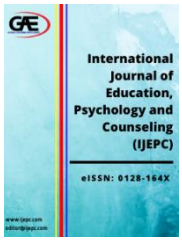
International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 7 Issue 47 (September 2022) PP. 189-
DOI 10.35631/IJEPC.747018



INTERNATIONAL JOURNAL OF EDUCATION, PSYCHOLOGY AND COUNSELLING (IJEPC)
www.ijepc.com

EXAMINING SOCIAL PRESENCE AND ONLINE LEARNING SATISFACTION AMONG MALAYSIAN UNIVERSITY STUDENTS DURING THE COVID-19 PANDEMIC

Ho Meng Chuan[1]*, Keoy Kay Hooi[2], Tan Han Leong[3], Pang Khong Yun[4], Ooi Pei Boon[5], Rohana Yusof[5]

[1] Centre of Excellence for Learning and Teaching (CELT), UCSI University, Malaysia
Email: HoMC@ucsiuniversity.edu.my
[2] Centre of Excellence for Learning and Teaching (CELT), UCSI University, Malaysia
Email: keoykh@ucsiuniversity.edu.my
[3] Centre of Excellence for Learning and Teaching (CELT), UCSI University, Malaysia
Email: tanhl@ucsiuniversity.edu.my
[4] Department of Psychology, Sunway University, Malaysia
Email: 22037329@imail.sunway.edu.my
[5] Department of Medical Sciences, Sunway University, Malaysia
Email: peiboono@sunway.edu.my
[6] Centre of Excellence for Learning and Teaching (CELT), UCSI University, Malaysia
Email: rohanayusof@ucsiuniversity.edu.my
* Corresponding Author

Article Info:

Article history:
Received date: 11.05.2022
Revised date: 31.05.2022
Accepted date: 16.07.2022
Published date: 05.09.2022

To cite this document:

Ho, M. C., Keoy, K. H., Tan, H. L., Pang, K. Y., Ooi, P. B., & Yusof, R. (2022). Examining Social Presence And Online Learning Satisfaction Among Malaysian University Students During The COVID-19 Pandemic. *International Journal of Education, Psychology and Counseling, 7* (47), 189-202.

Abstract:

This study aimed to investigate the relationship between social presence and online learning satisfaction among 257 university students (Mage=19.89years, SDage=1.93) during the COVID-19 pandemic. The partial least square (PLS) algorithm was used to examine the association and the prediction of the proposed relationship. This study employed a cross-sectional research design with convenience sampling. Participants completed an online survey questionnaire which consisted of a Social Presence Scale and Satisfaction Scale in March 2022. All scales included in the present study reported a satisfying level of reliability and validity coefficient. The PLS regression tests showed that social presence was positively associated with online learning satisfaction ($\beta = 0.717$, $p < 0.01$). Additionally, social presence reported a medium level of prediction power towards online learning satisfaction which shed light on the underlying mechanisms that explain students' online learning satisfaction during the COVID-19 pandemic. The results also demonstrate the singifiant contribution of teaching and learning approach, programme or intervention to facilitate social presenc. It is also essential to promote a greater sense of online satisfaction among university students.

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 7 Issue 47 (September 2022) PP. 189-
DOI 10.35631/IJEPC.747018

DOI: 10.35631/IJEPC.747018

Keywords:

Social Presence, Online Learning Satisfaction, University Students, COVID-19, Cross-Sectional Study, Prediction

Introduction

Students and lecturers in higher education institutions were severely impacted by the unexpected changes brought by the COVID-19 pandemic. Since then, numerous universities throughout the world had implemented online learning as a means of ensuring educational continuity (Chung et al., 2020). The COVID-19 epidemic affects all aspects of life, particularly education. Institutions from kindergartens to universities were closed as a result of the COVID-19 outbreak. As a result, students have shifted their norms from attending physical classrooms every morning to learning online because of the pandemic. The Movement Control Order (MCO) was implemented in Malaysia in March 2020, as well as in many other nations throughout the world, to flatten the curve of COVID-19 distribution. All public and private universities in Malaysia had undertaken teaching and learning activities via online learning (Malaysian Ministry of Higher Education, 2020). The COVID-19 pandemic's quick shifts have had a significant impact on students and lecturers in higher education institutions. These measures have caused psychological discomfort in students (Hasan & Bao, 2020) and some are now dealing with stress, despair, anxiety, and fear of COVID-19. Utilising online platforms for teaching and learning has presented several challenges to academicians and learners all around the world (Thandevaraj, 2021).

Although it is undeniable that online learning is the best way to guarantee learning continuity under the "new norm," there may be some drawbacks such as a lack of human touches, such as the ability to detect students' lack of understanding through facial expressions, and student engagement and interaction, which can be done more effectively in traditional face-to-face learning (Chung et al., 2020). Also, several local scholars had highlighted their concerns regarding the online infrastructure availability and readiness, to support online learning for the students (Azhar et al., 2021; Garad et al., 2021; Izwan et al., 2020). With these concerns, it is vital to investigate the experience of social presence experienced by our students, to ensure that effective learning can be sustained, as online learning could play more and more important roles in the contemporary learning mechanisms.

