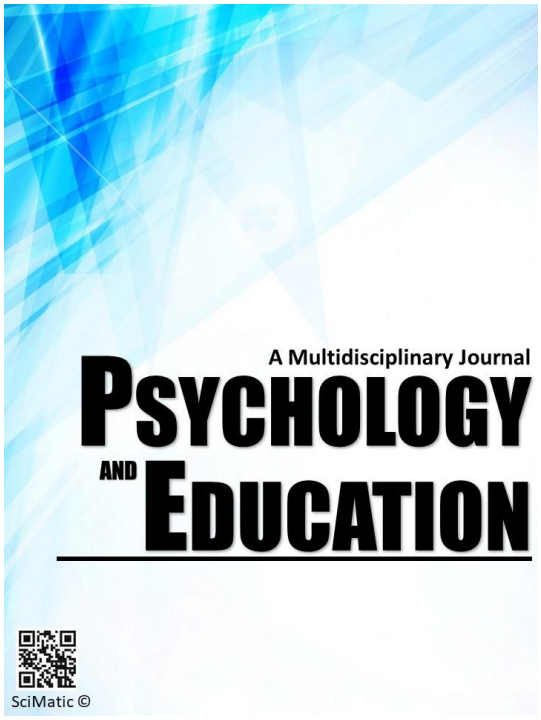
LEARNING SATISFACTION AND MOTIVATION TO STUDY ONLINE DURING THE COVID-19 PANDEMIC



PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL

2022
Volume: 5
Issue: 1
Pages: 238-244
Document ID: 2022PEMJ312
DOI: 10.5281/zenodo.7242469
Manuscript Submitted: 2022-10-15
Manuscript Accepted: 2022-10-23

Psych Educ, 2022, **5**(1): 238-244, Document ID: PEMJ312, doi: 10.5281/zenodo.7242469, ISSN 2822-4353

CC BY NC

Research Article

Learning Satisfaction and Motivation to Study Online During the COVID-19 Pandemic

Ellanah Feudo*, Philip Cordova Cuizon
For affiliations and correspondence, see the last page.

Abstract

Literature suggests that with the right environment and proper implementation of e-learning, students' motivation to acquire knowledge increases, leading to learning satisfaction and academic success. At the height of the COVID-19 pandemic, educational institutions adjusted to the new normal and implemented distance learning. This study investigated the correlation between motivation to learn online and online learning satisfaction among SDCA students based on their experience. Data were gathered from 256 colleges and grade 12 students who volunteered, using the Motivation to Learn Online Questionnaire (MLOQ) and satisfaction scale sent electronically to the respondents. Results were analyzed through statistical tests (i.e., mean and Pearson Correlation). The findings show a significant relationship between motivation to learn online and online learning satisfaction level ($r=0.715$, $p < 0.001$), which indicates that the respondents' level of satisfaction is strongly driven by their motivation to learn online. Recommendations are discussed at the end of the study based on the results.

Keywords*: e-learning, MLOQ, online learning satisfaction, COVID-19 pandemic, new normal*

Introduction

Several studies confirmed that a positive perception of the learning environment is correlated to a high level of motivation to learn and influences academic performance (Hafızoğlu & Yerdelen, 2019; Kaplan & Patrick, 2016; Gherasim, Butnaru, & Iacob, 2011). While e-learning was in demand, there had been reports of challenges students faced in an e-learning environment. In an interview conducted by CNN Philippines (2020), students from senior high school explained that they would learn as long as they were focused on their task, while the others were easily distracted and ignored their online class discussions compared to when they were in face-to-face sessions. This suggests that the environment is vital in facilitating learning and students' motivation. The researcher also assumed that a student with a poor level of motivation to study online also influences students' perception of their learning satisfaction.

Factors affecting motivation to learn online include intrinsic and extrinsic goal orientation, control of learning beliefs, self-efficacy, test anxiety, class context, task value, social engagement, and instructor support (Fowler, 2007; Teguh et al. 2022; Pintrich et al., 1991). Consequently, these factors can influence the classroom dynamics keeping students interested and actively participating in class discourse. To keep students' intrinsic motivation in an online setting, achieving the right environment for learning and improving competencies is necessary, which will bring out student-student relationships and autonomy (Todorova & Karamanska 2015). Cullum (2016) also believed that the intent of students to take online courses would increase if they think that the organizational and technical equipment exists to support them in online education.

