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Research Article

Digital Acceptance and Academic Self-Efficacy of College Students in the New Normal Setting

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ABSTRACT

Becoming a Digital Campus as an answer to the increasing need of the digital age initiates the integration of technology in learning. Due to the pandemic, an abrupt change happens in the academe. Learning from face-to-face to distance learning has different modalities and approaches from before. Technology is highly utilized, from self-learning through the internet to LMS use. For this, the study aims to identify the relationship of acceptance and use of technology to students' academic self-efficacy as mediated by Digital Acceptance and Attitude toward Technology following the Unified Theory of Acceptance and Use of Technology (UTAUT). The respondents were undergraduate students in a higher education institution in CALABARZON. The A Structural Equation Model (SEM) was presented to identify the variables' extent of influence and relationship.

The study established a modified model to explain the data and identify that effort expectancy and social influence directly influence academic self-efficacy among the dimensions of acceptance and use of technology. Then performance expectancy, social influence, and facilitating condition established indirect effect mediated by attitude on technology in learning and/or behavioral intention in digital acceptance. The model shows that the total effect is defined in all dimensions and is significant. Still, the study recommends digging deeper into the context and validating for deeper understanding in incorporating the model.

INTRODUCTION

In a world where change is constant, a wide-ranging global debate is always taking place about what knowledge and skills are most important for the diverse yet connected societies of the world. Countries worldwide agree that education can no longer provide basic literacy, skills, and education for most students. Higher-order skills are necessary to navigate profoundly in the 21st century, as the North Central Regional Educational Laboratory (NCREL) & Metiri Group (2003) mentioned. Competencies in knowledge, skills, and attributes that help children and youth to reach their full potential in achieving quality works and products can help future generations. One of the skills well acknowledged is technological literacy, as digital literacy is now an essential part of a workplace. For students to be equipped with the essential knowledge and experience, educational institution integrates digital literacy into the curriculum as early as basic education. The most important part is the students' activity and engagement in the learning process.

Learning occurs when students are actively involved in meaning and knowledge construction rather than passively receiving information. These concerns

are being addressed by technology. Technology in the 21st-century serves as an extraordinary tool to shape and enhance the learning environment. Students now are known as Digital Natives, who are native speakers and users of the digital language of the computer (Prensky 2001). Unless educators want to neglect their vocation, the only thing to do to facilitate the learning of the digital natives is to adapt to their nature as digital citizens. Digital literacy skills are necessary to ensure the technology is used to supplement but not substitute for high-quality instructional methods in any form. Technology has revolutionized each component of society and the abrupt change in instruction due to world events. Due to the rapid change in technology and students' changing values, teachers and administrators in a transition phase should be prepared to use these technologies but handle them systematically and analytically. Technology needs to be integrated to achieve the best quality pedagogy. Many educational institutions now adopt different ways of teaching their digital native students, such as online learning instruction, online courses, and/or adapting learning management systems. To answer the trend, a higher education institution in CALABARZON started its initiative to convert itself into a digital campus where digital literacy and usage forefront learnings and used as a constant tool in teaching and extra-curricular activities. Online instructions, learning management systems, and online activities are some of the institution's ways of moving to 21st-century learning.

The initiative was further boosted by the recent changes in teaching and learning modality due to the global pandemic, the Covid-19. The pandemic brought abrupt changes to the economy, government policy, healthcare, and the education system here in the Philippines and abroad. Through these changes, the Philippine government decided to adopt a new normal scheme in teaching and learning by applying a distant learning set-up where the educational institution was already engaging before the issue happened.

The practice of technology integration in learning gave students and teachers a new place to explore how the new delivery and practice will affect learning. The acceptance and use of technology in learning, attitude in using technology, behavioral intention to use technology, and learning affect students' academic self-efficacy. The resulting model may evaluate the institution's current scenario in accepting and using technology in learning. The institution can set the model as a reference to the direction it will take in the future on using technology in learning.

SIGNIFICANCE OF THE STUDY

The study's main purpose is to examine the digital acceptance of college students of the higher education institution in CALABARZON in the sudden learning change. Further, it aims to determine the use of technology on a full scale and identify the institution's position in the new normal setting regarding technology integration in learning.

For teachers, curriculum developers, and educational institution administrators, the paper presents if Digital Acceptance and Attitude mediated the influence of Acceptance and Use of Technology, particularly the use of Learning Management System (LMS). Online learning as a tool for improving teaching in-

instruction to academic self-efficacy. There could be a signal for the educators to maintain or further develop their teaching practices in the classroom as change constantly presents itself in learning, especially with instruction changes. The study can also help identify which construct of Acceptance and Use of Technology Influence Academic self-efficacy when Digital Acceptance and Attitude serve as mediators and further develop more appropriate activities for the subject as their guide. The model shows the actual impact of what is happening to the institution based on the standard of UTAUT. The standard may present where the institution is based on the universal theory and may implicate what is needed to be revised, enhanced, removed, or retained on the actual practice the institution is performing currently. Using the model, the administrators can dwell and plan to construct more valuable plans to contribute to the institution's digital campus. The findings indicate what to focus on in digital integration and minimize the effort to provide programs that may yield favorable results.