The virtual environment present in online learning provides students with a learning experience similar to that of a physical classroom, regardless of their location, generating both participation and interest. Despite the effectiveness of an online learning portal, a considerable disadvantage has been reported the course drop-out if students have poor engagement in online learning (Nasir, 2020). In most technology-based learning, social presence is seen as a key aspect of online learning (Guo et al., 2022; Poth, 2021; Phirangee & Malec, 2020; Stankovska et al., 2021). In mediated communication, social presence is defined as "the degree to which a person is viewed as a ‘real person' (Gunawardena, 1995; Edwards & Taasoobshirazi, 2022). Social presence, or the ability to perceive others in an online environment, has been shown to influence student motivation and participation, actual and perceived learning, course and instructor satisfaction, and retention in online courses; however, few studies have looked at social presence across contexts, disciplinary areas, or measures (Ensmann et al., 2021;

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 7 Issue 47 (September 2022) PP. 189-
DOI 10.35631/IJEPC.747018

Richardson et al, 2017). Students' satisfaction in an educational environment is influenced by several elements, including the teacher, the student, the course, the system design, technology, and the setting. Peer engagement, student-faculty connection, and communication with professors all have a significant impact on satisfaction (Stankovska, 2021).

Most educational institutions were obliged to migrate to online learning as a result of the COVID-19 epidemic. While the expansion of online education has brought numerous benefits to both institutions and students, it has also generated concerns about high student retention rates in online courses and programmes. According to Patterson and McFadden (2009), dropout rates in online programmes are six to seven times greater than in face-to-face programmes. Student persistence and retention in online courses have become essential challenges as an increasing number of institutions continue to offer online courses to improve student's access to learning opportunities. Some researchers believe that feelings of isolation and disconnection in online courses are important factors in high student dropout rates (Bowers, 2015). Arguments are made that the high dropout rates are due to a deficiency in cognitive retention and social presence traits (Guinaliu-Blasco et al., 2019; Guo et al., 2022; Leong, 2011). Students experience an absence of social presence and interactions in online classes when compared to traditional face-to-face courses. Students who complete online courses express a greater sense of closeness and presence (Brown, 2021). Students' overall views of learning in online courses are influenced by their sense of social presence and instructor presence, according to studies, and students who experience a lack of social interactions and instructor presence are more likely to withdraw and fail. Despite some evidence suggesting that online learning platforms are perceived as being simple to use and useful (Chang et al., 2017), recent studies reveal that many users frequently feel alone because the platforms do not offer a way for them to socially interact while the systems are set up for utility (Baruah, 2018; Gunesekera et al., 2019). To retain students, it is crucial to look at the factors which accelerate the learning process via e-learning platforms (Almaiah et al., 2022; Al-Samarraie et al., 2018), as well as how well universities do overall.

The pandemic's social isolation has resulted in a decrease in various social characteristics including interactivity, engagement, and support, all of which are important factors for students' satisfaction (Alenezi, 2022). In addition, the social component plays an important role in ensuring student retention and satisfaction in both face-to-face and virtual learning. During the COVID-19 pandemic, however, there is a little study to investigate the influence of social aspects on students' satisfaction with online learning (Dinh & Nguyen, 2020). In virtual learning, social presence is important since it builds comfort and emotional links among students and has been associated with improved learning outcomes and student satisfaction (Alenzi, 2022). In both face-to-face and online learning, engagement and interaction among peers are crucial. Several studies have revealed that in any learning environment, both the frequency and quality of student interactions are substantially connected with student satisfaction (Stankovska, 2021). The level of satisfaction and retention among users of such systems must be determined given the significance of e-learning platforms and their implementation. This is crucial, particularly because it's unclear whether students are satisfied with the features and information provided by the present e-learning platforms (Al-rahmi et al., 2015). Since user satisfaction influences the success of any technology implementation, it's crucial to identify the precise elements that might keep consumers satisfied with the system (Guinaliu-Blasco et al., 2019). Different local contemporary studies also share the same view, which indicated engagement from academic staff and relevant authorities such as the

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 7 Issue 47 (September 2022) PP. 189-
DOI 10.35631/IJEPC.747018

University would decrease dropout intention and enhance the academic performance of university students (Chong & Soo, 2021; Noman et al., 2021; Thandevaraj, et al., 2021).

This research examined the relations between social presence and satisfaction with learning experiences. One of the most crucial variables to consider when trying to improve the learning experience is learner satisfaction. Learner satisfaction has been proven to influence positive learning outcomes such as achievement and motivation studies. When developing a new system for delivering online learning, it is crucial to analyse learners' satisfaction. The impact of a learner's social presence on their satisfaction with online learning has been highlighted as a key factor (Alsadoon, 2018). Because online learning is expanding at such a rapid rate, it's critical to develop ways for bridging transactional distance and establishing cognitive, social, and teaching presence (Holbeck, 2018). The need to develop social relationships is a basic human desire. This need also applies to online settings. Individuals want more than just information when they go online; they want to feel connected, supported, and validated.

Two main research questions guided the current study-

1. To examine the relationships between social presence and online learning satisfaction among undergraduate students in Malaysia.
2. To examine the predictive power of social presence and online learning satisfaction among undergraduate students in Malaysia.

Methodology

Research Design

This is a cross-sectional study utilising online Google surveys. Survey link was distributed through email and messaging apps to the student population. Participation was voluntary and no compensation was given.

Research Samples

Two hundred fifty-seven (257) university students in Malaysia were recruited via the convenience sampling method to answer the online survey. No missing data was detected.