According to Letcher & Neves (2010), students' satisfaction contributes to building self-confidence in acquiring knowledge and dexterity. Some researchers examined the connection of satisfaction to students' educational processes, interpersonal relationships, and motivation (Hassan, Malik, & Khan, 2013; Karadag et al., 2012; Myers & Goodboy, 2014; Pan, 2013), and their findings suggested the significance of these concepts and their interrelation. Instructors also play an essential role in online teaching as they must improve their technical skills and consider the students' technical knowledge (Gopal et al., 2022).It is assumed in this paper that if a students' motivation to learn and acquire knowledge in their online class is higher, their satisfaction with their online learning experience is also high, which will produce a significant perception of online courses, have a higher completion rate, and possession of academic qualifications. Therefore, with the implementation of distance learning, it is necessary to assess students' motivation to study and investigate factors affecting it to determine areas for improvement in delivering distance learning education and providing a worthwhile educational experience. This research will also serve as a reference for educators and institutions to re-assess their approach's effectiveness in delivering quality education regardless of the teaching modality. Moreover, the following are the research questions for this study:

1) What is the level of motivation to learn online from respondents from SDCA?

2) What is the level of online learning satisfaction of respondents from SDCA?
3) Is there a correlation between the student's motivation to learn online and online learning satisfaction?

Literature Review

According to research, motivated learners are more likely to participate in a variety of demanding activities, embrace and apply an immersed approach to learning, and display improved performance, tenacity, and originality (Teguh et al., 2022). Factors affecting motivation to learn online include intrinsic and extrinsic goal orientation, control of learning beliefs, self-efficacy, test anxiety, class context, task value, social engagement, and instructor support (Teguh et al., 2022; Fowler, 2007; Pintrich et al., 1991). This study also supports its theoretical framework, which suggests that a better learning environment encourages and promotes social engagement, and adequate instructor support and stimulates learners' cognitive processes in learning, which sustain students' motivation to learn online. Ngiwara et al. (2018) stated that in order to understand what drives students, one needs examine their actions in relation to the objectives they embrace in their learning process. Their research reveals that in order to properly employ the deep learning technique during their studies, students must first be intrinsically motivated and have intrinsic goal orientation. The deep learning approach supports the cognitive presence discussed earlier in this study; it triggers learners to deepen their understanding of the course content and enhance their educational experience.

In the study conducted by Chen et al. (2020), user satisfaction on online education platforms. Their results suggested that the users' factors have no direct influence on user satisfaction, while platform availability has the most significant impact. They also considered emotional analysis of online users, platform availability, platform service type, platform privacy, platform teaching type, platform functionality, platform design environment, and network technology environment. And by compiling a list of the factors that have an impact on the user experience of online teaching platforms, they were able to identify areas for enhancement in the following areas: suitable electronic devices, online customer service, enhancement of the platform's functions, improvement in the quality of interactive devices, and stable network technology. As they discussed, if "network congestion" often occurs in the platform's use, the user experience and usage rate will decrease accordingly.

Nguyen (2016) found that elements such as engagement, cooperation, communication, assessment, and outcomes might be a good predictor of student satisfaction with online learning. The case study's advancement revealed that the following aspects had a major effect on learner satisfaction: interaction, collaboration, and assessment. It was also suggested that in order to do so, instructors and course designers should concentrate on creating interactive learning activities; learning material necessitates the participation of the whole group. To evaluate the true skills of the learners, the assessment activity should include a variety of different forms.

It is worth noting the usage of the theoretical framework created by Garrison, Anderson, and Archer (2000), which focuses on three aspects of educational experience: social, cognitive, and instructional presence.