For the Educational institution ICT providers, the study serves as their platform of evaluation on the practices, programs, and plans they have initialized. The model can serve as their primary data evaluation of what has happened after implementing the new digital tools. The model can also serve as their basis to further enhance what they need to develop to support educators and students on their adjustment and aim in this digital integration.

The paper may serve as researchers' related literature and/or reference for their study related to the topic. The study may guide them to know what field of study needs further research and topics to dwell on the same field.

OBJECTIVES OF THE STUDY

The research examined the influence of the Acceptance and Use of Technology on students' academic self-efficacy and determined if the digital acceptance and attitude on technology in learning mediate the relationship between the two variables. Specifically, the study aims to achieve a model derived from the relationship of acceptance and use of technology to students' academic self-efficacy as mediated by digital acceptance and attitude. The modified model identifies the students' stand towards the institution's aim to a digital campus. The change of instruction to adapt to the new needs due to global events and the new normal in teaching practices shifted the way of learning, leading to a change of needs and paths to explore academic approaches. The direction can improve by determining the effect of user acceptance of information technology on academic self-efficacy as mediated by digital acceptance and attitude.

SCOPE, LIMITATION, AND DELIMITATION

The study focused on identifying the mediating influence of digital acceptance and attitude on students' academic self-efficacy following the construct of the unified theory of acceptance and use of technology with dimensions of 1) performance expectancy, 2) effort expectancy, 3) social influence, and 4) facilitating condition of Venkatesh, V (2003). The research respondents were the students from a higher education institution in CALABARZON, as the insti-

tution is gearing towards a digital campus and shift in learning modalities in the new normal. A model based on UTAUT was presented to show where the institution was standing in the new normal and if the current model fits the institution's need. Modifications were incorporated based on model fit, wherein the end identifies the institution's standing in the new normal of teaching and learning. This study did not include other factors that may influence the students' academic self-efficacy. The researcher used secondary sources of information like books, the internet, academic journals, and existing thesis as references. Primary information came from the survey questionnaire, which the respondents answered through digital means. The output of the study was a model that the administrator and educator can utilize to improve teaching and further analyze the needs of the students in terms of digitalization and integration of digital tools in instructions and other academic/school activities. The study did not develop plans and guidelines on improving the institution's teaching and learning approach based on the model and should be directed to the administrators.

REVIEW OF RELATED LITERATURE

Research studies focused on effectiveness, motivations, task value, academic self-efficacy, synthesizing problems, and critical thinking in education mostly use technology as more educational institution shifts from traditional teaching to digital aided instruction.

According to the study of Saavedra et al. (2012), students must be taught differently than they were in the past for them to learn 21st-century skills. Teaching students using the outdated transmission model, which includes lectures and textbooks, are not the most effective way to teach 21st-century skills, yet it remains the dominant approach to compulsory education in most parts of the world. Students in the modern world are not taught explicitly and are more difficult to evaluate than factual retention, so they are not developing 21st-century skills. The researchers summarized the nine lessons from the science of learning, expressing how pedagogy can address students' needs and learn 21st-century skills.

The study of Husin et al. (2016) identified the changes in 21st-century skills among students after participating in an integrated Science, Technology, Engineering, and Mathematics (STEM) education program. The results from the study showed that the level of 21st-century skills, which includes Digital Literacy among students, increased, and it was statistically significant. One of the 21st-century skills components showed positive changes from moderate to high-level skills.

The study of Boholano H. (2017) determined the 21st-century skills of pre-service teachers in social networking. The author found out that technology in the 21st-century serves as an extraordinary tool to shape and enhance learning. Digital literacy skills are necessary to ensure the technology is used to supplement—and not substitute for—high-quality instructional methods. Pre-service teachers using digital technology with valuable skills are the most powerful tools in teaching in the 21st-century.

According to Jan H. (2017), technology has revo-

lutionized each component of society. A teacher is in a transition phase due to the rapid change in technology and students' changing values. A teacher can be prepared to use these technologies but handle them systematically and analytically.

The study of Scott-Weber (2012) found that the schools and their administrators have understood a very high and crucial need for educational restructuring at the entry level. Yet, the TTWWADI (That's The Way We've Always Done It) delayed the progress.

