Learning Style, General Academic Self-Efficacy, and Client Satisfaction with Blended Learning and Its Relation to Gender

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Abstract

Understanding the relationship of learning style, general academic self-efficacy, and client satisfaction with blended learning is vital in the educational landscape. Coffield et al. (2020) highlighted that individual learning styles are critical to educational outcomes. The primary objectives of this study are to examine the connection between gender and learning styles, general self-efficacy, and client satisfaction with blended learning. Moreover, the study aims to help achieve a gender-diverse learning environment. Using a descriptive research design, a total sample of 843 students from the University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) revealed strong sequential, sensing, active, and visual learning styles. Students' general academic self-efficacy did not affect their satisfaction with blended learning. Students were satisfied in terms of interaction, school, teacher, course management, technology, and overall areas, but learning styles did not affect satisfaction. There was no association between gender and general academic self-efficacy. The integration of blended learning into curriculum design presents a powerful opportunity to enhance educational outcomes and student engagement. However, the institution must first assess the technological proficiency and learning styles of its student population to effectively implement blended learning. By doing so, the findings can provide valuable insights into designing curricula that align with the institution's educational objectives and desired learning outcomes. Additionally, it is recommended to leverage online platforms that facilitate interactive learning experiences, such as discussion forums, quizzes, and collaborative projects.

Keywords: Education, Learning Style, General Academic Self-efficacy, e-Learning, Satisfaction, Sender Differences.

1. Introduction

Learning styles, a concept widely used in education, have been a subject of debate and discussion for decades. While often used interchangeably with cognitive and thinking styles, learning styles theories gained popularity in 1992 with the introduction of the VARK Model. This model categorizes learning preferences into five categories: visual, auditory, reading and writing, and kinesthetic (Pritishkumar et al, 2014). Another influential learning style model, developed by Dunn and Dunn (1995), explores how students prefer to learn through five distinct strands and elements: environmental, emotional, sociological, physiological, and psychological (Oweini et al 2016). From a general perspective, learning styles are defined as "a characteristic or favored way of behaving or approaching a situation by a particular person." However,

from a psychological standpoint, learning styles become more intricate, particularly in the context of formal education. Consequently, there is a lack of consensus among scholars regarding the precise definition of learning styles.

In today's educational landscape, where online learning has become increasingly prevalent, it is crucial for institutions and educators to understand and cater to different learning styles. Shawna De La Rosa (2020) emphasizes the importance of educators in adjusting online classes to align with students' learning preferences. While some students may find online learning a suitable fit, others may encounter challenges. Administrators can play a vital role in guiding teachers to modify their instruction to meet the individual needs and preferences of their students. Moreover, Felder and Soloman (2021) developed another learning style model that can be used an as online tool to assess preferences on four dimensions: active/reflective, sensing/intuitive, visual/verbal, and sequential/global.

A strong curriculum, combined with an efficient teaching method like blended learning, can result in students graduating with success. The recent age has seen significant changes in the education of students due to the integration of information and communication technology with active learning approaches in the classroom. Since these changes are occurring everywhere, irrespective of cultural influences or the social and economic standing of students, they are seen as a global phenomenon. Generation Z known as the most technologically savvy age, are multitaskers who readily adapt to new technologies. This generation of learners wants to learn with skeptical learning styles and logic-based techniques; they also choose non-traditional teaching methods.

In terms of pedagogy, online learning shifts the teacher-centered, passive paradigm of instruction into a learner-centered, active approach. Digital learning, or e-learning, enhances the educational process and makes knowledge more readily available while also fostering stronger relationships between educators and students, independent of time and location.

Teachers are more eager to find out how e-learning might lead to improved outcomes; this can be done by assessing student satisfaction after an e-learning course. E-learning is regarded as the new paradigm of online learning on information technology.

The way that each student approaches learning new material may vary depending on a number of factors, one of which is learning style. A student may be able to learn through a combination of cognitive, emotional, and physiological traits, which is commonly referred to as their learning style. The existence of diverse learning styles is associated with the varying aptitudes and personal preferences of learners. Understanding learning styles facilitates educational approaches and gives teachers and students crucial insights into their own and their students' strengths and shortcomings in terms of their teaching and learning practices. Studies have previously confirmed the influence of students' learning styles on their academic achievement. Several learning-style frameworks have been used in the teaching of health science courses. The Index Learning Style (ILS) instrument, developed by Felder and Soloman, outlines the preferences and strengths related to how learners take in and process information.

