

Correlation between Students' Motivation and Self-Regulation towards Technology Learning and Perceived Parental Support during COVID-19 Pandemic

Asia Pacific Journal of
Educational Perspectives
Vol. 8 No.2, 72-76
December 2021
ISSN: 2782-9332 (Print)

Jed V. Nepomuceno¹, Dr. Rodolfo T. Aunzo, Jr.²

BSED Science III and Assistant Professor IV,
Visayas State University - Isabel, Isabel, Leyte, 6539, Philippines
dolph.fu@gmail.com¹; rodolfo.aunzo@vsu.edu.ph²

Date Received: August 8, 2021; Date Revised: November 29, 2021; Date Accepted: December 3, 2021

Abstract – Due to the current pandemic, students' focus has shifted to online technological learning. Thus, this research study aimed to establish the students' motivation and self-regulation toward technology learning during the COVID-19 pandemic, students' perceived parental support in the new normal, and the correlation between the students' motivation and self-regulation towards technology learning and students' perceived parental support. The mean and standard deviation of the students' replies in the survey items were used. A correlational technique established the association between students' motivation and self-regulation toward technology learning and perceived parental support. The convenience sampling technique selected 687 VSU-Isabel students ranging from the first to the fifth year. The research study revealed that the students agreed that learning with technology is essential because it could be applied daily. Also, it was found out that students were undecided about parental support. The study revealed a significant and low positive correlation between the students' motivation and self-regulation toward technology learning and perceived parental support during the COVID-19 pandemic. These findings recommend the expanded usage of technology in the new normal. The school should employ vital motivators to diverse such ways to manifest actions on technological platforms for the students to enhance their motivation and self-regulation towards technology learning.

Keywords – motivation, perceived parental support, self-regulation, technology learning.

Cite this article as: Nepomuceno, J.V., and Aunzo, R.T., (2021). Correlation between Students' Motivation and Self-Regulation towards Technology Learning and Perceived Parental Support during COVID-19 Pandemic, *Asia Pacific Journal of Educational Perspectives*, 8(2), 72-76.

INTRODUCTION

The current pandemic situation has shifted face-to-face learning to online technological learning. Learning online platform is one of the crucial methods for its necessary use in this New Normal. Having the motivation to learn technology depends on the desire of a student. As a student, self-regulation is crucial in learning technology because it is essential in learning, especially in facing such a situation caused by a pandemic. Learning, academic progress, future academic, and career choices are all influenced by motivation [1]. Parental support to children in learning technology is one of the essential ways to entice their children to use technology as it is essential to the students that from their parents the support aspect comes. Culture influences the number of various sorts of support and their impact on some elements of teenage psychological well-being [2].

Instructional activities in schools are required to encourage students to use and learn technology well [3]; however, if kids do not develop positive motivation and self-regulation skills regarding technology, they will show less interest in technology, science, engineering, and mathematics [4]. Encouraging students to use technology in class can help them become more culturally conscious [5] because technology integration can provide a substantial and exciting new educational method for improving learning [6]. Learners who have a favorable online learning experience are more flexible and self-regulatory in their learning process [7]. Instructors and instructional designers should be aware that soft skills play a significant role in learning outcomes [8] because individual motivation is always important [9]. As part of digital literacies, the significance of self-regulation and mastering new technologies is highlighted [10].

In the study on youth mental health, parental support interventions significantly impacted transgender

youth's mental health [11]. Parental involvement is critical in inspiring children to enhance their academic performance [12]. For a child's confidence, perceived worth, and self-sufficiency in school, receiving emotional support and active involvement from parents is equally crucial [13]. Increased parental involvement has been linked to increased student achievement, improved parent and teacher satisfaction, and a more positive school climate [14]. Research findings imply that parental support and pressure are important factors to consider when maximizing children's extracurricular participation [15].

The parental support to students' computer usage in this COVID-19 pandemic is explored in this study and associated with students' motivation and self-regulation towards technology learning. This study will provide a baseline for future research on students' parental support, motivation, and self-regulation towards technology learning.

OBJECTIVES OF THE STUDY

This study aimed to determine the students' motivation and self-regulation toward technological learning and perceived parental support during the COVID-19 pandemic. It also established the correlation between the students' motivation and self-regulation toward technology learning and students' perceived parental support. It served as a springboard for future scholars in the development of studies in the same subject.

MATERIALS AND METHODS

Research Design

A quantitative non-experimental descriptive correlational research design was employed in this study. This study presented an overview of the present status. At the same time, it aimed to establish the relationship between the students' motivation and self-regulation towards technology learning and perceived parental support among six hundred eighty-seven (687) students of Visayas State University - Isabel (VSU-Isabel).