Most K-12 schools have now changed how they teach to address how students learn best. They have also altered their learning places to support spatial requirements and new technologies. The universities are educational entrepreneurs. The changes in schools are resonating, helping people realize that educational practices can change for the better. However, analytics prove this to be wrong. Some higher education institutions are making slow changes, which are not all-rounded. The research concluded that educational institutions and government agencies should work together to recognize what is needed, what is coming, and how to fully and intentionally plan for the changes necessary to get back to the top.

Technology needs to be integrated to achieve the best quality pedagogy. The study of Garba, S. A. et al. (2015) found that in a 21st-century learning environment, digital electronic communication technology is the key factor. Teaching and learning have to center around the innovative use of existing and emerging technologies.

According to the case study of Leyva, J. (2015), technology is a tool to enhance student academic learning. The case study aimed to identify the impact on teaching and learning practices in high-technology usage by K-12 schools. The researcher gathered evidence on SCHS technology instructional practices during the study to build strong technological school culture. School leadership is a vital component in implementing technology integration in the classroom

According to Martin, N and Lambert C. (2015), different age groups show different patterns of use of technology before their experiences, and exposure can be digital passengers, navigators, or drivers. The importance of ICT in instruction is evident and proves to be a great tool to move to teach a notch higher.

The study of Moyer (2016) measured student engagement in 21st-Century Learning and Innovation Skills, Life and Career Skills, and Socio-Cultural skills while participating in a non-formal learning experience. Qualitative and quantitative components influenced the conceptualization stage of the study, which was the establishment of relationships, with crossover analysis directly influencing the formulation of meta-inferences or viability, thus necessitating the integrated mono strand conversion design. The study revealed that students were consistently engaged in the same non-domain specific 21st-century skills targeted in Common Core State Standards and Next Generation Science Standards. Therefore, the implications are that non-formal learning is a pathway for achieving current educational initiatives and possible use of student instructional time. Focusing instructional time on non-formal learning both within

the formal school day and outside of it is valuable for achieving the current educational initiative.

Integration of technology in learning should benefit students in their academic endeavors, one of which is their academic self-efficacy which is generally their belief in their capability to achieve academic success. Based on the study of Elstad, E., & Knut-Andreas Christophersen. (2017), academic self-efficacy is useful for motivating students. There is a strong association between the student teachers' perceptions of digital competency to resolve challenges relating to information and communication technology (ICT) in schools and their academic self-efficacy. The study implied that self-efficacy is a major drive for students to achieve greater heights in their learning. In this generation, technological advantage gives them an edge in academic endeavors.

According to an earlier study of Peters et al. (2003), teaching and learning the values of who you are and why you do construction. This means that using a range of strategies to develop learning relationships, conversations, and tasks that are constructivist develops a classroom culture that has a high engagement for the students, which leads to students' higher performance. Dealing with better development of students, strategies are needed for engagement. And to engage digital native students, technological integration and use of digital aides in learning must be established in the learning platform or classroom.

Based on the literature, technological integration in teaching is necessary for improving learning, especially for this age. Undeniable connections were connections were drawn in previous findings that supplement the need to incorporate technology in learning. Now, in the changing times is must right to know where the institution stands and where the institution should be heading further in the academic endeavor. Thus, the study was conducted.

THEORETICAL FRAMEWORK

The research study was anchored on the Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh (2003), which aims to explain the users' behavior towards digitalization or adaption of information technology.

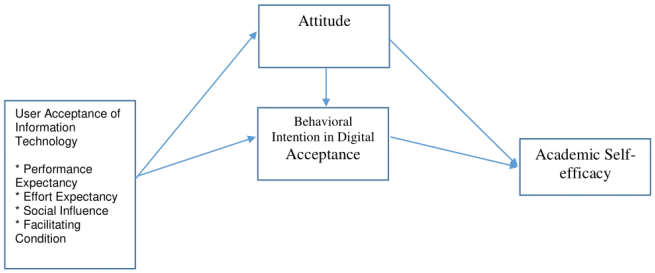

Table 2: Motivations of Generation Z Solo Parent- mothers

The unified theory of acceptance and use of technology is highly based on the technology acceptance model (TAM). However, it still addresses some of its shortcomings, like the behavior on IT, P. Ajibade (2018). The model can be well used when implementing new technology or technology. The framework was aligned on the institutions' aim to become a digital campus and the current situation where there was a sudden shift to distance learning where information technology was so utilized. Also, the framework displays the mediating effect of the variables' attitude towards the use of technology in learning to explore students' feelings toward the use of technology in

learning and behavioral intention in digital acceptance, the manifestation of their willingness on digital learning, to the relationship of user acceptance of information technology to students' academic self-efficacy. Thus, the framework grasped the factors that were studied.