Research Instrument and Procedures

The online survey took roughly 15 min to complete. Measures for this study were administered in the following order: demographics, a questionnaire assessing the Social Presence Scale (SPRES), and Satisfaction Scale.

Social Presence Scale (SPRES)

The Social Presence Scale (SPRES) developed by Short and colleagues (1976) was used in order to measure the general social relationship and interactive communication level among students. The scale was composed of 14 items. It is a five-point Likert-type scale. According to the sums of the scores, the total score ranges from 14 to 70, where higher scores prove a higher level of social presence. Cronbach’s alpha coefficient for internal consistency was 0.772.

Satisfaction Scale

The Satisfaction Scale developed by Short and colleagues (1976) was a 7-item questionnaire, a Likert-type response format from 1 to 5. The higher scores indicated a higher rate of

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 7 Issue 47 (September 2022) PP. 189-
DOI 10.35631/IJEPC.747018

satisfaction. The internal coefficient of consistency (Cronbach's Alpha) was 0.816 for this study.

Data Analysis

The data were analysed using the Statistical Package for Social Sciences (SPSS) and Partial Least Square-Structural Equation Modelling (PLS-SEM) was used and the Smart-PLS 3.0 was employed to analyze the proposed model in this study. Descriptive statistics were used to examine the first objective, correlation analysis was utilised to examine the second objective, and the multivariate analysis method was utilised to examine the third objective.

Result

Descriptive Statistics

A total of 257 participants took part in this study, with 53% females and comprised of Malays (21%), Chinese (55%), Indians (11%) and others (13%). The mean, standard deviation, skewness, and kurtosis of the variables were shown in Table 1. Table 2 showed the listwise reported CGPA achieved by the participants, 32 participants did not report their CGPA score in the survey.

Table 1: The Descriptive Statistics Information (*n* = 225)

Variables	Mean	Std. deviation	Skewness	Kurtosis
Social presence	54.68	10.25	0.015	-0.986
Satisfaction	27.81	5.81	-0.574	-0.054

Table 2: CGPA (*n* = 225)

CGPA scores	Frequency (*n*)	Percentage (%)
1.99 < CGPA < 3.00	54	21.4
2.99 < CGPA < 3.50	116	45.5
CGPA > 3.49	54	21.3

Composite Reliability (CR) and Average Variance Extracted (AVE)

According to Ramayah et al. (2018), the AVE of each construct should be greater than 0.40, which indicates that the construct will explain 40% of the variance of its items. Our data met this criterion. Additionally, the researcher will also need to achieve 60% of CR and 70% of Cronbach alpha to justify the construct reliability, similarly, our data fulfil this criterion (Table 3).

Table 3: Reliability Test

Variables	Items	Scales	Loadings	AVE	CR	Cronbach alpha
Social presence	SP1	Reflective	0.733	0.634	0.960	0.955
	SP2		0.763			
	SP3		0.806			
	SP4		0.806			
	SP5		0.738			
	SP6		0.855			
	SP7		0.799			

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 7 Issue 47 (September 2022) PP. 189-
DOI 10.35631/IJEPC.747018

	SP8		0.832			
	SP9		0.810			
	SP10		0.851			
	SP11		0.773			
	SP12		0.826			
	SP13		0.799			
	SP14		0.740			
Satisfaction	SS1	Reflective	0.702	0.732	0.950	0.938
	SS2		0.807			
	SS3		0.888			
	SS4		0.905			
	SS5		0.902			
	SS6		0.900			
	SS7		0.865			

Correlation Test

We used the Pearson correlation test and found that social presence was moderately correlated with satisfaction ($r = 0.696$, $p < 0.01$).

Table 4: Correlation Test

Variables	1	2
Social presence	-	0.696**
Satisfaction	0.696**	-

Note: **$p < 0.01$

Partial Least Square (PLS) Regression Test

We used the SmartPLS software to conduct the bootstrap procedure with 5000 resamples on the data. Social presence was positively predicting satisfaction ($\beta = 0.717$, $p < 0.01$) (Table 5). This relationship had a substantial effect size with an adjusted R squared of more than 0.26 and f squared of more than 0.4 (Cohen, 1988).

Table 5: PLS Regression

Relationship	Std. beta	Std. error	*t*-value	Adj. R square	*f* square	Effect size
Social presence → Satisfaction	0.717	0.038	19.057***	0.513	1.060	Substantial

Note: ***$p < 0.01$

Predictive Relevancy

We used the PLS Predict (Shmueli, 2016) to identify the prediction power of the models. Shmueli et al. (2019) suggested that researchers can use the root mean square error (RMSE) to determine the prediction power of the endogenous construct's indicators by comparing the difference between RMSE generated by the PLS algorithm and that generated by the linear regression (LM). In addition, those indicators' positive value of Stone-Geisser predictive relevance (Q2) indicates a better predictor. All the indicators except for SS1 had lower RMSE in the PLS analysis (Table 6). Therefore, the items were interpreted as having medium predicting power with low prediction error.