The researcher noted that motivation and satisfaction in learning are essential to academic success (Usán et al., 2019; Adamma et al., 2018; Commissiong, M., 2020). While there are factors affecting the students' learning in an online setting, educators need to adapt to the innovation of technological education and maintain an engaging environment that promotes students' motivation, positive learning beliefs, and learning satisfaction (Baticulon et al., 2020; Chua et al., 2020; Chen et al., 2020). Independent research has shown that a variety of factors heavily influence students' motivation to learn, including goal orientation, control of learning beliefs, self-efficacy, task value, social engagement, and instructors' support (Teguh et al., 2022; Ngiwara et al., 2018; Usán et al., 2019; Quing & Baudin, 2021; Schunk & Dibenedetto, 2020; Maragi et al. 2018). This study combined the factors vital to students' motivation in a single analysis and investigated whether it correlates with online learning satisfaction. The current study results were used as a basis for recommendations to promote a student-centered learning environment in e-Learning while incorporating the theoretical foundations mentioned in this study.

Methodology

Participants

The sample of this study consisted of 256 volunteer students (165 grade 12 students and 91 college students) enrolled in an online class from St. Dominic

College of Asia (SDCA). The researcher used a convenience sampling technique drawn from voluntary participants conveniently available to the researcher. The survey questionnaire was sent to the target population through their program coordinators after getting permission from SDCA Vice President for Academic Affairs.

Instruments of the Study

The research instrument included three sections. The first section was dedicated to the consent form, and the second section consisted of the participants' demographic data. The third section included the combined adaptation of the MLOQ by Fowler (2018) and the 6-items online learning satisfaction scale adapted from the study of Gopal et al. (2021).

Shawn Fowler created the MLOQ in 2007 to examine student motivation in traditional and online classes in order to understand whether the motivation to learn changes between the two. Based on the Motivated Strategies for Learning Questionnaire (MSLQ) by Pintrich et al. (1991) consists of 81 items and six subscales (intrinsic goal orientation, external goal orientation, self-efficacy, control of learning beliefs, task value, and test anxiety), the MLOQ's reliability and validity were evaluated. On the other hand, the revised MLOQ in 2018 consists of 38 items with seven subscales: intrinsic goal orientation, extrinsic goal orientation, control of learning beliefs, self-efficacy, task value, and two additional subscales of social engagement and instructor's support. In his research to validate the instrument, Shawn did not obtain the desired threshold for construct validity.

The MLOQ was validated in a separate study by Teguh et al. (2022). Their adapted test instrument from Fowler consists of 38 items with seven subscales: intrinsic goal orientation, extrinsic goal orientation, control of learning beliefs, self-efficacy, task value, social engagement, and instructor's support. Teguh et al. (2022) tested the adaptation of MLOQ for confirmatory factor analysis and obtained a Chi-square = 500.1444, df = 315, P-Value = 0.0000, and RMSEA value = 0.041, which indicated that the items from the instrument are unidimensional. In this research, participants were asked to rate their degree of agreement with each statement on a 5-point Likert scale ranging from strongly disagree to strongly agree.

Students' satisfaction with online learning was assessed using six questions derived from the Gopal et al. (2021) research, with composite reliability of 0.924 and an acceptable RMSEA = 0.030 on a 5-point Likert scale ranging from strongly disagree to strongly agree.

Procedures

After receiving authorization from the Vice President of Academic Affairs to carry out the research at SDCA, the researcher wrote a letter of intent to the Basic Education Principal, as well as to the Undergraduate Deans and Program Chairs inviting their students to participate in the survey; the web-based questionnaire was sent out electronically through Google Forms. Personal information was removed from the raw file before submitting it to the statistician for data analysis to protect the respondent's personal information.

Ethical Considerations

The respondents who participated in this study are of legal age and their participation is based on voluntary participation with the approval of the principal from basic education and the Vice-President for Academic Affairs of St. Dominic College of Asia. Respondents were informed about the nature of this study including the test administration. Personal information was not included in the conduct of this study due to Data Privacy Law.