MATERIALS AND METHODS

This research used a descriptive research design that examined and determined if digital acceptance and attitude towards digitalization approach mediate the influence of acceptance and use of technology constructs to academic self-efficacy. The data gathered from the respondents described their responses to the factors and variables of the study. A stratified random sampling design was used in gathering relevant data about the study.

A total of three hundred fifty-four (354) respondents from colleges of a higher education institution in CALABARZON were randomly selected. The number of respondents was generated using g-power at a Power of 0.95 at α-error of 0.05 using an effect size of 0.05.

The data distribution followed proportional stratified random sampling; the number of sample respondents per college was allocated based on the ratio of students per college, which totaled into 354 student respondents. The data gathered were the primary data based on the questionnaires given by the researcher, where respondents of the study were undergraduate students of a higher education institution in CALABARZON.

The instrument used was a three-part questionnaire. The first part covered the demographic profile of the respondents, which defined their basic information that identified the group of the students. The second part was a 4-point Likert-scale survey questionnaire of Venkatesh (2003) titled "User Acceptance of Information Technology: Towards a Unified View" to estimate the respondents' acceptance and use of technology.

The survey questionnaire consisted of the following construct namely: Performance Expectancy (PE) with four questions and Internal consistency reliability (ICR) averaging to 0.91, Effort Expectancy (EE) with four questions and an average ICR of 0.91, Social Influence (SI) with four questions and average ICR of 0.92, Facilitating Conditions (FC) with four questions and an average ICR of 0.85 and for the intended mediating variable Attitude (A) towards using technology with four questions and ICR of 0.81 and Behavioral Intention (BI) of Digital Acceptance with seven questions and ICR 0.90.

In measuring academic self-efficacy, the third part, the study adopted the instrument developed by Byrne and Matoti (2014) was used, which consisted of 20 questions. The questionnaire for academic self-efficacy has a Cronbach alpha of 0.79. The response was set on 1 being the least extent and 4 being the fullest. The instrument was administered digitally using google form after the target respondents were informed and signed the consent form. The descriptive means response shall follow the measure of; 1.00 to 1.75 as very low, 1.76 to 2.50 as low, 2.51 to 3.25 as high, and 3.26 to 4.00 as very high. The mean score was to

describe the mean score measure of each factor identified in the study.

Path analysis was used for the model, which does not include more complicated relationships like reciprocal causation. The analysis allowed the researcher to analyze the estimation of multiple and interrelated dependence relationships to represent unobserved concepts in these relationships (Chen & Lei, 2017). The Mediation was done on SPSS AMOS by doing Structural Equation Modelling (SEM) to enable analysis such as regression, correlation, factor analysis, and analysis of variance.

According to SAS Institute Inc. (2008), Structural Equation Modelling (SEM) is a series of statistical methods that allow complex relationships between independent and dependent variables. There are numerous ways to define SEM. It is frequently thought of as a hybrid within some form of analysis of variance (ANOVA) or regression and some form of factor analysis. In AMOS, Structural Equation Modeling (SEM) involves drawing a circle and arrow path diagram. AMOS is easy to process as it gives detailed results and is easy to manage data and models. The data were analyzed with descriptive and inferential statistical tests. SEM consists of seven major stages Shariffudin (n.d.), from developing the model, constructing path diagram causal relationship, building and modifying measurement model, and finally model fit (Hair et al., 2006).

Fit indices were used like; the Chi-Square (CMIN) where a good model fit would provide an insignificant result at a 0.05 threshold, Berrett (2007); Root Mean Square Error of Approximation (RMSEA) where ≤ .08 is considered acceptable fit, Steiger (2007); Goodness-of-Fit (GFI) a consensus cut-off point for GFI of 0.90 has been recommended, Hoyle (1995); Adjusted Goodness-of-Fit Statistic (AGFI) where a value of greater the 0.85 is accepted fit according to Chau & Hu (2007); Normed-fit Index (NFI) and Comparative Fit Index (CFI) where a value of greater the 0.90 is accepted, Hu and Bentler (1999).

Likewise, path analysis is the statistical technique based upon a linear equation system used to examine causal relationships between two or more variables. Also, the model identifies the direct effect and the indirect effect of an independent variable, via mediating variable, on the dependent variable. Fit indexes were measured to determine how well an a priori model fits the sample data. This is to indicate how well the proposed theory fits the data.

ETHICAL CONSIDERATIONS OF THE STUDY

In pursuit of the study, ethical concerns were addressed for the researcher's safety, respondents, and the institution the study was conducted. There were no conflicts of interest to declare about this study. Students with special cases or needs who want to answer the study requested assistance from a confidant to answer the survey. If the research subject chooses not to participate, he/she may respond no in answering the survey. The respondents were called and notified about the study and asked for their participation. All important details about the study were mentioned, and the place and time of the respondents' availability and convenience.