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 7 Issue 47 (September 2022) PP. 189-
DOI 10.35631/IJEPC.747018

Table 6: Predictive Power

Indicators	Q^2_predict	PLS	Benchmark	Difference
SS1	0.478	0.608	0.602	-0.006
SS2	0.337	0.779	0.811	0.032
SS3	0.309	0.816	0.817	0.001
SS4	0.346	0.807	0.828	0.021
SS5	0.337	0.803	0.837	0.034
SS6	0.353	0.800	0.842	0.042
SS7	0.293	0.868	0.896	0.028

Note: Benchmark is Assessed by LM

Discussion

This study aimed to examine the association and prediction of social presence on the online learning satisfaction level among university undergraduate students. The present study revealed students' social presence was positively and highly associated with online learning satisfaction. Since 2020, over 6 million students' academic progress was affected in Malaysia due to the temporary closure of higher educational institutions as a result of the Movement Control Order (MCO) implemented nationwide in Malaysia. Both instructors and students had to swiftly adjust to the virtual learning environment and innovate new methods to engage in learning and learning activities in a way that is enjoyable, interactive, and effective while learning remotely (Izhar et al., 2021; Kamal et al., 2020; Wong et al., 2021). Nevertheless, excellent online learning outcomes depend much on the engagement and involvement between the instructor and learner. The degree to which one perceives the presence of other participants during online learning is an essential element to ensure a quality online learning process took place (Amir et al., 2020; Munoz et al., 2021). This could post as a barrier to the students' learning if the students are worried about being themselves and feeling uncomfortable. The students' involvement may be minimum, affected or eventually withdraw from being active or present.

Social presence is regarded as one of the important indicators to enhance the learning experience process and efficacy of learning outcomes (Bailey, 2021; Susanti, 2021). Present studies reported that the social presence of online learning is significantly positively correlated with online learning satisfaction, and it is no surprise as supported by different studies in overseas and Malaysia (Han & Chung, 2022; Horzum, 2017; Mad et al., 2020; Natarajan & Joseph, 2021; Salimon et al., 2021). High social presence experience during online learning indicates learners show high affective and cognitive involvement in the study online, and experience the online learning more effective, replacing the absence of a physical face-to-face system (Ritonga et al., 2022).

Our study result contradicted the previous researchers which reported students were unsatisfied with online learning because they felt overloaded with online information, and self-perceptions of technical abilities required too influenced their perceived online learning difficulty (Annamalai, 2021; Conrad et al., 2022). This resulted in low satisfaction with the online learning environment (Agyeiwaah et al., 2021; Ansar et al., 2020). The difference reported with our present study could be due the learner adaptation towards the online learning (Razak et al., 2021). After the 2-year MCO, the "new norms" of online learning methdos had been widely implemented, and higher level of autonomy and self-determination in the online environment

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 7 Issue 47 (September 2022) PP. 189-
DOI 10.35631/IJEPC.747018
obtained from the online learning methods would be convenince for the students (Tajudin et al., 2022). Students reported saving travel time, being able to better plan their days and create their own study schedule, and feeling they had more control over their day (Biwer et al., 2021). The saliency of the instructors during the online learning, which derived from social presence perspective during the online learning would allow the student to design the study progress at their own pace at times when they were most productive and satisfied (Munoz et al., 2021; Nasir, 2020). This had a positive effect on their attention and performance regulation, as well as their time management.

The finding of the present study revealed that social presence contributed 51.3% to online learning satisfaction. It shows that connectivity and engagement derived from the social presence between the instructors and students on online learning platforms do contribute to the learners' online satisfaction. The enhancement of online learning platforms and technology efficacy resulted in a high level of social presence, which is a good sign to prove the benefits and advantages of online learning platforms are likely to be gradually accepted by university students. Eventually, they will likely find the use of online learning platforms to be beneficial to their learning. Learning satisfaction and social presence are frequently considered to be two crucial motivation variables in developing positive learning outcomes for undergraduate students. In light of the implications for these variables, we believe it is prudent to examine individual psychological characteristics when implementing new technology acceptance, adoption, and satisfaction.

Contemporary studies believe the high level of involvement and connectedness between students, teaching staff, and the institution to be a major positive component of online learning, which is consistent with the current study's reported satisfaction and social presence in active learning and personal relevance (Krishnapatria et al., 2020; Fatani, 2020; Wang et al., 2022). The academician can take advantage of student engagement and involvement to deliver a fuller and more robust educational experience.

Additionally, even though the instructor applied a variety of online learning tactics and spent hours creating and delivering videos and activities to increase the engagement with the students, the trajectory of the social presence would increase participation and online learning satisfaction may still be justified (Andel et al., 2020; Natarajan & Joseph, 2021). Our findings demonstrated a moderate relationship between students' perceived levels of social presence and their overall satisfaction with the online environment. Therefore, instructors should interact with students and project a sense of social presence in the online learning environment to increase students' learning satisfaction, which is justified by the present study. Instructors could also incorporate more engaging activities like blogging, group breakout sessions, and polls to diversify and compensate for the absence of physical contact. This could improve the sense of social presence when learning online, which resulted in the satisfaction of online learning.