Participants

The study participants were 1st to 5th-year students of Visayas State University-Isabel I during the first semester of AY 2020-2021. They were chosen using the convenience sampling technique, and participants were notified via text messages, emails, and messenger. Six hundred and eighty-seven students answered an online survey using a Google form from

February 16 to 24, 2021. On February 25, 2021, the data were retrieved and analyzed.

Table 1 shows the participants' demographic characteristics. It reveals that women make up the majority of the participants (67.97%).

Table 1. Demographic Characteristics of the Participants

	Frequency	Percentage
Sex		
Male	220	32.02
Female	467	67.97
Age		
20 and below	302	43.96
21 – 30	364	52.98
31 and above	21	3.06
Year Level		
1 st year	181	26.34
2 nd year	179	26.05
3 rd year	174	25.32
4 th year	99	14.41
5 th year	54	7.86
Course		
BEED	128	18.63
BPED	116	16.88
BSAB	115	16.74
BSEd ENGLISH	58	8.44
BSEd MAPEH	18	2.62
BSEd MATH	46	6.69
BSEd SCIENCE	32	4.65
BSIE	57	8.29
BSIT	39	5.67
BSME	78	11.35

Furthermore, 53% of the participants are between the ages of 21 and 30. The courses of the participants were Bachelor of Elementary Education (BEED - 18.63%), Bachelor of Physical Education (BPED - 16.88%), Bachelor of Science in Agribusiness (BSAB - 16.74%), Bachelor of Science in Education major in English (BSED English - 8.44%), Bachelor of Secondary Education major in Music, Arts, PE, and Health (BSED MAPEH - 2.62%), Bachelor of Secondary Education major in Math (BSED Math - 6.69%), Bachelor of Secondary Education major in Science (BSED Science - 4.65%), Bachelor of Industrial Engineering (BSIE - 8.29%), Bachelor of Information Technology (BSIT - 5.67%), and Bachelor of Science in Mechanical Engineering (BSME - 11.35%).

Research Instruments

A survey questionnaire was the instrument utilized in the study, which was composed of the

following parts; (1) Demographics, (2) Motivation and Self-Regulation towards Technology Learning, and (3) Perceived Parent Support. The demographic characteristic included the respondents' sex, age, course, and year level. This survey was web-based and administered using Google Form. The Motivational Beliefs and Social Support (MBSS) consisted of 17 questions divided into four sections: Computer Self-Efficacy Belief, Computer Value Belief, Perceived Parental Support and Perceived Peer Support. In this study, the perceived parent support section was utilized.

The second part of the survey questionnaire consisted of 10 questions about motivation and self-regulation towards technology learning which was adapted from the study Validation of an Instrument to Measure Students' Motivation and Self-Regulation towards Technology Learning [4], whose validity and reliability of the instrument was being established. The motivation and self-regulation towards technology learning surveys were measured on a 5-point Likert scale (5 as strongly agree, 4 as agree, 3 as undecided, 2 as disagree, and 1 as strongly disagree). The third part of the survey questionnaire comprised of 5 questions

related to perceived parent support which was adapted from the study Gender issues in technology use: Perceived social support, computer self-efficacy and value beliefs, and computer use beyond school [16], which validity and reliability were established in the study. The perceived parent support was measured on a 5-point Likert scale (5 as strongly agree, 4 as agree, 3 as undecided, 2 as disagree, and 1 as strongly disagree).

Data Analysis

The study utilized a Pearson's r correlational approach to measure the relationship between motivation and self-regulation towards technology learning and perceived parent support. The study used the SPSS and WarpPLS to compute the correlation coefficient. The study also utilized the mean and standard deviation to establish the descriptive data on the survey questionnaires' responses.

Ethical Considerations

The study adheres to the voluntary participation of students in responding to the instruments in this study. The responses were kept with strict confidentiality to protect the identity of the participants.