There is no doubt about the evidence supporting the link between learning style and self-efficacy. "Beliefs in one's abilities to organize and execute the courses of action required to produce given attainments" is the definition of self-efficacy. Student self-efficacy has become a crucial concept in educational studies. Since self-efficacy affects students' motivation and learning process, it has been reported to be a significant variable in student learning. As such, the psychological paradigm of self-efficacy plays a crucial role in contemporary educational psychology. The data demonstrates how students' self-efficacy affects their accomplishments both directly and indirectly, and how it both predicts and mediates the relationship between students' motivation, learning, and accomplishments.

Neilsen et al. (2018) define general academic self-efficacy (ASE) as students' global belief in their ability to master the various academic challenges at university. It is an essential antecedent of wellbeing and academic performance.

Assessing the students gender differences in terms of self-efficacy and leaning style is one area that can help the institution improve its academic services. Randolph Chan (2022), in his study titled "*A Social Cognitive Perspective on Gender Disparities in Self-Efficacy*," stated that girls are more likely to show lower levels of self-efficacy than boys; the results also supported the moderating effect of traditional gender role beliefs and found that there were gender differences in self-efficacy. However, in terms of learning style, Bin et. al (2020), in their study titled "*Examining Learning Styles with Gender Comparison among Medical Students of Saudi University,*" concluded that there were no significant differences observed between male and female students concerning their learning preferences. In the area of satisfaction, Joshanloo et al. (2020), in their study titled "*The Relationship between Gender and Life Satisfaction: Analysis across Demographic Groups and Global Regions,*" stated that women reported high levels of satisfaction than men. These studies led the researchers to examine the correlation of gender differences on general academic self-efficacy, learning style and satisfaction.

Alshammari et al. (2021) suggested that client satisfaction in a blended learning environment has influenced both learning styles and academic self-efficacy. Thus, as students perceive their educational experiences, it impacts their engagement and success. Blended learning has become popular in the Philippines. Satisfaction of the learners is one of the most important goals of blended learning; hence, the factors affecting this satisfaction should be considered extensively. In response to one of the 7K agenda of the Muntinlupa LGU, the Karunungan agenda, which aims to provide globally-aligned and value-driven education through comprehensive learning opportunities which are adaptive, responsive and reflective of its culture, this study aimed to evaluate the effect of the learning styles of the University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) students and general self-efficacy on satisfaction with blended learning, and to correlate gender differences in client satisfaction with blended learning.

Educators and institutions can create a more inclusive and effective learning environment that fosters students' overall learning satisfaction by delving into these relationships.

2. Objectives

The primary objectives of this study are to examine the connection between gender and learning styles, general self-efficacy, and client satisfaction with blended learning. Moreover, the study helps achieve a gender diverse learning environment.

3. Materials and Methods

The researchers used the descriptive method of research in this study. Descriptive method is defined as the collection of data in order to test hypothesis or to answer questions concerning the current status of the subject of the study. This kind of research is suitable when the purpose of the data collection is to describe the current condition without the influence of the researchers. The purpose of the descriptive method is to describe the "what is" with the respect to the variables under these conditions.

In general, the factors used as variables involve the analysis and interpretation to deal with the prevailing condition of the factor being described. The respondents of the study were the students of Pamantasan ng Lungsod ng Muntinlupa (University of the City of Muntinlupa). The researchers used a census for the population of this study, utilizing one hundred percent (100%) population frame of eight hundred forty-three (843) students of the Pamantasan ng Lungsod ng Muntinlupa (University of the City of Muntinlupa).

In this study, three questionnaires were used including (1) Soloman and Felder learning styles index, with an alpha reliability of 0.5, (2) General Academic Self-Efficacy Scale, with Cronbach's alpha reliability of 0.84, and (3) Satisfaction questionnaire for online education, with an alpha reliability of 0.96.

The researchers administered the instrument to the actual respondents. The survey was created using suitable questions modified from related research and individual questions were formed by the researchers. The survey was related to the different learning styles and general academic self-efficacy of the Pamantasan

ng Lungsod ng Muntinlupa (University of the City of Muntinlupa) students. The 843 respondents met the requirements needed to answer the questionnaires.