On top of that, the positive prediction of social presence and online learning satisfaction suggests that students who are more involved in their online learning environment are more likely to find that virtual learning could be a suitable trend for the learning modes nowadays. The results also supported by Long and colleagues (2021) reported that student engagement is crucial for improving students' desired learning outcomes and optimising student satisfaction with online learning. Earlier and contemporary studies reported that motivated students put more effort into their education initiated by the instructor, take part in more learning activities,

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 7 Issue 47 (September 2022) PP. 189-
DOI 10.35631/IJEPC.747018
and develop strategies to help them meet their academic objectives, which increases their satisfaction with and online context learning process (Harahap et al., 2021; Pan, 2014; Shen et al., 2013; Syahwani & Soeyono, 2021; Usman & Rachdanti, 2021). That is to say, students who interact more are likely to foster their academic self-efficacy (Hamdan et al., 2021). Subsequently, with higher academic self-efficacy, they believe that they have sufficient ability to perform online tasks and are more engaged with their learning, which in turn contributes to their satisfaction with online learning (Means & Neisler, 2021).

Implication

This study also gives rise to several important implications for better understanding students' satisfaction in the online learning context during the COVID-19 pandemic. Theoretically, this study aims to provide empirical evidence for social presence theory and student online learning satisfaction. In this vein, the results of the study improve our understanding of the mechanism behind the relationship between interaction and online learning satisfaction. During the pandemic to endemic, it is an unavoidable trend that online learning would be continuously expanded in higher education institutions across all schools worldwide. As a result, the current study attempted to investigate the social presence and students' satisfaction with online education platforms in Malaysia, based on the current COVID-19 situation. COVID-19 has a considerable impact on university education in Malaysia, and it fights for changes in the framework of university education. It is becoming vital to upgrade university teaching methods. And it was the pandemic that provided the incentive for Malaysia's higher education system to undergo swift and effective restructuring.

The study's findings imply that implementing online learning programmes was a feasible idea during the pandemic, as the majority of the students polled were in favour of it. Furthermore, we discovered that students' satisfaction with online learning was largely influenced by their social presence. Respondents rated the great degree of autonomy and interaction among students as a highly favourable feature of online learning. The instructor can use student autonomy and involvement to deliver a fuller and more comprehensive educational experience. The satisfaction of students with online learning courses is the main focus of this study. Future research may be able to examine satisfaction with online education platforms by taking into other stakeholders' perspectives - e.g., the instructors, the administrator or parents. The study could also be used to examine the impact of emerging technologies such as video streaming and multimedia learning environments, e.g., voice tools and avatars, on social presence, an area in need of further study.

Conclusion

Social presence remains a key influential component of the quality of online learning satisfaction from the students' perspective. These findings give light to the COVID-19 aftermath's potential repercussions. What follows is the question of what will happen if the requirement is repealed. Will the demand of our education system return to pre-crisis levels, somewhat increase, or skyrocket? Time will prevail, but the empirical findings suggest that educators's ability in "rising to the occasion" with quality teaching will have contribute signficant impact on demand as students becoming more accustomed to online learning. If many students suffer inadequate fundamental functional competency, poor instructional design, sporadic teacher presence, and poorly implemented cognitive and social features as a result of the rush to bring classes online, they may be willing to return to the traditional classroom. The study findings also shows that students perfered hybrid and online classes that

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 7 Issue 47 (September 2022) PP. 189-
DOI 10.35631/IJEPC.747018

will indirectly improve the quality of classes despite time constraints. Students will be pruned to accepted online and hybrid teaching if educators are able to blend high-quality interactive teaching pedagogy with technological support. As a result, students will be expose to a diverse range of experiences.

Acknowledgements
The authors would like to express their gratitude to all participants who took part in this study.

References

Agyeiwaah, E., Badu Baiden, F., Gamor, E., & Hsu, F.-C. (2021). Determining the attributes that influence students' online learning satisfaction during COVID-19 pandemic. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 100364. https://doi.org/10.1016/j.jhlste.2021.100364

Alenezi, A. R. (2022). Modeling the social factors affecting students' satisfaction with online learning: A structural equation modeling approach. *Education Research International*, *2022*, 1–13. https://doi.org/10.1155/2022/2594221

Almaiah, M. A., Hajjej, F., Lutfi, A., Al-Khasawneh, A., Shehab, R., Al-Otaibi, S., & Alrawad, M. (2022). Explaining the factors affecting students' attitudes to using online learning (Madrasati platform) during COVID-19. *Electronics*, *11*(7), 973. https://doi.org/10.3390/electronics11070973

Almusharraf, N., & Khahro, S. (2020). Students satisfaction with online learning experiences during the COVID-19 pandemic. *International Journal of Emerging Technologies in Learning (IJET)*, 15(21), 246. https://doi.org/10.3991/ijet.v15i21.15647

Alsadoon, A. p. (2018). The Impact of Social Presence on Learners' Satisfaction in Mobile Learning . *The Turkish Online Journal of Educational Technology*, 226-233Al-rahmi,

Al-Samarraie, H., Teng, B. K., Alzahrani, A. I., & Alalwan, N. (2017). E-learning continuance satisfaction in higher education: A unified perspective from instructors and students. Studies in Higher Education, 43(11), 2003–2019. https://doi.org/10.1080/03075079.2017.1298088

Amir, L. R., Tanti, I., Maharani, D. A., Wimardhani, Y. S., Julia, V., Sulijaya, B., & Puspitawati, R. (2020). Student perspective of classroom and distance learning during COVID-19 pandemic in the Undergraduate Dental Study Program Universitas Indonesia. *BMC Medical Education*, *20*(1). https://doi.org/10.1186/s12909-020-02312-0