Results

The following are the results of the study based on the data gathered:

Table 1. *Level of Respondents' Motivation to Learn Online*

	N	*Mean*	*SD*	*Verbal Interpretation*
Motivation to Learn Online	256	3.88	0.543	Moderate
Intrinsic Goal Orientation	256	3.87	0.655	Moderate
Extrinsic Goal Orientation	256	3.96	0.699	Moderate
Control of Learning Beliefs	256	3.93	0.625	Moderate
Self-Efficacy	256	3.85	0.647	Moderate
Task-Value	256	4.13	0.626	High
Social Engagement	256	3.54	0.734	Moderate
Instructor's Support	256	3.87	0.662	Moderate

Descriptive statistics was utilized to analyze the students' motivation level to learn online, including the seven subscales that predict motivation. The result shows that the respondents were moderately motivated (M = 3.88, SD = 0.54) to learn online. As shown in the

figure above Task Value obtained a score with verbal interpretation of High (M = 4.13, SD = 0.63), the extrinsic goal orientation (M = 3.96, SD = 0.69), control of learning beliefs (M = 3.93, SD = 0.0.62), intrinsic goal orientation (M = 3.87, SD = 0.65), instructor's support (M = 3.87, SD = 0.66), self-efficacy (M = 3.85, SD = 0.64) were all in moderate level, and lastly social engagement (M = 3.54, SD = 0.73) presented the lowest mean in moderate level and has the highest variation among the motivational subscale.

Table 3. *Online Learning Satisfaction Level of Respondents*

	N	*Mean*	*SD*	*Verbal Interpretation*
online learning satisfaction level	256	3.61	0.834	Moderate

The table above presented a moderate level of online learning satisfaction (M = 3.61, SD = 0.83). This means that the respondents agree to the indicators regarding online learning satisfaction; its value, its ability to increase their interest and understanding of their course, quality, engagement, and overall experience.

Table 3. *Correlation between the student's motivation to learn online and online learning satisfaction*

		MLO	IGO	EGO	CLB	SE	TV	SoE	IS
online learning satisfaction level	Pearson's r	0.715 ***	0.513 ***	0.467 ***	0.531 ***	0.637 ***	0.584 ***	0.542 ***	0.716 ***
	p-value	< .001	< .001	< .001	< .001	< .001	< .001	< .001	< .001
	r^2	0.5112	0.2632	0.2181	0.2820	0.4058	0.3411	0.2938	0.5127

As shown on the table above, there is a significant relationship between motivation to learn online and online learning satisfaction level ($r = 0.715$, $p < 0.001$) which indicates that the respondents' level of satisfaction is strongly driven by their motivation to learn online. The coefficient of determination r2 = 0.5112 indicate that the degree to which motivation to learn online affects online learning satisfaction level is at 51.12%. All motivator subscales are positively correlated with satisfaction, intrinsic goal orientation ($r = 0.51$, $p < .001$), extrinsic goal orientation ($r = 0.47$, $p < .001$), control of learning beliefs ($r = 0.53$, $p < .001$), task value ($r = 0.58$, $p < .001$), social engagement ($r = 0.54$, $p < .001$), but only two subscales are considered as a strong predictor for satisfaction: Instructor's support ($r = 0.71$. $p < .001$) and Self-efficacy ($r = 0.637$, $p < .001$).

Discussion

The findings was corroborated by the research that was carried out by Umarji et al. (2021), in which it was shown that activities with high emotions/cost were more likely to be accomplished than anticipated, and tasks with low emotions/cost were less likely to be accomplished than intended. The results also show that their goals were extrinsically motivated; this suggests that the respondents were more concerned about their performance in achieving better grade output than mastering the course subject. Other subscales presented to be at a moderate level and contributed to the overall moderate motivational level of the respondents. These findings support the related literature and studies that intrinsic & extrinsic goals, self-efficacy, social engagement, and instructional support are critical to the student's motivation to study (Schunk & Dibenedetto, 2020; Lee et al., 2020; Martin & Bolliger, 2018; Stark, 2019).

Satisfaction has been widely researched as an intellectual concept. Strong et al. (2012) stated that students' satisfaction with online learning should be frequently measured in order to possibly enhance online course delivery. Factors measuring students' satisfaction in learning were also consistent with previous research, wherein social presence, the environment, cognitive presence, lecture styles, and their capacity to gauge and track their progress has a significant effect on students' satisfaction (Strong et al., 2012; Cole, Shelley, & Swartz, 2014; Dziuban et al., 2015; Choe et al., 2019). Students' satisfaction also aids in the development of confidence, which aids in the acquisition of information and the development of useful dexterities (Letcher & Neves 2010), thus improving their overall perception of learning and preventing learning discontinuation or drop-outs.