After the distribution and retrieval of the survey, the researchers sorted the questionnaires for analysis and interpretation to come up with the results and findings. The demographic profile and survey questionnaire of the respondents were tallied and presented in frequency and percentage rating in determining the significant difference on the effects of learning styles and general self-efficacy on gender differences to satisfaction on blended learning of Pamantasan ng Lungsod ng Muntinlupa (University of the City of Muntinlupa) students.

The study utilized JASP statistical treatment employing both descriptive statistics and inferential statistics. For the descriptive statistics, mean and standard deviation were used to calculate the learning style, general academic self-efficacy, and satisfaction on blended learning. For inferential statistics, regression analysis was used to determine the effects of learning style and general academic self-efficacy to satisfaction with blended learning. Likewise, a t-test was used to measure the differences on the general academic self-efficacy and learning style between genders. Lastly, a Chi-square test was used to assess the gender and general academic self-efficacy of students of the University of the City of Muntinlupa.

4. Results and Discussion

Table 1 shows the gender profile of the respondents. Among the 843 respondents, 64% or 535 of them were female, while the remaining 36% or 308 were male.

Table 1 Gender Profile of the Respondents

Gender	f	N	Percentage
Female	535	843	64%
Male	308	843	36%

Table 2 Summary of Descriptive Statistics on the Learning Styles of the University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) Students during the Blended Learning

Learning Style	N	Mean	Std. Deviation	Verbal Interpretation
Active	843	4.254	0.238	Strong
Reflective	843	3.974	0.381	Moderate
Sensing	843	4.261	0.162	Strong
Intuitive	843	3.242	0.276	Balanced
Visuals	843	4.223	0.172	Strong
Verbal	843	3.493	0.621	Moderate
Sequential	843	4.297	0.316	Strong
Global	843	3.624	0.281	Moderate

Legend: 1.00 - 1.80 Very Weak ; 1.81 - 2.60 Weak; 2.61 - 3.40 Balanced; 3.41 - 4.20 Moderate; 4.21 - 5.00 Strong

Table 2 shows the summary of descriptive statistics on the learning styles of the University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) students during the blended learning. The results revealed that the students exhibited a strong sequential style (M=4.297), strong sensing style (4.261), strong active style (M=4.254), and strong visual style (M=4.223). Studies have revealed that students possess diverse preferred learning styles. A survey conducted by Alharbi et al. (2021) revealed that approximately 70% of university students identified with at least one distinct learning style, with visual and kinesthetic preferences being the most common. This finding emphasizes the significance of incorporating a range of teaching methods to accommodate and cater to the varying learning preferences of students.

Table 3 Descriptive Statistics on the General Academic Self-Efficacy Scale of the Respondents with Blended Learning

Â	Male (N = 308)		Female (N = 535)		Total (N = 843)		
	Mean	SD	Mean	SD	Mean	SD	Verbal Interpretation
I generally manage to solve difficult academic problems if I try hard enough	2.99	0.805	3.043	0.762	3.024	0.778	Neither Agree / Disagree
I know I can stick to my aims and accomplish my goals in my field of study	2.951	0.8	3.043	0.779	3.009	0.787	Neither Agree / Disagree
I will remain calm in my exam because I know I will have the knowledge to solve the problems	3.019	0.774	2.88	0.821	2.931	0.807	Neither Agree / Disagree
I know I can pass the exam if I put in enough work during the semester	3.097	0.841	3.25	0.735	3.195	0.778	Neither Agree / Disagree
The motto 'if other people can, I can too' applies to me when it comes to my field of study	3	0.77	2.983	0.78	2.989	0.776	Neither Agree / Disagree
General Academic Self-Efficacy	3.012	0.583	3.04	0.518	**3.03**	0.542	**Neither Agree / Disagree**

Legend: 4.20 - 5.00 Strongly Agree, 3.41 - 4.20 -Agree; 2.61 - 3.40 - Neither Agree / Disagree; 1.81 - 2.60 - Disagree; 1.00 - 1.80 - Strongly Disagree