Andel, S. A., de Vreede, T., Spector, P. E., Padmanabhan, B., Singh, V. K., & de Vreede, G.-J. (2020). Do social features help in video-centric online learning platforms? A Social Presence Perspective. *Computers in Human Behavior*, *113*, 106505. https://doi.org/10.1016/j.chb.2020.106505

Annamalai, N. (2021). Online learning during COVID-19 pandemic. are Malaysian high school students ready? *Pertanika Journal of Social Sciences and Humanities*, *29*(3). https://doi.org/10.47836/pjssh.29.3.06

Ansar, F., Ali, W., Khattak, A., Naveed, H., & Zeb, S. (2020). Undergraduate Students' Perception And Satisfaction Regarding Online Learning System amidst Covid-19 Pandemic In Pakistan. *Journal of Ayub Medical College Abbottabad*, 32(1), 644–650.

Azhar, N., Wan Ahmad, W. F., Ahmad, R., & Abu Bakar, Z. (2021). Factors affecting the acceptance of online learning among the urban poor: A case study of malaysia. *Sustainability*, *13*(18), 10359. https://doi.org/10.3390/su131810359

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 7 Issue 47 (September 2022) PP. 189-
DOI 10.35631/IJEPC.747018

Bailey, D. (2021). Interactivity during covid-19: Mediation of Learner Interactions on social presence and expected learning outcome within videoconference EFL courses. *Journal of Computers in Education*. https://doi.org/10.1007/s40692-021-00204-w

Baruah, T. D. (2018). E-learning as a medium for facilitating learners' support services under open and distance learning: An evaluative study. *Technology for Efficient Learner Support Services in Distance Education*, 93–112. https://doi.org/10.1007/978-981-13-2300-3_5

Basith, A., Rosmaiyadi, R., Triani, S. N., & Fitri, F. (2020). Investigation of online learning satisfaction during COVID 19: In relation to academic achievement. *Journal of Educational Science and Technology (EST)*, 265–275. https://doi.org/10.26858/est.v1i1.14803

Biwer, F., Wiradhany, W., oude Egbrink, M., Hospers, H., Wasenitz, S., Jansen, W., & de Bruin, A. (2021). Changes and adaptations: How university students self-regulate their online learning during the COVID-19 pandemic. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.642593

Bowers, J., & Kumar, P. (2015). Students' perceptions of teaching and social presence. *Blended Learning*, 1532–1550. https://doi.org/10.4018/978-1-5225-0783-3.ch073

Brown, W. S. (2021). Successful strategies to engage students in a COVID-19 environment. *Frontiers in Communication*, *6*. https://doi.org/10.3389/fcomm.2021.641865

Chang, C.-T., Hajiyev, J., & Su, C.-R. (2017). Examining the students' behavioral intention to use e-learning in Azerbaijan? The General Extended Technology Acceptance Model for e-learning approach. *Computers & Education*, *111*, 128–143. https://doi.org/10.1016/j.compedu.2017.04.010

Chung, E., Subramaniam, G., & Christ Dass, L. (2020). Online learning readiness among university students in Malaysia amidst covid-19. *Asian Journal of University Education*, *16*(2), 45. https://doi.org/10.24191/ajue.v16i2.10294

Cobb, S. C. (2009). Social presence and online learning: A current view from a research perspective. *Journal of Interactive Online Learning*, 8(3), 241–254.

Conrad, C., Deng, Q., Caron, I., Shkurska, O., Skerrett, P., & Sundararajan, B. (2022). How student perceptions about online learning difficulty influenced their satisfaction during Canada's Covid-19 response. *British Journal of Educational Technology*, 53(3), 534–557. https://doi.org/10.1111/bjet.13206

Dinh, L. P., & Nguyen, T. T. (2020). Pandemic, social distancing, and Social Work Education: Students' satisfaction with online education in Vietnam. *Social Work Education*, *39*(8), 1074–1083. https://doi.org/10.1080/02615479.2020.1823365

Edwards, O. V., & Taasoobshirazi, G. (2022). Social presence and teacher involvement: The link with expectancy, task value, and engagement. *The Internet and Higher Education*, *55*, 100869. https://doi.org/10.1016/j.iheduc.2022.100869

Elia, G., Solazzo, G., Lorenzo, G., & Passiante, G. (2019). Assessing learners' satisfaction in collaborative online courses through a big data approach. *Computers in Human Behavior*, 92, 589–599. https://doi.org/10.1016/j.chb.2018.04.033

Ensmann, S., Whiteside, A., Gomez-Vasquez, L., & Sturgill, R. (2021). Connections before curriculum: the role of social presence during COVID-19 emergency remote learning for students. *Online Learning*, *25*(3). https://doi.org/10.24059/olj.v25i3.2868

Fatani, T. H. (2020). Student satisfaction with videoconferencing teaching quality during the COVID-19 pandemic. *BMC Medical Education*, 20(1). https://doi.org/10.1186/s12909-020-02310-2

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 7 Issue 47 (September 2022) PP. 189-
DOI 10.35631/IJEPC.747018

Garad, A., Al-Ansi, A. M., & Qamari, I. N. (2021). The role of e-learning infrastructure and cognitive competence in distance learning effectiveness during the COVID-19 pandemic. *Jurnal Cakrawala Pendidikan*, *40*(1), 81–91. https://doi.org/10.21831/cp.v40i1.33474