The respondents were informed about the duration of the study, and they can decline and withdraw at any time they wish, and that the participation is all voluntary. After the students accepted the request, a consent letter was sent to confirm acceptance. Respondents' responses were confidential, and by the time the hard and soft copy of the questionnaire was used, the paper and digital print were stored properly after the completion and expiration of the data.

The responses gathered in this study were used only for research, and proper analysis of the data was done only following the need of the research. The data gathered will not prevent the risk of identifying the respondents and their responses. The anonymity of the research data and respondents was archived to the proper authority to ensure that other researchers would not use the data.

EXPECTED OUTPUT FOR PROJECT-BASED AND EVALUATIVE RESEARCH

The study provided a Structural Equation Model that identifies the current standing of the higher education institution in CALABARZON in the User Acceptance of Information Technology and its influence on students' Academic self-efficacy.

The model serves as the institution's current standing in the use of ICT in teaching and if the actual implementation can motivate students academically following the dimensions of Unified Theory of Acceptance and Use of Technology. The model then identified the institution's technological integration of learning in the new normal setting of the UTAUT and was a good platform for improving and modifying the existing practices.

Since one of the institution's strategic directions is driving social innovation in quality education, the institution aims to elevate social standing and develop effective solutions to existing issues through education. Using the model, administrators can see which factors to focus more to achieve institution's digital campus goal. Plans can be modified and enhanced using the model's result. Also, the output of the study is a model that the administrator and educator can utilize to improve teaching and further analyze the needs of the students in terms of digitalization and integration of digital tools in instructions and other academic/school activities. The model output can be used to enhance the actual directions of the institution to become a digital campus. The said direction will then become a data-based and research-based direction supported by a study represented by their own students' responses.

RESULTS AND DISCUSSION

The study's respondents of three hundred fif- ty-four participants (354) were adequate and suitable for the study with a KMO value of 0.901. They were related based on Bartlett's Test of Sphericity with a significance level of 0.000.

The base model was specified by the path wherein Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Condition were the predicting variables that indirectly influenced the respondents' Academic Self-efficacy. Thus, it implied the mediation of Attitude on using technology in learning and/or Behavioral Intention in Digital Acceptance.

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The intended model ended up showing no significant parameter estimate. Hence, the researcher identified whether the directed relationship has implications in the drawn data.

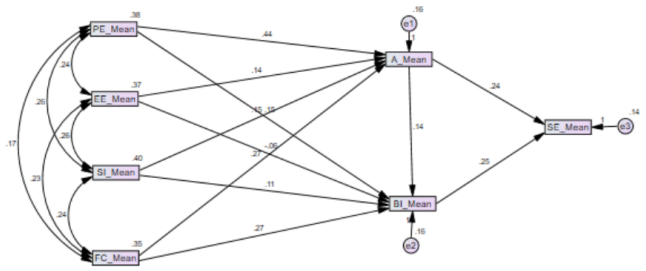

Figure 2: Hypothesized Model: User Acceptance of Information Technology to Academic Self-Efficacy as mediated by Attitude and Behavioral Intention in Digital Acceptance

Note: The table demonstrates the hyphotesized model of the relationship of user acceptance of information technology's dimension; Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI) and, Facilitating Conditions (FC), to Academic Self-Efficacy (SE) as mediated by Attitude (A) and Behavioral Intention in Digital Acceptance (BI).

Modifications were done and needed on the model to equate a good model with identified path and have a good fit index. Regression weights were performed to analyze the significant path on the hypothesized model. Standardized and unstandardized regression weights are presented (Table 1).

			Unstandardized Estimate	S.E.	C.R.	Standardized Estimate	P
A_Mean	<---	PE_Mean	.437	.049	8.885	.413	***
A_Mean	<---	EE_Mean	.139	.056	2.504	.129	.012
A_Mean	<---	SI_Mean	.149	.055	2.715	.143	.007
A_Mean	<---	FC_Mean	.270	.051	5.271	.243	***
BI_Mean	<---	A_Mean	.144	.053	2.729	.183	.006
BI_Mean	<---	FC_Mean	.273	.053	5.157	.311	***
BI_Mean	<---	PE_Mean	.149	.054	2.745	.178	.006
BI_Mean	<---	EE_Mean	-.064	.056	-1.138	-.075	.255
BI_Mean	<---	SI_Mean	.111	.055	2.014	.136	.044
SE_Mean	<---	BI_Mean	.251	.045	5.530	.289	***
SE_Mean	<---	A_Mean	.243	.036	6.818	.356	***

Table 1: Regression Weights of Hypothesize Model

Based on the regression weights of the hypothesized model, the path of Effort Expectancy to Behavioral Intention in Digital Acceptance is not statistically significant at P-value=0.255 (Beta=-0.075). Likewise, the model showed a poor fit index at an RMSEA fit parameter value of 0.143 and an AGFI of 0.82. Likewise, the model has a poor fit on the data based on Bollen-Stine bootstrap of 500 at P-value=0.002 which is less than the threshold of 0.05 to have at least an acceptable model to conclude that the model presented the data are fit.