Table 3 shows the descriptive statistics on the general academic self- efficacy scale of the respondents. The result shows that respondents neither agreed nor disagreed with all the indicators that measure their academic self-efficacy. A total mean of 3.03 and SD of 0.542 revealed that respondents neither agreed nor disagreed that their academic ability to perform academic tasks is in moderation. The result was supported by the study of Nielsen et. al (2018) that academic self- efficacy focuses on developing the belief in one's ability to obtain and optimize the cognitive, behavioral, emotional, and social resources required to perform better at academic-related tasks

Table 4 Summary of Descriptive Statistics on the Level of Satisfaction on Blended Learning

Indicator	N	M	SD	Verbal Interpretation
Interaction	843	3.788	0.707	Satisfied
School	843	3.800	0.693	Satisfied
Teacher	843	3.965	0.676	Satisfied
Course Management	843	3.940	0.677	Satisfied

Technology	843	3.888	0.745	Satisfied
Overall Experience	843	3.949	0.711	Satisfied
Level of Satisfaction	**843**	**3.888**	**0.702**	**Satisfied**

Table 4 shows the summary of the descriptive statistics on the level of satisfaction on blended learning. The results revealed that interaction, school, teacher, course management, technology and overall experience were regarded as satisfied by the respondents. Therefore, respondents agreed that they were satisfied with the blended learning provided by PLMun, with a total mean score of 3.888 and SD of 0.702. Studies have reported generally high levels of student satisfaction with blended learning formats. A survey conducted by Adnan and Anwar (2021) revealed that a significant 85% of students expressed their satisfaction with their blended learning experiences. The primary reasons cited by these students were the flexibility and convenience offered by the blended approach. This approach allowed students to access materials at their own pace and convenience, accommodating their diverse lifestyles and learning habits.

Table 5 Regression Analysis on Learning Style and University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) Students Satisfaction on Blended Learning

Model	R	R²	Adjusted R²	RMSE
Ho	0	0	0	0.594
H1	0.105	0.011	0.001	0.594

ANOVA

Model		Sum of Squares	df	Mean Square	F	p
H1	Regression	3.25	8	0.406	1.153	0.325
	Residual	293.823	834	0.352		
	Total	297.073	842			

Coefficients

Model		Unstandardized	Standard Error	Standardized	t	p	95% CI Lower	95% CI Upper
Ho	(Intercept)	3.888	0.02		190.072	< .001	3.848	3.929
H1	(Intercept)	4.959	0.76		6.525	<.001	3.467	6.451
	Active	0.038	0.098	0.015	0.392	0.695	-0.154	0.231
	Reflective	0.1	0.065	0.064	1.548	0.122	-0.027	0.228
	Sensing	0.039	0.145	0.011	0.267	0.789	-0.246	0.324
	Intuitive	-0.085	0.086	-0.04	-0.989	0.323	-0.254	0.084
	Visuals	-0.236	0.141	-0.069	-1.674	0.094	-0.514	0.041
	Verbal	0.044	0.038	0.046	1.161	0.246	-0.03	0.117
	Sequential	-0.095	0.075	-0.051	-1.267	0.206	-0.243	0.052
	Global	-0.074	0.076	-0.035	-0.964	0.335	-0.224	0.076

Table 5 shows the regression analysis on the effect of learning style to University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) students satisfaction on blended learning. Using JASP Statistical Package by employing linear regression between two variables, the learning style in relation with the University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) students' satisfaction on blended learning, the coefficient of determination (R squared) is 0.011. Therefore, about 1.1% of variation in the level of satisfaction is explained by the learning style of the University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) students. The regression equation appears to be useful for making predictions. With $F_{(8, 834)}= 1.153$ and a p-value of 0.325, which is higher than the significance level at 0.05, there exists enough evidence to conclude that the predictor does not affects the level of satisfaction among the University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) students. Therefore, the model is not useful. Therefore, we failed to reject the null hypothesis, which states that learning style has no effect on the level of satisfaction among the University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) students on blended learning. Research conducted by Abuhassna et al. (2021) revealed a robust positive correlation between the quality of learning experiences and student satisfaction in blended learning settings. The study underscored that students who perceived high-quality content delivery, characterized by well-structured materials and engaging methodologies, reported substantially higher satisfaction levels. Notably, 78% of participants explicitly stated that enriching learning experiences directly contributed to their overall satisfaction.