Guinaliu-Blasco, M., Hernández-Ortega, B., & Franco, J. L. (2019). The effect of cognitive absorption on marketing learning performance. *Spanish Journal of Marketing - ESIC*, *23*(2), 249–271. https://doi.org/10.1108/sjme-10-2018-0048

Gunesekera, A. I., Bao, Y., & Kibelloh, M. (2019). The role of usability on e-learning user interactions and satisfaction: A literature review. *Journal of Systems and Information Technology*, *21*(3), 368–394. https://doi.org/10.1108/jsit-02-2019-0024

Guo, Q., Zeng, Q., & Zhang, L. (2022). What social factors influence learners' continuous intention in online learning? A Social Presence Perspective. *Information Technology & People*. https://doi.org/10.1108/itp-02-2021-0151

Hamdan, K. M., Al-Bashaireh, A. M., Zahran, Z., Al-Daghestani, A., AL-Habashneh, S., & Shaheen, A. M. (2021). University students' interaction, internet self-efficacy, self-regulation and satisfaction with online education during pandemic crises of COVID-19 (SARS-COV-2). *International Journal of Educational Management*, *35*(3), 713–725. https://doi.org/10.1108/ijem-11-2020-0513

Han, E. R., & Chung, E. K. (2022). The Relationship Between Social Presence and Learning Satisfaction in Videoconferencing Problem-Based Learning. *Korean Medical Education Review*, 24(1), 56–62. https://doi.org/https://doi.org/10.17496/kmer.2022.24.1.56

Harahap, M., Pristiyono, P., Lubis, J., Ikhlash, M., & Anjar, A. (2021). Level of Satisfaction of Online Learning in Mediation Lecturer Competence on Learning Motivation. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, *4*(3), 3981-3990. https://doi.org/10.33258/birci.v4i3.2166

Hasan, N., & Bao, Y. (2020). Impact of "e-learning crack-up" perception on psychological distress among college students during COVID-19 pandemic: A mediating role of "Fear of academic year loss." *Children and Youth Services Review*, *118*, 105355. https://doi.org/10.1016/j.childyouth.2020.105355 Holbeck, R., & Hartman, J. (2018). Efficient strategies for maximizing online student satisfaction: Applying technologies to increase cognitive presence, social presence, and teaching presence. *Journal of Educators Online*, 15(3). https://doi.org/10.9743/jeo.2018.15.3.6

Horzum, M. B. (2017). Interaction, structure, social presence, and satisfaction in online learning. EURASIA *Journal of Mathematics, Science and Technology Education*, 11(3). https://doi.org/10.12973/eurasia.2014.1324a Izhar, N. A., Al-dheleai, Y. M., & Si Na, K. (2021). Teaching in the time of covid-19: The challenges faced by teachers in initiating online class sessions. *International Journal of Academic Research in Business and Social Sciences*, *11*(2). https://doi.org/10.6007/ijarbss/v11-i2/9205

Izwan, N. S., Muhamad, S., Hasniza, N., Ibrahim, N. M., JAMIL, J. J., & Ang, J. S. (2020). Assessing Lecturer's Readiness for Online Learning Implementation during COVID-19 Outbreak. *Ilkogretim Online - Elementary Education Online*, *19*(2), 79–84.

Kamal, A. A., Mohd, N., Truna, L., Sabri, M., & N., S. (2020). Transitioning to online learning during COVID-19 pandemic: Case study of a pre-university centre in Malaysia. *International Journal of Advanced Computer Science and Applications*, *11*(6). https://doi.org/10.14569/ijacsa.2020.0110628

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 7 Issue 47 (September 2022) PP. 189-
DOI 10.35631/IJEPC.747018

Krishnapatria, K. (2020). From 'lockdown' to letdown: Students' perception of e-learning amid the covid-19 outbreak. *ELT in Focus*, 3(1), 1–8. https://doi.org/10.35706/eltinfc.v3i1.3694

Leong, P. (2011). Role of social presence and cognitive absorption in online learning environments. *Distance Education*, *32*(1), 5–28. https://doi.org/10.1080/01587919.2011.565495

Long, S., Ma, L., Jan, A., Sharif Nia, H., & Rahmatpour, P. (2021). Online learning satisfaction during COVID-19 pandemic among Chinese University Students: The Serial Mediation Model. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.743936

Mad, S., Omar, N. A., Sarudin, E. S., & Aziz, N. H. (2020). Perception and intention to use e-learning from students' point of view- an evidence from Malaysia local university. *Journal of Computing Research and Innovation*, *5*(2), 11–20. https://doi.org/10.24191/jcrinn.v5i2.163

Means, B., & Neisler, J. (2021). Teaching and learning in the time of COVID: The student perspective. *Online Learning*, *25*(1). https://doi.org/10.24059/olj.v25i1.2496

Munoz, K. E., Wang, M.-J. (S., & Tham, A. (2021). Enhancing online learning environments using social presence: Evidence from hospitality online courses during COVID-19. *Journal of Teaching in Travel & Tourism*, *21*(4), 339–357. https://doi.org/10.1080/15313220.2021.1908871

Nasir, M. K. (2020). The influence of social presence on students' satisfaction toward online course. Open Praxis, 12(4), 485. https://doi.org/10.5944/openpraxis.12.4.1141

Natarajan, J., & Joseph, M. A. (2021). Impact of emergency remote teaching on nursing students' engagement, social presence, and satisfaction during the Covid-19 pandemic. *Nursing Forum*, 57(1), 42–48. https://doi.org/10.1111/nuf.12649

Pan, Y.-H. (2014). Relationships among teachers' self-efficacy and students' motivation, atmosphere, and satisfaction in Physical Education. *Journal of Teaching in Physical Education*, *33*(1), 68–92. https://doi.org/10.1123/jtpe.2013-0069

Patterson, B., & McFadden, C. (2009). Attrition in Online and Campus Degree Programs. *Online Journal of Distance Learning Administration*, *12*(2), 1–8.