RESULTS AND DISCUSSION

Table 2. The level of Motivation and Self-Regulation towards Technology Learning

Items	Mean	SD	Description
1. Whether the technology content is difficult or manageable, I am sure that I can understand it.	3.40	0.80	Undecided
2. When I am being taught with technology, I can understand the concepts very well.	3.44	0.77	Undecided
3. Technology topics are easy for me.	3.11	0.80	Undecided
4. I usually do well using technology.	3.40	0.80	Undecided
5. I can complete difficult work if I try.	3.67	0.78	Agree
6. I think learning with technology is essential because I can use it in my daily life.	3.83	0.73	Agree
7. I think that learning with technology is essential because it stimulates my thinking.	3.68	0.72	Agree
8. I think that it is essential to learn how to solve problems with technology.	3.62	0.75	Agree
9. I think that it is essential to participate in inquiry activities with technology.	3.63	0.70	Agree
10. It is essential to have the opportunity to satisfy my curiosity when learning with technology.	3.77	0.71	Agree
Overall Mean Rating	3.56	0.76	Agree

Interval: 4.3 - 5.0 (Strongly Agree); 3.5 - 4.2 (Agree); 2.7 - 3.4 (Undecided); 1.9 - 2.6 (Disagree); 1.0 - 1.8(Strongly Disagree)

Table 2 shows the results of students' responses on motivation and self-regulation towards technology learning survey. It revealed an overall mean of 3.56 which means that the students *agreed* about their motivation and self-regulation towards technology learning. Among the ten statements, statement 6 bears the highest mean of 3.83 (agree), "I think learning with technology is essential because I can use it in my daily

life." While the lowest mean is statement 3, *technology topics are easy for me*, with a mean of 3.11 (undecided). These findings revealed that the students of VSU-Isabel have a strong motivation and self-regulation towards technology learning during the COVID-19 pandemic. It implies that the students can work well with flexible learning using technology in this New Normal.

Table 3. The Level of Perceived Parent Support

Items	Mean	SD	Description
1. My parents encourage me to use computers.	3.25	0.89	Undecided
2. My parents think that being good at computers is helpful for my future.	3.55	0.93	Agree
3. My parents think that I can do well at computers.	3.51	0.87	Agree
4. My parents are happy with my computer progress.	3.46	0.83	Undecided
5. My parents get involved when I use the computer.	3.07	0.96	Undecided
Overall Mean Rating	3.37	0.90	Undecided

Interval: 4.3 - 5.0 (Strongly Agree); 3.5 - 4.2 (Agree); 2.7 - 3.4 (Undecided); 1.9 - 2.6 (Disagree); 1.0 - 1.8(Strongly Disagree)

Table 3 presents the students' responses to the perceived parental support survey. The table revealed an overall mean of 3.37 which means that the students were **undecided** about parental support. Among the five statements, item 2 bears the highest mean of 3.55 (agree), "My parents think that being good at computers is helpful for my future" and the lowest mean is statement 5, my parents get involved when I use 3.07 (undecided) computer. These findings revealed that the students of VSU-Isabel were **undecided** whether their parents supported them in terms of computer usage during the COVID-19 pandemic. It implies that parents of these students do not have an attachment with them in their engagement with the computer.

Table 4. The correlation between the level of students Motivation and Self-Regulation towards Technology Learning and Perceived Parent Support

Correlations			
		MSRTL	PPaS
MSRTL	Pearson	1	.497*
	Correlation		*
	Sig. (2-tailed)		.000
	N	687	687
PPaS	Pearson	.497*	1
	Correlation	*	
	Sig. (2-tailed)	.000	
	N	687	687

** Correlation is significant at the 0.01 level (2 tailed).

Table 4 presents the correlation between students' Motivation and Self-Regulation towards Technology Learning (MSRTL) and Perceived Parental Support (PPaS). Using the alpha level (0.05) and degree of freedom (685), the critical value in the r-table and found 0.079. Table 4 shows that Pearson r (0.497) is

greater than the r-tabled value (0.079); thus, the null hypothesis is rejected. It means a significant positive relationship between students' motivation and self-regulation towards technology learning and perceived parental support. It further implies that parents' support is positively associated with their motivation and self-regulation towards technology learning.

CONCLUSION AND RECOMMENDATION

The students at VSU-Isabel have a strong motivation and self-regulation towards technology learning during the COVID-19 pandemic. Indeed, the students firmly believe that learning with technology is essential because it can be used daily. They also believed that computers are helpful and necessary, as most jobs demand computer abilities. The students found learning with the aid of technology essential, especially during this COVID-19 pandemic with no face-to-face interaction. Additionally, the students were undecided about their parental support during this COVID-19 pandemic, and it implies that their parents do not have engagement with them in terms of computer usage. The students believed that parental support in using technology could maximize and boost their confidence about the need and essential use of technology for future benefit.

The study shows that motivation and self-regulation towards technology learning and perceived parental support have a significant positive correlation. It implies that parental support to students on computer usage has a significant association with students' motivation and self-regulation towards technology learning. Further, it shows that if parental support for students' computer usage is high, students' motivation and self-regulation towards technology learning are also high.