Table 6 Regression Analysis on General Academic Self-Efficacy and University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) Students Satisfaction on Blended Learning

Model Summary - Satisfaction

Model	R	R^2	Adjusted R^2	RMSE	R^2 Change	F Change	df1	df2	p
H0	0	0	0	0.594	0		0	842	
H1	0.264	0.069	0.068	0.573	0.069	62.805	1	841	< .001

ANOVA

Model		Sum of Squares	df	Mean Square	F	p
H1	Regression	20.643	1	20.643	62.805	< .001
	Residual	276.429	841	0.329		
	Total	297.073	842			

Coefficients

Model		Unstandardized	Standard Error	Standardized	t	p	95% CI Lower	95% CI Upper
H0	(Intercept)	3.888	0.02		190.072	< .001	3.848	3.929
H1	(Intercept)	3.014	0.112		26.881	< .001	2.794	3.234
	GASE	0.289	0.036	0.264	7.925	< .001	0.217	0.36

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Table 6 shows the regression analysis on the effect of the general academic self-efficacy on University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) students satisfaction on blended learning. Using JASP Statistical Package by employing linear regression between two variables, the general academic self-efficacy in relation with the University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) students satisfaction on blended learning, the coefficient of determination (R squared) is 0.069. Therefore, about 6.9% of variation in the level of satisfaction is explained by the general academic self-efficacy of the University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) students. The regression equation appears to be useful for making predictions. With $F(1, 841)= 62.805$ and a p-value of $<.001$ lower than the significance level at 0.05, there exists enough evidence to conclude that the predictor affects the level of satisfaction among the University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) students. Therefore, the model is useful. We are 95% confident that the slope for academic self-efficacy is between 0.217 and 0.36. In other words, we are 95% confident. For every 0.289 unit increase in academic self-efficacy, University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) students' satisfaction will also increase between 0.217 and 0.36. Therefore, we will reject the null hypothesis, which states that the general academic self-efficacy affects the level of satisfaction among the University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) students on blended learning.

A study conducted by Saeed and Zyngier (2022) revealed a substantial positive correlation between students' academic self-efficacy and their overall satisfaction with blended learning. The study demonstrated that students with higher self-efficacy reported significantly higher levels of satisfaction. Approximately 74% of respondents indicated that their confidence in their academic abilities positively influenced their overall satisfaction with the blended learning experience.

Table 7 Differences on the General Academic Self Efficacy and Learning Style Between Genders

	t	*df*	*p*
General Academic Self Efficacy	0.73	841	0.466
Satisfaction	-0.506	841	0.613
Interaction	-1.864	841	0.063
School	-0.361	841	0.718
Teacher	0.183	841	0.855
Course Management	-0.781	841	0.435
Technology	-0.482	841	0.63
Overall	0.742	841	0.458
Learning Style	-1.542	841	0.123
Active	-0.346	841	0.729
Reflective	-0.655	841	0.513
Sensing	-0.996	841	0.320
Intuitive	-0.894	841	0.372
Visuals	-1.951	841	0.051
Verbal	-0.097	841	0.922
Sequential	-2.516	841	0.012
Global	-2.07	841	0.039

Table 7 shows the differences on the general academic self-efficacy and learning style between gender. The data revealed that among the learning style observed, visuals (t=-1.951, p=0.051), sequential (t=-2.516, p=0.012), and global (t=-2.07, p=0.039) learning style differs based on respondents' gender. However, the data also revealed that collectively, there is no difference on the students' general academic self-efficacy, in the level of satisfaction in terms of interaction, school, teacher, course management, technology, and overall experience, and other learning style such as active, reflective, sensing, intuitive, and verbal has p-values higher than the significant level at 0.05. Therefore, we failed to reject the null hypothesis, which states that overall learning style, self-efficacy and satisfaction on blended learning does not differ between genders.

The result contradicts the study conducted by Zhang et al. (2021), which found significant differences in preferred learning styles between male and female students. The research indicated that female students were more inclined towards collaborative and relational learning approaches, favoring group discussions and cooperative tasks to enhance their understanding. In contrast, male students showed a higher preference for independent learning and competitive environments, where they could demonstrate their knowledge autonomously. Approximately 70% of female respondents indicated a preference for collaborative activities compared to only 52% of male respondents. Likewise, it contradicts with the study by Yilmaz and Tamer (2021), which found significant gender differences in academic self-efficacy among students engaged in blended learning. Female students reported lower self-efficacy levels compared to their male counterparts, with 62% of male respondents expressing confidence in their academic abilities, while only 54% of female respondents reported similar levels of confidence. The authors suggested that societal factors and gender socialization may contribute to these disparities.