Modification indices were presented to improve the model. Creating a direct path for Effort Expectancy to Academic Self-efficacy and then Social Influence to Academic Self-efficacy was introduced. And removing the path of Effort Expectancy to Behavioral Intention in Digital Acceptance is not statistically significant. The modifications yield another statistically insignificant path, which is the path of Social Influence to Behavioral Intention in Digital Acceptance at P-value=0.076 (Beta=0.115). Thus, removing one statistically insignificant path to the model or connecting a path from one factor to another and then re-run is done one at a time until the modified model reaches the accepted model fit (Figure 3). The model then presented new estimates and a statistically significant path.

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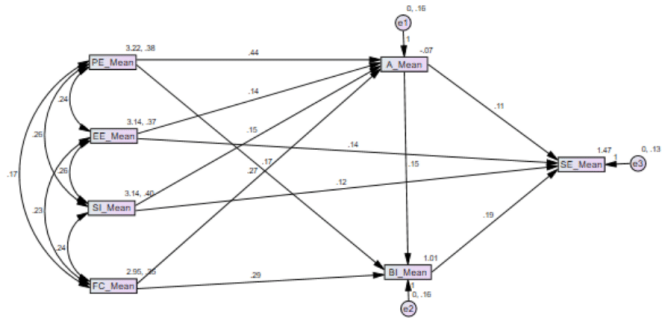

Figure 3: Modified Model: User Acceptance of Information Technology to Academic Self-Efficacy as mediated by Attitude and Behavioral Intention in Digital Acceptance

Note: The table demonstrate the hyphotesized model of the relationship of user acceptance of information technology's dimension; Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI) and, Facilitating Conditions (FC), to Academic Self-Efficacy (SE) as mediated by Attitude (A) and Behavioral Intention in Digital Acceptance (BI).

Fit Measure	Good Fit	Acceptable Fit	Hypothesize Model	Decision	Modified Model	Decision
CMIN/DF	0 ≤ CMIN/DF ≤ 2	2 < CMIN/DF ≤ 3	8.197	Not Fit	2.33	Acceptable Fit
RMSEA	0 ≤ RMSEA ≤ .05	.05 < RMSEA ≤ .08	0.143	Not Fit	0.061	Acceptable Fit
GFI	.95 ≤ GFI ≤ 1.00	.90 ≤ GFI < .95	0.975	Good Fit	0.993	Good Fit
CFI	.97 ≤ CFI ≤ 1.00	.95 ≤ CFI < .97	0.979	Good Fit	0.996	Good Fit
NFI	.95 ≤ NFI ≤ 1.00	.90 ≤ CFI <.95	0.977	Good Fit	0.993	Good Fit
AGFI	.90 ≤ AGFI ≤ 1.00	.85 ≤ AGFI <.90	0.827	Not Fit	0.948	Good Fit
Fit Measure	**Good Fit**	**Acceptable Fit**	**Hypothesize Model**	**Decision**	**Modified Model**	**Decision**
Bollen-Stine Bootstrap Test of null hypothesis	p-value>0.05		0.001	Not Fit	0.07	Good Fit

Table 2: Model Fit of Hypothesize Model and Modified Model

The modified model presented a sizable improvement compared to the hypothesized model (Table 2), which shows GFI, CFI, NFI and AGFI were a good fit and above 0.9 thresholds of good fit and show good fitting in both RMSEA and CMIN/DF with value 0.061 and 2.33 respectively. And for Bollen-Stine bootstrap of p-value=0.07, which is greater than 0.05 can be concluded that the model was fit the data.

	Mean			Std. Deviation
	Statistic	Interpretation	Std. Error	Statistic
Performance Expectancy	3.2225	High	.03290	.61909
Effort Expectancy	3.1363	High	.03225	.60682
Social Influence	3.1356	High	.03355	.63115
Facilitating Condition	2.9506	High	.03128	.58851
Attitude on using technology	3.0388	High	.03481	.65491
Behavioral Intention in Digital Acceptance	2.8785	High	.02744	.51620
Academic Self-efficacy	3.1689	High	.02382	.44814