These findings suggest the following recommendations to VSU- Isabel: expand the usage of technology in the new normal; the school should employ

vital motivators to diverse such ways to manifest technological platforms for the students to enhance their abilities into the students' motivation and self-regulation towards technology learning. The school should guide students on acquiring different tools to boost their ideas on using technology for online learning during this new normal. The school may employ various platforms, including Schoology, Canvas, Zoom, and others, and Google Classroom, Google Forms, and Google Meet. The parents may show dedicated support to their children by getting positive feedback on using technology and guiding them with answering and using platforms to maximize their willingness to use digital platforms. Aside from it, parents may show encouragement through giving adequate moral support, especially in answering the daily activities in online learning. After the children have mastered their tasks, more challenging assignments may be assigned to them. In this way, kids' computer skills will be improved. Future scholars are also encouraged to devise effective strategies for addressing technological concerns and problems.

REFERENCES

- [1] Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (2001). Self-efficacy beliefs as shapers of children's aspirations and career trajectories. *Child Development*, 72(1), 187–206.
- [2] Chentsova Dutton, Y. E., Choi, I. J., & Choi, E. (2020). Perceived Parental Support and Adolescents' Positive Self-Beliefs and Levels of Distress Across Four Countries. *Frontiers in psychology*, 11, 353. <https://doi.org/10.3389/fpsyg.2020.00353>
- [3] Sekerci, A., (2017). Adaptation of Motivation and Self-Regulation towards Technology Learning Scale (MSRTL) to Turkish: Validity and Reliability Study, *Journal of Bayburt Education Faculty*, 12 (24), 487-514.
- [4] Liou, P., & Kuo P. (2014). Validation of an Instrument to Measure Students' Motivation and Self-Regulation towards Technology Learning. *Research in Science & Technological Education*. 32(2), 79-96.
- [5] Şahin-Kızıl, A., & Savran, Z. (2016). Self-regulated learning in the digital age: An EFL perspective. *Novitas-ROYAL (Research on Youth and Language)*, 10(2). 147-158.
- [6] Alakrash, H.M., & Razak, N.A. (2019). Motivation towards the application of ICT in English language learning among Arab EFL students. *Journal of Advanced Research in Dynamical & Control Systems*. 11 (10), 1197-1203.
- [7] Zheng, C., Liang, J., Li, M., & Tsai, C. (2018). The Relationship between English Language Learners' Motivation and Online Self-Regulation: A Structural Equation Modelling Approach. *System*. 76, 144-157. <https://doi.org/10.1016/j.system.2018.05.003>
- [8] Tseng, H., Yi, X., & Yeh, H. (2019). Learning-related Soft Skills among Online Business Students in Higher Education: Grade Level and Managerial Role Differences in Self-regulation, Motivation, and Social Skills. *Computers in Human Behavior*. 95, 179-186.
- [9] Ushioda, E. (2013). Motivation matters in mobile language learning: A brief commentary. *Language Learning & Technology*, 17(3), 1–5.
- [10] Avdiel, O., Blau, I., & Shamir-Inbal, T. (2020). How does the pedagogical design of a technology-enhanced collaborative academic course promote digital literacies, self-regulation, and perceived learning of students? *The Internet and Higher Education*. 45. 100722.
- [11] Simons, L., Schrage, S., Clark, L., Belzer, M., & Olson, J. (2013). Parental Support and Mental Health Among Transgender Adolescents. *Journal of Adolescent Health*. 53(6), 791-793
- [12] Mahuro, G. M., & Hungi, N. (2016). Parental participation improves student academic achievement: A case of Iganga and Mayuge districts in Uganda. *Cogent Education*, 3(1), 1264170. <https://doi.org/10.1080/2331186X.2016.1264170>,
- [13] Ruholt, R., Gore, J., & Dukes, K. (2015). Is Parental Support or Parental Involvement More Important for Adolescents? Undergraduate *Journal of Psychology*. 28(1). 1-8.
- [14] Bunijevac, M., & Durisic, M. (2017). Parental Involvement as an Important Factor for Successful Education. *Center for Educational Policy Studies Journal*. 7(3), 137-153.
- [15] Anderson, J., Funk, J., Elliot, R., & Smith, P. (2003). Parental support and pressure and children's extracurricular activities: relationships with involvement and affective experience of participation. *Journal of Applied Developmental Psychology*. 24 (2), 241-257.
- [16] Vekiri, I. & Chronaki, A. (2008). Gender issues in technology use: Perceived social support, computer self-efficacy and value beliefs, and computer use beyond school. *Computers & Education*. 51, 1392-1404.

COPYRIGHTS

Copyright of this article is retained by the author/s, with first publication rights granted to APJEP. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4>).