Students' perception of their instructor's support and beliefs about their capabilities greatly influence their online learning satisfaction. The instructor plays a vital role in getting students' attention by emphasizing the course's utility and learning goals to enhance its value; this will encourage participation, collaboration, and academic persistence. The result is consistent with the study of Šteh et al. (2014) that students prefer instructors who deliver well, encourage critical thinking, and lead them to discover the subject area, leading them to a more responsible and independent role. In addition, the result of the study conversely supports the findings of Naseer and Rafique (2021), who discovered that the factors that are the best predictors of academic motivation are students'

satisfaction with their online learning experiences and the level of support they receive from their instructors. On the other hand, students with high self-efficacy are more likely to become more independent and motivated to use self-regulated learning strategies to achieve their goals (Lee et al., 2020; Torres et al., 2020), leading to a worthwhile learning experience. The result also satisfies the theoretical framework proposed by Keller (1987) by meeting the required learning environment that focuses on students' attention, the relevance of course content facilitated by their instructors, their confidence in their capabilities, and satisfaction with remaining motivated.

Conclusion

In conclusion, the institution has met the students' learning satisfaction regarding the quality of their course outline, its value and ability to increase their interest in their subject matter, and their overall learning experience in distance learning. The instructor's support and students' self-efficacy are strong predictors of student satisfaction with their online learning experience. Instructors play a vital role in students' learning satisfaction and motivation to study. Their teaching presence serves as a binding element in education (Garrison, Anderson & Archer, 2000) by balancing students' social and cognitive presence. This can be achieved by delivering course activities that foster collaboration and satisfies students' learning goals, thus keeping them engaged while having their best experience and performance in an online class, consequently, according to a published book by APA (2017) concerning the principles of Psychology for pre-K-12 teaching and learning, when students have clear goals, their self-efficacy increases as they monitor their progress towards their goals. They also mentioned that goal setting is important for motivation because students who have a goal and appropriate self-efficacy are more likely to participate in activities that lead to the achievement of that goal.

The development of the present study, along with its related literature, shows that academic institutions and instructors need to create the right environment for learning to encourage students' motivation to learn online and provide a worthwhile educational experience. It is recommended that future researchers explore the limitations of the studies mentioned earlier to understand online learning dynamics further and explore possible pedagogical approaches and learning strategies beneficial both for educators and students. This research aims to provide helpful suggestions and guidelines based on the present study results. The researcher proposes two parts of recommendation; one is for information dissemination, and in the second part are the suggested guidelines and approaches recommended in maintaining a high level of motivation for all its subscales and increasing students' satisfaction.

Acknowledgement

I want to express my gratitude to Doc Philip, whose guidance, encouragement, and support have been invaluable throughout my journey in graduate studies. I would also like to thank my mentor, colleague, and friend, Allan Robert Mosura, for extending his expertise in handling statistical analysis for my study and providing guidance and direction for my paper. Also, this research would have taken a different course if not for the help of Ram Gopal and Teguh Fachmi for their assistance with the research instrument. I also want to acknowledge my Managers for their understanding, advice, and support while balancing my responsibility at work and in academics. Of course, I also want to express my gratitude to my MAP colleagues for the invaluable bond and memories we had despite the lack of face-to-face engagement. To my best friend Sam Garcia and Sister in Christ Maryleah Balagtas, thank you for the constant check and pat on the back; you, guys, are the most incredible support system I have ever had. And I will be forever grateful to Dra. Marita Andaman Rillo, thank you for always being there to support my studies. And finally, I want to express my highest regards to my mother, Tet Mosquera, for her never-ending dream and encouragement to further my education and for believing in me.

References

Adamma, O., Ekwutosim, O., Unamba, E. (2018). Influence of extrinsic and intrinsic motivation on pupils academic performance in mathematics. Supremum journal of mathematics education. 2(2). 52-59. DOI:

American Psychological Association, Center for Psychology in Schools and Education. (2017). Top 20 principles from psychology for preK–12 creative, talented, and gifted students' teaching and learning.