Phirangee, K., & Malec, A. (2020). Othering in online learning: An examination of social presence, identity, and sense of community. *Social Presence and Identity in Online Learning*, 24–36. https://doi.org/10.4324/9780429294235-3

Poth, R. D. (2021). Social presence in online learning. *Research Anthology on Developing Effective Online Learning Courses*, 1580–1601. https://doi.org/10.4018/978-1-7998-8047-9.ch078

Razak, A., Nawi, N., Noor, A., Daud, B., & Ismail, M. (2021). Students' adaptability in online learning based on malaysian students' perception. *Malim: Jurnal Pengajian Umum Asia Tenggara (Sea Journal Of General Studies)*, *22*(1), 139–152. https://doi.org/10.17576/malim-2021-2201-11

Richardson, J. C., Maeda, Y., Lv, J., & Caskurlu, S. (2017). Social presence in relation to students' satisfaction and learning in the online environment: A meta-analysis. *Computers in Human Behavior*, *71*, 402–417. https://doi.org/10.1016/j.chb.2017.02.001

Ritonga, M., Lahmi, A., Saputra, R., ., M., & ., N. (2022). Online learning during the COVID-19 pandemic period: Studies on the social presence and affective and cognitive engagement of students. *International Journal of Early Childhood Special Education*, *14*(1), 479–486. https://doi.org/10.9756/int-jecse/v14i1.221058

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 7 Issue 47 (September 2022) PP. 189-
DOI 10.35631/IJEPC.747018

Salimon, M. G., Sanuri, S. M., Aliyu, O. A., Perumal, S., & Yusr, M. M. (2021). E-learning satisfaction and retention: A concurrent perspective of cognitive absorption, perceived social presence and technology acceptance model. *Journal of Systems and Information Technology*, 23(1), 109–129. https://doi.org/10.1108/jsit-02-2020-0029

Shen, D., Cho, M.-H., Tsai, C.-L., & Marra, R. (2013). Unpacking online learning experiences: Online learning self-efficacy and learning satisfaction. *The Internet and Higher Education*, *19*, 10–17. https://doi.org/10.1016/j.iheduc.2013.04.001

Stankovska, G., Dimitrovski, D., Ibraimi, Z., & Memedi, I. (2022). Online Learning, Social Presence and Satisfaction among University Students during the COVID-19 Pandemic. In *Bulgarian Comparative Education Society (BCES)* (pp. 181–188). Cham, Sofia; Springer International Publishing.

Short, J. A., Williams, E., & Christie, B. (1976). *The social psychology or telecommunications*. London, England; Wiley.

Susanti, S. (2021). Online Class Discussion and Social Presence to Boost Academic Performance of English Subject Amid COVID-19 Outbreak. *International Journal for Educational Studies*, 14(1), 35–48.

Syahwani, A. K., & Soeyono, A. (2021). The effect of lecturer competence in online learning methods on student college satisfaction during the pandemic. *Procedia of Social Sciences and Humanities*, *1*, 239–250. https://doi.org/10.21070/pssh.v1i.53

Tajudin, A. B., Maulida, C., & Vransiska, R. D. (2022). Self-regulated learning in online classes: A comparative study between Malaysian and Indonesian students. *Journal of Educational Management and Instruction (JEMIN)*, *2*(1), 1–11. https://doi.org/10.22515/jemin.v2i1.4965

Thandevaraj, E. J., Gani, N. A., & Nasir, M. K. (2021). A review of psychological impact on students online learning during COVID-19 in Malaysia. Creative Education, 12(06), 1296–1306. https://doi.org/10.4236/ce.2021.126097

Usman, O., & Rachdanti, Z. (2021). The effect of learning quality, student motivation and student satisfaction level on online learning during pandemic. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3996329

Wang, R., Han, J., Liu, C., & Wang, L. (2022). Relationship between medical students' perceived instructor role and their approaches to using online learning technologies in a cloud-based Virtual Classroom. *Frontiers in Psychology*, 12. https://doi.org/10.21203/rs.3.rs-1406388/v1

Wong, K. Y., Sulaiman, T., Ibrahim, A., Kunchi Mohd, A. G., Hassan @ Hussin, O., & Wan Jaafar, W. M. (2021). Secondary School Teachers Psychological Status and competencies in e-teaching during covid-19. *Heliyon*, *7*(11). https://doi.org/10.1016/j.heliyon.2021.e08238

W. M., Othman, M. S., & Mi Yusuf, L. (2015). The effectiveness of using e-learning in Malaysian higher education: A case study Universiti Teknologi Malaysia. *Mediterranean Journal of Social Sciences*. https://doi.org/10.5901/mjss.2015.v6n5s2p625