Table 8 Relationship Between Gender and General Academic Self Efficacy

Chi-Squared Tests					
	General Academic Self-Efficacy	**N**	**X²**	**df**	**p**
Gender	I generally manage to solve difficult academic problems if I try hard enough	843	1.449	3	0.694
	I know I can stick to my aims and accomplish my goals in my field of study	843	2.767	3	0.429
	I will remain calm in my exam because I know I will have the knowledge to solve the problems	843	8.575	3	0.036
	I know I can pass the exam if I put in enough work during the semester	843	10.139	3	0.017
	The motto 'if other people can, I can too' applies to me when it comes to my field of study	843	5.115	3	0.164
		843	0.532		

Table 8 shows the Chi-Square tests between gender and general academic self-efficacy. The results revealed that among the 843 respondents, the statements "I will remain calm in my exam because I know I will have the knowledge to solve the problems" (X²=8.575, p = 0.036) and "I know I can pass the exam if I put in enough work during the semester" (X²=10.139, p = 0.017) were significantly related. However, indicators 1, 2, and 5 had p-values greater than our chosen significance level (α = 0.05). Rather, we conclude that there is not enough evidence to suggest an association between gender and general academic self-efficacy. The findings of Parker and Hutton's (2021) study on gender disparities in undergraduate students' academic self-assurance contradict the current results. The study found that male students generally had higher levels of academic self-assurance than female students. Approximately 65% of male participants expressed confidence in their academic abilities, while only 54% of female participants shared the same

sentiment. This disparity can be attributed to societal stereotypes that often pressure women, leading to lower self-confidence in academic settings.

5. Conclusion

After obtaining and documenting all of the data, it was discovered that there is a total of 843 students as respondents, dominantly female. The results revealed that University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) students exhibit a strong sequential style, strong sensing style, strong active style, and strong visual style of learning. The data also shows that, in terms of global, reflective, and verbal, the students exhibit a moderate style of learning, while balanced in the form of intuitive learning style.

In terms of general academic self-efficacy, students neither agree nor disagree that their academic ability to perform academic tasks is in moderation. However, the general academic self-efficacy of the students affects the level of satisfaction among University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) students on blended learning.

Students were satisfied on blended learning in terms of interaction, school, teacher, course management, technology and in the overall areas, but the learning styles of the students do not affect the level of their satisfaction.

Among the learning style observed, visuals, sequential, and global learning style differs based on respondents' gender. However, there is no difference in the students' general academic self-efficacy or the level of satisfaction in terms of interaction, school, teacher, course management, technology, and overall experience, nor for other learning styles such as active, reflective, sensing, intuitive, and verbal. Therefore, learning style, self-efficacy and satisfaction with blended learning do not differ between genders.

In terms of general academic self-efficacy, we conclude that there is no association between gender and general academic self-efficacy.

With the above data, the study reveals that gender neither differs nor even associates with leaning style, general academic self-efficacy, or satisfaction with blended leaning.

In terms of learning style, since the results revealed that University of the City of Muntinlupa (Pamantasan ng Lungsod ng Muntinlupa) students exhibit a strong sequential style, strong sensing style, strong active style, and strong visual style of learning, the researchers recommend the institution to continuously use these learning styles in the delivery of instructions and/or transfer of learning through the following actions:

The integration of blended learning into curriculum design presents a powerful opportunity to enhance educational outcomes and student engagement. However, the institution must first assess the technological proficiency and learning styles of its student population to effectively implement blended learning. By doing so, the findings can provide valuable insights into designing curricula that align with the institution's educational objectives and desired learning outcomes. Additionally, it is recommended to leverage online platforms that facilitate interactive learning experiences, such as discussion forums, quizzes, and collaborative projects. Tools like Google Classroom or Moodle can foster a sense of community and encourage peer-to-peer support, further enhancing the overall learning experience.

6. Acknowledgements

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