Table 3: Descriptive Statistics of Variables

All dimensions of User Acceptance of Information Technology are positively correlated at less than 0.01 p-value. Among the dimensions of User Acceptance of Information Technology, Performance Expectancy shows the highest response score with a value of 3.223 (SE=0.033; SD=0.619) (Table 3). This shows that respondents believe that using the system helps them attain gains in learning during the new normal set-up. This result covers school academic needs and activities and overall academic productivity because the students saw this as a safer way of learning and provided readily available information needed in any scenario. Effort expectancy shows a response score of 3.136 (SE=0.032; SD=0.607), which can be said that the degree of ease associated with the use of the respondents of technology in the set-up is good. At the same time, they find the use of technology in learning easy and accessible as it may be due to the respondents as digital citizens. Social influence has a response score of 3.136 (SE=0.034; SD=0.631), which means that there is a high degree to which an individual perceives that it is important that others believe that they should use the technology in learning during this time. This shows that people around them see that technology is a key tool in learning and that they should explore and use this as they may also see that technology is a tool for advancement and progress. Facilitating conditions, which is the lowest mean

score 2.951 (SE=0.031; SD=0.586), still presented a good degree to which the respondents believe they have the resources, tools, and technical infrastructure to support the use of technology in learning. The high response may root that the institution provides support and proper tools, such as LMS and ICT support, but inadequate responses can be rooted in the respondents' actual resources such as internet connection and devices used in learning. According to the findings, the scores align with the study of Samaila et al. (2017). The study recognized that the identified characteristics were significantly associated with the students' intention to utilize LMS. Thus, it was demonstrated that students' intentions to use the LMS were influenced by performance expectations, effort expectations, social influence, and the conditions of supporting them.

The intended mediating variables, Attitude on using technology and Behavioral Intention in Digital Acceptance has a response score of 3.039 (SE=0.035; SD=0.655) and 2.879 (SE=0.027; D=0.516), which both indicate that the respondents feel that the use of technology in learning and the strength of intention in digital acceptance were both high. The result can imply that the respondents well receive the Attitude and intention of using technology. This showed that respondents perceive a positive outlook on technology overall as a tool in learning, and they perceive the application of technology with ease. The study of Silin and Kwok (2016), in students' Attitude in using ICT in problem-based learning, concluded that perceived usefulness was substantially linked with attitudes about the use of ICT in the study and that students would be strongly interested in the usage of ICT if they regarded it to be effective in their learning. Also, ease of use was substantially connected with Attitude toward ICT usage. When ICT is viewed as difficult to use, students are more likely to have a negative attitude toward it. Behavioral intention implied that they see technology as a mainstay for learning because of much easier access in learning due to readily available data and information. The result was rooted in the fact that the respondents are digital natives with higher technological knowledge than older generations. This is supported by the study of Jamila et al.(2020), where the research showed that digital literacy influences behavioral intention. It has a significant relationship with the adaption of new technologies, shown in the digital native students.

Academic Self-efficacy of respondents during the shift of learning relying on technology has a score of 3.169 (SE=0.024; SD=0.448), implying that students performed well and executed the task as a student. The result coincides with Hanham et al.(2021), where the study focuses on online tutoring infrastructure components. The findings stated that infrastructure components significantly impact students' evaluations of the program's perceived usefulness. This implied that students' opinions of their academic ability, such as self-efficacy, were linked to their academic achievement outcomes, which were linked to their utility of the online tutoring program.

	Performance Expectancy to Academic Self-Efficacy	Effort Expectancy to Academic Self-Efficacy	Social Influence to Academic Self-Efficacy	Facilitating Condition to Academic Self-Efficacy	Attitude to Academic Self-Efficacy	Behavioral Intention in Digital Acceptance to Academic Self-Efficacy
Direct Effect	0	0.143	0.12	0	0.105	0.192
Standardized Direct Effect	0	0.194	0.169	0	0.154	0.222
Two-Tailed Significance	…	0.006	0.009	…	0.022	0.002
Indirect Effect	0.091	0.019	0.02	0.093	0.03	0
Standardized Indirect Effect	0.126	0.025	0.028	0.122	0.043	0
Two-Tailed Significance	0.002	0.063	0.044	0.002	0.006	…

Total Effect	0.091	0.162	0.14	0.093	0.135	0.192
Standardized Total Effect	0.126	0.22	0.197	0.122	0.197	0.222
Two-Tailed Significance	0.002	0.003	0.005	0.002	0.004	0.002

Table 4: Effect Matrix of Relationship of User Acceptance of Information Technology to Academic Self-Efficacy as mediated by Attitude and Behavioral Intention in Digital Acceptance

