

**THE MEDIATING EFFECTS OF NEEDS AND WANTS
ON THE RELATIONSHIP BETWEEN INTERNATIONAL
STUDENTS' FINANCIAL STRESS AND LEARNING
MOTIVATION AND FINANCIAL SUSTAINABILITY**

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Abstract

It has become very challenging for international students to find financial sustainability and learning motivation in their courses of study due to their financial stress and the dichotomy of needs and wants. This research examined the mediating effects of needs and wants on the relationship between financial stress and learning motivation and financial sustainability. The research is a correlational study where 300 international students selected from universities in Cavite, the Philippines were conveniently sampled to answer a survey questionnaire. The researchers used ANOVA in SPSS 22 and Structural Equation Modeling in AMOS to analysis the data and come out with a new model. The research concludes that financial stress has a high correlation significance relationship with learning motivation and a low correlation significance with financial sustainability. Also, needs and wants do not mediate the relationships between financial stress and learning motivation and financial sustainability. However, needs as an independent variable as financial stress has a significant relationship with learning motivation and financial sustainability of international students in Cavite, the Philippines. The research recommends that international students' needs must be satisfied in order to prevent financial stress that will impact on their learning motivation and financial sustainability.

Keywords: Needs, Wants, Financial Stress, Learning Motivation, Financial Sustainability

INTRODUCTION

It has become very challenging for international students to find financial sustainability and learning motivation in their courses of study. International students cross borders for education. According to Peprah (2018), people are seeking international education because of quality education, seeking programs and courses not existing in their home country or universities. Further to these reasons, UNESCO Institute of Statistics also comments that the shift in demand for higher education by international students is towards developing countries. This is due to their low cost of living and educational fees. International University students are noted to be adolescents and above who are directly and indirectly suffering from financial stress (Ponnet, 2018).

The data from the UNESCO Institute of Statistics indicates that from 2000 to 2016 global international students' mobility increased from 2 million to 4.8million (UNESCO, 2018). It indicates an average annual growth rate of 3%. However, data from the Commission on Higher Education (CHED, 2018) in the Philippines shows that the number of international students

coming to study has been doubling year on year. Based on sampled data from CHED 2012 Iranians are 21.44%. South Korean students are 19.62%, Chinese and ASEAN countries at 18.39% and 10.97%, respectively. The remaining 23.58% were students from other countries in the world.

This phenomenon supports UNESCO assertions that international students are moving towards developing countries. It is upon this reason that this study is aiming to explain and confirm if financial stress impact financial sustainability and learning motivation as intervene by international students' needs and wants.

Financial sustainability is the ability of international students to get inflows to cover their entire living and educational expenses. In the same vein, learning motivation is a physical, psychological or social need that encourages a person to attain or realize their target and satisfy their wants and, ultimately feels pleased as the outcome of achieving their learning goals (Tuncel, Sadikoglu, & Memmedova 2016). Financial stress relates to the international student incapability to meet its needs and wants (Northern, O'Brien & Goetz, 2010).

In a research study by Mbokani and Evinita (2018) on the relationship between financial pressures and learning motivation, they established that there is a significant relationship using international students as their respondents in Cavite province of the Philippines. The learning motivation was identified as an intrinsic factor, and the financial stress was moderate. In another seminar, Peprah (2018) discussed international students' financial sustainability in the same province. These studies pointed to the fact that financial stress influences are learning motivation and financial sustainability on international students in Cavite. However, these studies did not include the dichotomy of international students' needs and wants implication as a better way to explain the relationship. This research work has found the gap want to confirm the mediating effects of international students' in Cavite needs and wants on the relationship between financial stress and learning motivation and financial sustainability.

Research Questions

The research questions to consist of:

1. Is there a significant relationship between financial stress and learning motivation?
2. Is there a significant relationship between financial stress and financial sustainability?
3. Do needs and wants mediate the relationship between financial stress and
 - a. Learning motivation?
 - b. Financial sustainability?
4. What model can be developed?

LITERATURE REVIEW

Financial Stress

Financial stress is both a significant problem for both international students and citizen students. As financial stress relates to incapability to obtain funds to meet needs and wants, it has been noted to impact learning motivation (Mbokani & Simaupang, 2018). In a study by Bernardo (2018) among Filipino students in higher education concluded that financial stress affects students' well-being. The study also asserted that life satisfaction is a negative predictor of financial stress. However, eternal family support moderates the relationship between life satisfaction and financial stress. The study implies that whereas Filipinos are expressing financial stress how much more international students.