Anderson, T. (2011). The theory and practice of online learning (2nd ed.). Edmonton, AB: AU Press.

Arjomandi, A., Seufert, J.H., O'brien, M., & Anwar, S. (2018). Active Teaching Strategies and Student Engagement: A Comparison of Traditional and Non-Traditional Business Students. E-Journal of Business Education and Scholarship of Teaching, 12, 120-140.

Baticulon, R., Alberto, N., Baron, M., Mabulay, R., Rizada, L., Sy, J., Tiu, C., Clarion, C., Reyes, J., (2020). Barriers to Online Learning in the Time of COVID-19: A National Survey of Medical

Students in the Philippines.

Belgica, C., Calugan J., Dumo, J., & Simber, L. (2020). Online Distance Learning: Thematic Study on the Challenges Faced by Educare College Inc. Primary Pupils. 3rd International Conference on Advanced Research in Education, Teaching & Learning. 94-111.

Chen, T., Peng, L., Yin, Xiaohua., Rong, J., Yang, J., Cong, G., (2020). Analysis of User Satisfaction with Online Education Platforms in China during the COVID-19 Pandemic. Healthcare 2020, 8(3), 200. doi:10.3390/healthcare8030200

Choe, R., Scuric, Z., Eshkol, E., Cruser, S., Arndt, A., Cox, R., Toma, S., Shapiro, C., Levis-Fitzgerald, M., Barnes, G., and Crosbie, R. (2019). Student Satisfaction and Learning Outcomes in Asynchronous Online Lecture Videos. CBE - Life Sciences Education, 18(4).

Cole, M. T., Shelley, D. J., & Swartz, L. B. (2014). Online instruction, e-learning, and student satisfaction: A three year study. The International Review of Research in Open and Distributed Learning, 15(6).

Commissiong, M. (2020). Student engagement, self-regulation, satisfaction, and success in online learning environment. Walden dissertations and doctoral studies.

Cullum, A. (2016). Student Motivation and Intent to Take Online Courses. Electronic Theses and Dissertations. 1492.

Darren Linvill (2014) Student Interest and Engagement in the Classroom: Relationships with Student Personality and Developmental Variables, Southern Communication Journal, 79(3), 201-214,

Dweck, C. (1986). Motivational process affecting learning. American Psychological Association, 41(10), 1040-1048.

Dziuban, C., Moskal, P., Thompson, J., Kramer, L., DeCantis, G., Hermsdorfer, A., (2015). StudentSatisfaction with Online Learning: Is it a Psychological Contract?. Journal of Asynchronous LearningNetwork, 19(2). DOI: 10.24059/olj.v19i2.496

Fabia, J., & Prudente, M. (2021). Students' Satisfaction, Efficacy, and Achievement on Learning Science,Technology, and Society (STS) Online Course.

Filgona, J., Sakiyo, J., Gwany, D., & Okoronka, A. (2020). Motivation in Learning. Asian Journal of Education and Social Studies, 10(4), 16-37. DOI: 10.9734/AJESS/2020/v10i430273.

Fowler, S. (2007). The motivation to learn online questionnaire.

Galeon, D., Garcia Jr, P., dela Cruz, J, (2019). E-learning roadmap for open distance learning in Cordillera Administrative Region. IOP Conference Series: Materials Science and Engineering, 482, 012012. doi:10.1088/1757-899X/482/1/012012

Garrison, D. R., Anderson, T., Archer, W. (2000). Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education. The Internet and Higher Education, 2(2-3), 87-105.

Garrison, D. R., & Anderson, T. (2003). E-Learning in the 21st century: A framework for research and practice. London: Routledge/Falmer.

Garrison, D. R. (2009). Communities of Inquiry in Online Learning. In Rogers, P. L., Berg, G. A., Boettcher, J. V., Howard, C., Justice, L., & Schenk, K. D. (Eds.), Encyclopedia of Distance Learning, Second Edition (pp. 352-355). IGI Global.

Goulimaris, D., (2015). The Relation Between Distance Education Students' Motivation and Satisfaction. Turkish Online Journal of Distance Education, vol. 16(2), 16, 21.

