	0.34	0.05	6.30 ***	0.22	2.00
H_5: Attitude toward using online learning has a significant effect on behavioral intention to use	0.30	0.05	6.68 ***	0.24	1.95
H_6: Perceived ease of use significantly affects online learning satisfaction	0.53	0.05	10.43 ***	0.43	1.68
H_7: Perceived usefulness of online learning has a significant effect on online learning satisfaction	0.45	0.05	9.26 ***	0.37	1.80
H_8: Attitude towards using online learning has a significant effect on online learning satisfaction	0.37	0.04	9.04 ***	0.36	1.71
H_9: Behavioral intention to use online learning has a significant effect on online learning satisfaction	0.47	0.07	6.418 ***	0.22	2.01

*** Coefficient is significant at 0.01 level

Source: Authors' calculation

Results show that hypotheses supporting the TAM model confirm all defined relationships between the constructs. Perceived ease of use and perceived usefulness have a statistically significant and positive impact on attitude towards using online learning. When students find online learning to be easy to use and easy for them to become skillful, they conclude that online teaching is a good idea that should continue and will make them want to learn more. The same conclusion comes when the students think that online teaching improves their performance and provides them with appropriate course content.

Perceived ease of use has a significant and positive effect on perceived usefulness. Students consider the usefulness of the online learning process increases when they find online learning to be easy and when they like online learning activities.

Perceived usefulness and attitude toward online learning significantly affect behavioral intention to use online learning.

The following four hypotheses examine the effect that perceived ease of use, perceived usefulness, attitude towards using online learning and behavioral intention to use online learning have on the satisfaction of this process. Results confirm that a statistically significant and positive effect exists. The satisfaction is expressed by students always finding the needed material or course online, swift solutions to a problem and complete teaching resources that are available online. Students while explaining their perceptions mentioned that they cannot acquire soft skills, the networking effects and socialization are missing. However, cost reduction benefits are mentioned as a positive effect together with improved time management and safe environment in the pandemics.

All hypotheses confirm significant relationships between the constructs. The first three hypotheses have the most robust correlation coefficients (0.61, 0.63 and 0.68, respectively).

CONCLUSION

This study discusses the driving factors of online learning adoption, makes extension on the basis of technology acceptance model, identifies driving factors of online learning satisfaction, and empirically tests the nine hypotheses defined by the research model. The results show that the hypotheses proposed in this paper have been effectively verified, and the positive influence of perceived ease of use, perceived usefulness and users'

online learning behavioral attitude in TAM model on users' behavioral intention has also been verified.

This study has theoretical and practical contribution. Firstly, it is significant since it adds value to the existing empirical evidence on online learning by supporting the relevance of TAM in understanding the usage of online learning adoption even in situations such as the COVID-19 pandemic. Understanding factors that affected the use and acceptance of online learning will help higher education policy makers integrate them into future hybrid or fully online programs.

REFERENCES

1. Abdullah, F., & Ward, R. (2016). Developing a General Extended Technology Acceptance Model for E-Learning (GETAMEL) by analysing commonly used external factors. *Computers in human behavior,* 56, pp.238-256.
2. Adedoyin, O.B. and Soykan, A. (2020). Covid-19 pandemic and online learning: the challenges and opportunities, Interactive Learning Environments, 1-13, https://doi.org/10.1080/10494820.2020.1813180 (accessed 20.06.2022)
3. Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, *50*(2), pp.179-211.
4. Al-hawari, M. A., & Mouakket, S. (2010). The influence of technology acceptance model (TAM) factors on students'e-satisfaction and e-retention within the context of UAE e-learning. *Education, Business and Society: Contemporary Middle Eastern Issues*, 3 (4), pp. 299-314
5. Bersin, J. (2017). How do you define digital learning?. www.clomedia.com/2017/06/11/define-digital-learning/ (accessed 20.06.2022)
6. Clark, J.D. (2007). *Learning and Teaching in the Mobile Learning Environment of the Twenty-First Century*. Austin, Texas: Austin Community College.
7. Fernandes, C., Ross, K., and Meraj, M. (2013). Understanding student satisfaction and loyalty in the UAE HE sector. *International Journal of Education Management,* 27, 613–630.
8. Field, A.P. (2005). *Discovering Statistics Using SPSS*. 2nd Edition, London: Sage Publications
9. Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010). *Multivariate Data Analysis*. 7th Edition, New York: Pearson

10. Hewitt, J. (2005). Toward an understanding of how threads die in asynchronous computer conferences. *The journal of the learning sciences,* 14(4), pp.567-589
11. Jiang, Z., Zhao, C., Li, H., Liang, Y., and Huang, Y. (2017). A study on learner satisfaction in online open courses: development, influencing factors and direction. Modern Distance Educ. 3, 34–43.
12. Karim, M. W., Haque, A., Ulfy, M. A., & Hossin, M. S. (2021). Factors Influencing Student Satisfaction towards Distance Learning Apps During the Covid-19 Pandemic in Malaysia. International Journal of Academic Research in Progressive Education and Development, 10(2), pp. 245–260.
13. Kearns, L. R. (2012). Student assessment in online learning: Challenges and effective practices. *Journal of Online Learning and Teaching*, 8(3), p.198
14. King, W. R., & He, J. (2006). A meta-analysis of the technology acceptance model. *Information & management*, *43*(6), pp. 740-755.
15. Mailizar, M., Burg, D., & Maulina, S. (2021). Examining university students' behavioural intention to use e-learning during the COVID-19 pandemic: An extended TAM model. *Education and Information Technologies*, *26*(6), pp.7057-7077.
16. Patricia Aguilera-Hermida, A. (2020). College students' use and acceptance of emergency online learning due to COVID-19. International Journal of Educational Research Open, 1, p. 100011.
17. Rosenberg, M. J. (2001). *E-learning: Strategies for delivering knowledge in the digital age*. New York: McGraw-Hill.
18. Shao, C. (2020). An empirical study on the identification of driving factors of satisfaction with online learning based on TAM. The *5th international conference on economics, management, law and education (EMLE 2019)*, pp. 1067-1073).
19. Sukendro, S., Habibi, A., Khaeruddin, K., Indrayana, B., Syahruddin, S., Makadada, F. A., & Hakim, H. (2020). Using an extended Technology Acceptance Model to understand students' use of e-learning during Covid-19: Indonesian sport science education context. *Heliyon*, 6 (11).
20. Utami, T. L. W. (2021). Technology adoption on online learning during Covid-19 pandemic: Implementation of Technology Acceptance Model (TAM). *Diponegoro International Journal of Business*, *4*(1), pp.8-19.
21. Weerathunga, P. R., Samarathunga, W. H. M. S., Rathnayake, H. N., Agampodi, S. B., Nurunnabi, M., & Madhunimasha, M. M. S. C. (2021). The COVID-19 pandemic and the acceptance of E-learning

among university Students: The Role of Precipitating Events. *Education Sciences*, *11*(8), p.436.

22. Yee, B.C., Mohd Nawi, A. and Abdullah, T. (2022). Potential disruptive innovation: online learning of public speaking courses in higher education, *Foresight,* 24 (3/4), pp. 445-455.
23. Yu, Q. (2022). Factors Influencing Online Learning Satisfaction. *Frontiers in Psychology*, *13*, 852360-852360**.**
24. Zeng, X., & Wang, T. (2021). College Student Satisfaction with Online Learning during COVID-19: A review and implications. *International Journal of Multidisciplinary Perspectives in Higher Education*, *6*(1), pp.182-195.