Joo, Durband, and Grable (2008) investigated the relationship between financial stress and academic performance. Their study affirmed that financial stress is a cause for students to reduce their coursework or stop schooling. Based on a web-based survey of 503 students in higher education confirmed that there is a significant relationship between financial stress and academic performance.

A further studies by Essel and Owusu (2017) and Yan (2017) examined the factors that give stress to students which affects their academic success and how to manage it. They identified four main area consisting of relationship factors, environmental factors, personal factors, and academic factors. How to work with people was what they considered as related factors. The environment stress was related to students' worries about the future. Academic stress factor was the class workload. The personal factor is mainly financial stress. Financial stress was noted to predominantly affect the students' academic success. They recommended stress management classes and financial literacy courses for all the students so that they can manage their finances.

Learning Motivation

Learning concerns the collaboration between learner and environment. A Learning situation influence and impact the student. Learning is in seeking a calculated education with well-developed course contents. In education, learning motivation is an essential issue in academic research as it influences learning quality (Ferreira, Cardoso & Abrantes 2011). According to Hsieh, (2014) learning motivation is now a current concern for university instructors.

The concept of motivation is a physical, psychological or social need that helps students to attain their set objectives amidst various stressors (Tuncel, Sadikoglu, & Memmedova 2016). The motivation which is a Latin word "movere" meaning "to move" is a factor in energizing students behavior to accomplish, an educational goal (Ferreira,

Cardoso & Abrantes 2011). Students also are naturally concerned with motivation. It is a factor for a student who wants to continue their study and aspire to involve in the learning process. Therefore the instructors must wisely consider the motivation of each student in the objective to mobilize their capabilities and possibilities to achieve the academic performance.

According to Firat, Kılınç, and Yüzer (2018), the factors that motivate the students are both intrinsic and extrinsic. These are based on the perceptions that course is essential to the student, self - confidence and self-esteem, as well as endurance and perseverance, instructor's enthusiasm; significance of the material; arrangement of the course; difficulty level of the material; vigorous commitment of the students; variety; collaboration between student and instructors and, the use of appropriate; concrete, and comprehensible examples.

Financial Sustainability

The concept of financial sustainability to the international student is on their ability to generate inflows and cover all expenses for now and the future (Renoir & Guttentag, 2018). It involves a high level of financial literacy on the part of these students to attain financial independence and financial capability (Serido & Deenanath, 2016). It is based on these reasons that some international students seek to look for diversified incomes (Omeri, 2015) to reduce their financial stress because they have various needs and wants. International students get funding from relatives and sponsors. Alonso-Canadas, Saez-Martins, Saraite and Caba-Perez (2017) and Lucianelli and Citro (2017) have commented that financial sustainability is also a challenge for universities and they seek alternative ways to be sustained.

As evidence from the UNESCO report, the top 10 countries that are seeing an increase in the number of international students are those that give some level of working hours to the international students. These countries are the United States of America, United Kingdom, Australia, France, Germany, Russia, Canada, Japan, China, and Malaysia. Also, these countries' economies are developed and require more labor except Malaysia. They provide some form of sponsorship or scholarship to international students in order to reduce their financial stress. International students are noted to provide cheap labor in these economies. However, suffice it to say that this is the only avenue international students can obtain additional income to support their needs and wants.

According to Hira (2016), financial sustainability for international students will provide financial impact. The financial impact consists of the international student having a quality of life, happiness, and satisfaction. Happiness is a derivative of financial sustainability (Xiao,

2013). Economic factors affect the quality of life with no regard to sex, civil status, and age. Satisfaction is noted from the standard of living of the international student (Xiao, Chen & Chen, 2014).

Needs and Wants

One of the most significant challenges for international students is their ability to distinguish between their needs and wants. This economic concept causes the effects of financial stress which impacts on learning motivation and financial sustainability of the international student. Needs and wants create a philosophical and humanistic marketing situation for international students to determine the necessary and unnecessary expenses due to their income (Dierksmeier, 2014).