Unmediated influences or direct effect in the model is described by four paths (Figure 3). Effort expectancy and social influence shows a statistically significant direct effect to academic self-efficacy with standard Beta value of 0.194 (p-value=0.006) and 0.169 (p-value=0.009) respectively (Table 4). This means that the view that technology is easy to use in learning and that the person around them shows a positive outlook on adopting technology in learning contributes to their efficiency in learning things. This result is supported by the studies of Liebenberg et al.(2018), where it is found out that the perception of technology as easy to use, more likely to accept the use of these technologies, and that technology acceptance and use in higher education and provides a convenient tool for educators to measure the probability of success. The study presented evidence when the use of technology such as eBooks and the SLMS demonstrate an advantage in academic performance compared to the regular students. While the intended mediating variables, attitude in the use of technology in learning and behavioral intention in digital acceptance, also has a statistically significant direct influence on academic self-efficacy with the standardized Beta value of 0.154 (p-value=0.022) and 0.222 (p-value=0.002). This indicates that both variables can mediate the relationship of dimensions of user acceptance of information technology to academic self-efficacy. And the result shows the institution's current position on the abrupt change of learning in terms of the relationship of user acceptance of information technology to academic self-efficacy as mediated by attitude and behavioral intention in digital acceptance. Also, the institution's aim to become a digital campus that is seen to be a mainstream of learning in the future can be actualized without hindering students' academic self-efficacy. In the study of Iovu, Runcan, and Runcan (2015), the researchers found that if students held a positive attitude towards an academic subject, they tended to possess higher self-efficacy in studying the subject, which coincides with learning using technology. Also, in Mokhtari (2019) study about mobile-based assessment, mobile devices had made assessment more convenient and pleasant to them. They preferred utilizing mobile devices for assessment in the future compared to other forms of assessment in their learning process. The assessment result is on the positive side of the spectrum

The indirect effect influence is mediated by at least one intervening variable, the attitude in using technology in learning and the behavioral intention in digital acceptance or the indirect effect described in the model. Among the dimensions of user acceptance of information technology to academic, performance expectancy, social influence, and facilitating condition all have a statistically significant indirect influence on academic self-efficacy with standardized Beta of 0.126 (p-value=0.002), 0.028 (p-value=0.044), and 0.122 (p-value=0.002) respectively (Table 4). At the same time, effort expectancy does not have a statistically significant indirect influence on academic self-efficacy (p-value=0.063). This means that though there was an identified path for effort expectancy to academic self-efficacy, those indirect path does not fit

the data, thus indicating the indirect path. Defining the specific paths estimand EE → A →SE has a value of 0.015 (p-value=0.08) estimates, and path EE → A → BI → SE has an estimated value of 0.004 (p-value=0.063) where no path is significant. The finding was aligned to the conclusion of Dwivedi et al.(2017), where attitude partially mediates the effects of performance expectancy, effort expectancy, facilitating conditions, and social influence on behavioral intention, and also has a direct effect on user behavior which is derived that can be served as a good alternative for understanding IS/IT acceptance and usage.

The total effect of the dimensions of user acceptance of information technology to academics, as shown (Table 4), presents that all are statistically significant. The total effect was led by effort expectancy at standardized value of 0.22 (p-value=0.003) followed by social influence with a value of 0.197 (p-value=0.005) and then performance expectancy with standardized value of 0.126 (p-value=0.002) and facilitating condition with 0.122 (p-value-0.0020 value. The result is valid and considered considering all effects are in place.

CONCLUSION AND RECOMMENDATIONS

This study examined the influence of the Acceptance and Use of Technology on students' academic self-efficacy. It recognized the modified model that was derived from the relationship of acceptance and use of technology to students' academic self-efficacy as mediated by digital acceptance and attitude.

The study initially found out that the hypothesized model does not fit some measure indicating modifications should be done to accommodate the data to have an acceptable model fit. It was then analyzed that, among all the dimensions of user acceptance of information technology, effort expectancy and social influence directly influence academic self-efficacy, implying that improvement on those factors immediately affects students' academic self-efficacy. Also, dimensions presented performance expectancy, social influence, and facilitating conditions have an indirect effect and need to be mediated by attitude on using technology in learning and/or behavioral intention in digital acceptance. In contrast, effort expectancy does not have a statistically significant indirect effect on academic self-efficacy. And the total effect was found out that performance expectancy, effect expectancy, social influence, and facilitating conditions have a statistically significant effect in total with the intended intervening variables, attitude on using technology in learning, and behavioral intention in digital acceptance. The results implied that students' academic self-efficacy could be directly or indirectly influenced by their acceptance and use of technology in learning through their attitude and intention to use.

The study was primarily intended to assess the institution's digital acceptance, and its relationship to academic self-efficacy may vary from one institution to another. The model may be acknowledged as a basis for actions, but researchers should explore and validate a new conclusion on the matter. Thus, the study recommends exploring models that will fit their organization/institution based on their data and context. The researcher also recommends exploring other variables that may serve as a factor or intervening factors to students' academic self-efficacy in the new

normal setting due to learning setup and modalities in different organizational contexts. And to study deeper and validate the model before considering it as a basis in the institutions' direction in the new normal setup and beyond.

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