Guay, F. (2022). Applying Self-Determination Theory to Education: Regulations Types, Psychological Needs, and Autonomy Supporting Behaviors. Canadian Journal of School Psychology, 37(1), 75–92.

Hafızoğlu, A., & Yerdelen, S. (2019). The Role of Students' Motivation in the Relationship between Perceived Learning Environment and Achievement in Science: A Mediation Analysis. Science Education International, 30(4).

Hart, S.R., Stewart, K. & Jimerson, S.R. (2011) The Student Engagement in Schools Questionnaire (SESQ) and the Teacher Engagement Report Form-New (TERF-N): Examining the Preliminary Evidence. Contemporary School Psychology. 15, 67–79

Keller, J. M. (1987). Development and use of the ARCS model of motivational design. Journal of Instructional Development, 10(3), 2 – 10.

Keller, J. M., (2008). First principles of motivation to learn and e3-learning, Distance Education, 29(2), 175-185,

Lathrop, A., (2011). IMPACT OF STUDENT MOTIVATION IN ONLINE LEARNING ACTIVITIES. Theses, Dissertations, and Student Research in Agronomy and Horticulture, 24.

Lau, C., Kitsantas A., Miller A., & Rodgers E. (2018). Perceived responsibility for learning, self-efficacy, and sources of self-efficacy in mathematics: a study of international baccalaureate primary years programme students. Social Psychology of Education, 21, 603-620.

Lee, S., Lee, H., & Kim, T. (2018). A Study on the Instructor Role in Dealing with Mixed Contents: How It Affects Learner Satisfaction and Retention in e-Learning. Sustainability, 10(3).

Lee, D., Watson S., & Watson, W. (2020). The relationships between self-efficacy, task value, and self-regulated learning strategies in massive online courses. International review of research in open and distributed learning. 21(1). 23-39. DOI: 10.19173/irrodl.v20i5.4389

Letcher, D.W., & Neves, J.S. (2010). Determinants of undergraduate business student satisfaction. Retrieved on April 15, 2022.

Lucey, K. (2018). The Effect of Motivation on Student Persistence in Online Higher Education: A Phenomenological Study of How Adult Learners Experience Motivation in a Web-based Distance Learning Environment (Doctoral dissertation, Duquesne University).

Maragi, M., Mortazavi-Tabatabaei S.A., Ahmady S., Hosseini, M. (2018). The relation of educational self-efficacy and motivation among Medical Education students. Journal of advances in medical education. 1(2). 1-5.

Martin, F., & Bolliger, D. (2018). Engagement Matters: Student Perception on the importance of engagement strategies in the online learning environment. Online Learning Journal, 22(1). 205-222.

Meşe, E. & Sevilen, Ç. (2021). Factors influencing EFL students' motivation in online learning: A qualitative case study. Journal of Educational Technology & Online Learning, 4(1), 11-22.

Naseer, S. & Rafique, S. (2021). Moderating role of teachers'

academic support between students' satisfaction with online learning and academic motivation in undergraduate students during COVID-19. Education Research International, 2021.

Ng, C. (2012). The Role of Self-Efficacy, Control Beliefs and Achievement Goals on Learning Among Distance Learners. In J. L. Moore, & A. D. Benson (Eds.), International Perspectives of Distance Learning in Higher Education. 233-252.

Ngwira, F. Emagnaw, A., Taibe, P., Adamsege, H. (2018). The role of intrinsic goal orientation on Medical health students' deep learning approach. Advances in social science, education, and humanities research (ASSEHR). 127. 42-49. DOI: 10.2991/icaaip-17.2018.9

Nguyen, V., (2016). Examining Student's Satisfaction with Online learning activities in Blended Learning Course: A Case Study. DOI: 10.21125/iceri.2016.1716

Neuville, S., Frenay, M., & Buorgeois, E. (2007). Task Value, Self-Efficacy and Goal Orientations: Impact on self-regulated learning, choice, and performance among university students. Psychologica Belgica, 47(1-2), 95–117.

Pintrich, P., Smith, D., Garcia T., McKeachie W. (1991). A Manual for the Use of the Motivated Strategies for Learning Questionnaire (MLSQ).