According to Price (2016) needs and wants understanding and application are mixed-up for students. As a result, it must be well explained. A need is needed for survival while wants a desire. Needs have the following features: it is a necessity or essential, essential for survival, needs do not change over time. Non-fulfillment of needs may lead to an adverse outcome, and finally, all individual have the same needs. The characteristics of wants are that it is a desire, not essential for survival, and change over time. Again, non-fulfillment of want may result in mental distress and finally wants differ from the individual international student. Needs and wants differences are noted to serve the same purpose (Laspona, 2014).

Vasisht (2017) has developed a quadrant for needs and wants a prioritization approach to help international students in thinking and making a decision. The quadrant for low need and low want must be ignored in that this section is not wanted and not needed. In short, the decision is to avoid items in low wants and low needs. There is also low wants and high needs. Once something is identified in the low wants and high needs quadrant, the reminder is to seek higher goal at hand and prioritize accordingly. Furthermore, high need and low want quadrant exist. This is what most international students find themselves in. Items at the high need and low want must decipher what we value. Finally, the most powerful quadrant is the high need and high want section. It is when the needs and the wants of the international student are aligned.

Research Paradigm

The conceptual research model for this study is shown in figure 1.

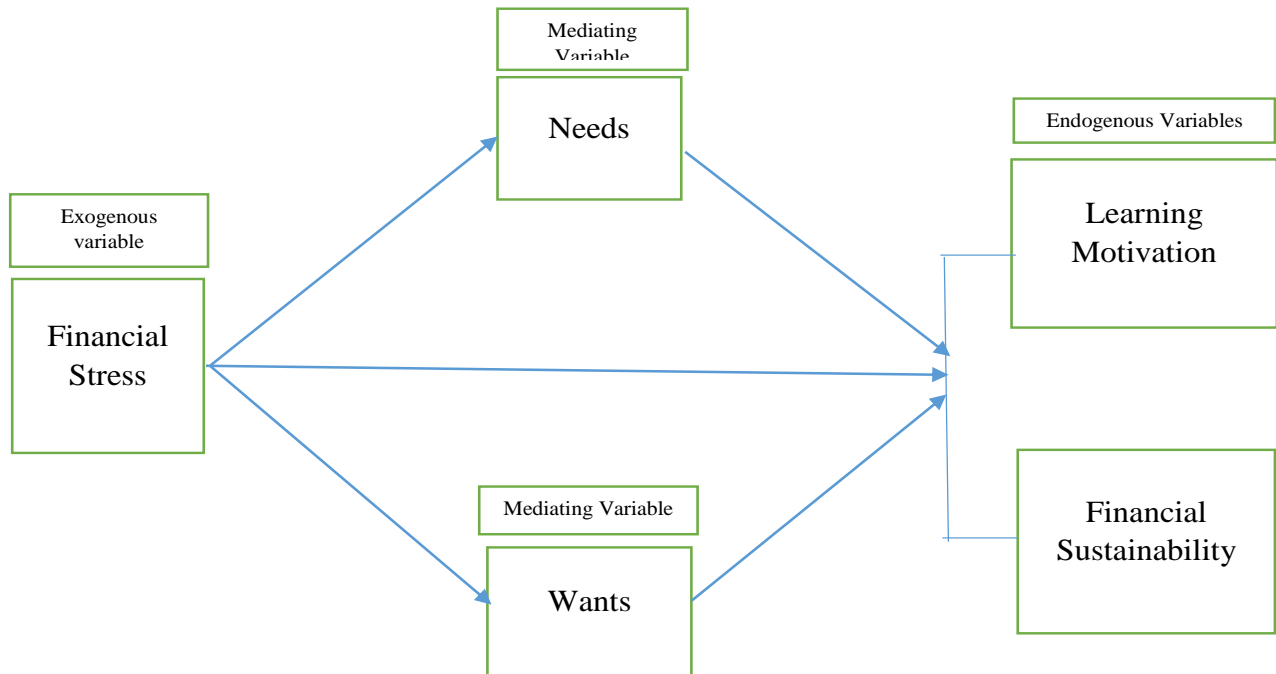


Figure 1 Conceptual Framework

METHODOLOGY

This study adopted a correlational research design. The research questions one and two are answered with the used of regression and question three is answered by using structural equation modeling (AMOS) to explain and confirm the theoretical paradigm. The 300 international students' respondents were conveniently contacted to answer a survey distributed self-constructed questionnaire in selected universities in Cavite, the Philippines. The research questionnaire was made up of the five Likert-scale stating 1 – strongly disagree, 2 – disagree, 3 – *moderately agree*, 4 –agree and 5 – strongly agree for all the variables. The internal consistency of the instruments the survey had a Cronbach's alpha of financial stress 0.913, learning motivation 0.893, and financial sustainability 0.813, needs 0.723 and wants 0.829.