Quing, K. & Baudin, J. (2021). Roles of internal locus of control and grit in managing academic stress of senior high school students in a state university in the Philippines. Journal of education, management, and development studies. DOI: 10.52631/jemds.v1i1.4

Reyes, J.R., Grajo, J., Comia, N., Tolento, M.S., Ebal, L., & Mendoza J.J. (2021). Assessment of Filipino Higher Education Students' Readiness for e-Learning During a Pandemic: A Rasch Technique Application. Philippine Journal of Science. 150(3). 1007-1018.

Reyes-Chua, E., Sibbaluca, B., Miranda, R., Palmario, G., Moreno, R., Solon, J.P. (2020). The Status of the Implementation of the E-Learning Classroom in Selected Higher Education Institution in Region IV-A Amidst the COVID-19 Crisis. Journal of Critical Reviews. 7(11), 253-258. DOI: 10.31838/jcr.07.11.41

Rotas, E., & Cahapay, M. (2020). Difficulties in remote learning: Voices of Philippine University Students in the wake of COVID-19 crisis. Asian journal of distance education. 15(2). 147-158. DOI:10.5281/zenodo.4299835

Ryan, R. M., & Deci, E. L. (2017). Self-determination theory: Basic psychological needs in motivation, Development, and wellness. New York: Guilford Publishing.

Schunk D., & Dibenedetto M. (2020). Self-efficacy and human motivation. Elsevier Inc. Advances in motivation science. DOI: 10.1016/bs.adms.2020.10.001

Stark, E. (2019). Examining the role of motivation and learning strategies in student success in online versus face-to-face courses. Online Learning, 23(3), 234-251. doi:10.24059/olj.v23i3.1556

Šteh, B., Kalin, J., & Mažgon, J. (2014). The role and responsibility of teachers and students in university studies: A comparative analysis of the views expressed by pedagogy students. Zbornik Instituta za Pedagoška Istraživanja, 46(1), 50-68. DOI: 10.2298/ZIPI1401050S

Strong, R., Irby, T., Wynn, J., & McClure, M. (2012). Investigating Students' Satisfaction with eLearning Courses: The Effect of Learning Environment and Social Presence. Journal of Agricultural Education, 53(3), 98-110. DOI: 10.5032/jae.2012.03098.

Teguh, F., Wahyudi, H., Musuilah, E., Umayah, U., Syahri, A., Wulandari, D. (2022). Adaptation and validation of Motivation to Learn Online Questionnaire (MLOQ) and differential item functioning (DIF) Analysis at Islamic University Student. Advances in Social Science, Education and Humanities Research. 633. 347-352.

Todorova, M., Karamanska, D., (2015). A Study of Motivation and Satisfaction of Students in E-learning Environment. ATI – Applied Technologies and Applications, 11(2), 88-89.

Torres, E., Portoles, J., & López, V. (2020). Inter-Relations among Motivation, Self-Perceived Use of Strategies and Academic Achievement in Science: A Study with Spanish Secondary School Students. Sustainability, 12(17). doi:10.3390/su12176752.

Tria, J. Z. (2020). The COVID-19 Pandemic through the Lens of Education in the Philippines: The New Normal. International Journal of Pedagogical Development and Lifelong Learning, 1(1), ep2001.

Umarji, O., McPartlan, P., Moeller, J., Li, Q., Shaffer, J., & Eccles, J. (2021). The Motivational System of Task Values and Anticipated Emotions in Daily Academic Behavior. Motivation and Emotion, 45, 599-616.

Usán, P., Salavera, C., Teruel, P. (2019). School motivation, goal orientation and academic performance in secondary education students. Psychology research and behavior management. 12. 877-887. DOI: 10.2147/PRBM.S215641

Wenceslao Jr., Felicisimo., (2015). A Comparative Study on the Effectiveness of e-Learning Technologies Used in the Blended Learning Approach. International Journal of Innovative Science, Engineering & Technology, 2(11), 770-775.

Affiliations and Corresponding Information

Ellanah Feudo
St. Dominic College of Asia - Philippines

Philip Cuizon
St. Dominic College of Asia - Philippines