The null hypotheses to be tested for this research are:

- a. Ho1: There is no significant relationship between financial stress and learning motivation.
- b. Ho2: There is no significant relationship between financial stress and financial sustainability.
- c. Ho3: Needs and wants do not mediate the relationship between financial stress and
 - a. Learning motivation
 - b. Financial sustainability

The research study interpretation of the correlation as related to beta (β) or unstandardized coefficients is based on Cohen (1988) guidelines in respect of the negative or positive relationship:

Table 1: Interpretation table for Beta

Unstandardized coefficients	Interpretation	Verbal Interpretation
$\beta=0.10$ to 0.29	Small	Low
$\beta=0.30$ to 0.49	Medium	Moderate
$\beta=0.50$ to 1.0	Large	High

The research study determination of a model fit indices to answer question four is based on some general rules of thumb for model evaluation as shown below:

Table 2: Interpretation table for Model Fit Indices

Fit Measure	Good Fit	Acceptable Fit
Chi square	$0 \leq \chi^2 \leq 2df$	$2df < \chi^2 \leq 3df$
p value	$.05 < p \leq 1.00$	$.01 \leq p \leq .05$
RMSEA	$0 \leq RMSEA \leq .05$	$.05 < RMSEA \leq .08$
CFI	$0.97 \leq CFI \leq 1.00$	$0.95 \leq CFI < .97$
GFI	$0.95 \leq GFI \leq 1.00$	$0.90 \leq GFI < .95$

RESULTS AND DISCUSSION

The respondents were made up of international students in Cavite, the Philippines. They were made of 165(55%) males and 135(45%) females. It had African 131(43.67%), Asians excluding Filipinos 106 (35.33%), North Americans 49 (16.33%), South Americans 3 (1%), Europeans 3(1%) and others 8(2.7%). The education level of the respondents were undergraduates 163(54.3%) and graduate 137 (45.7%). Regarding where they received their source of finance 169(56.3%) got it from their relatives, self-support 74(24.7%), institutional sponsored students were 27(9%), and others were 30(10%). In terms of measuring the respondents monthly living expenses 143(47.7%) spent less than ₱9,999, 100(33.33%) ₱10,000-₱19,999, 33(11%) ₱20,000-₱29,999, 9(3%) ₱30,000-₱39,999 and 15(5%) ₱40,000-₱49,999.

In answering question one based related to the null hypothesis statement: there is no significant relationship between financial stress and learning motivation. The study concluded that there is a significant relationship between financial stress and learning motivation ($F=149.589$, $p = 0.00$) at $p < 0.05$. As a result, we reject the null hypothesis in that financial

stress has a relationship with leaning motivation. The financial stress predicts 33.4% of learning motivation. Also, the beta (β) of 0.629 is interpreted to as *highly* correlated. The beta shows a positive correlation between financial stress and learning motivation. It means that they move together in the same direction and a unit change in learning motivation will be responded by financial stress by 0.629. This research is contrary to Weaver (2013) that concluded that there is no relationship between financial hardship and academic motivation. The deviation is on the tangent that all of the respondents used in Weaver’s research were receiving financial support from their parents whereas this research had 24.7% on self-support and 75.3% received some forms of financial sponsorship. However, this study confirms Heckman, Lim, and Montalto (2014) study in Ohio, USA that financial stress is widely or highly among students.

Table 3: Financial Stress and Learning Motivation Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.578 ^a	.334	.332	.8134	.334	149.589	1	298	.000

a. Predictors: (Constant), Financial Stress

Table 4: Financial Stress and Learning Motivation ANOVA

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	98.968	1	98.968	149.589	.000 ^b
	Residual	197.157	298	.662		
	Total	296.125	299			

a. Dependent Variable: Learning Motivation

b. Predictors: (Constant), Financial Stress

Table 5: Financial Stress and Learning Motivation Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1	(Constant)	.611	.134		4.564	.000		
	Financial Stress	.629	.051	.578	12.231	.000	1.000	1.000

a. Dependent Variable: Learning Motivation

Also, to address question two with the hypothesis that there is no significant relationship between financial stress and financial sustainability. The study shows that there is a significant relationship between financial stress and financial sustainability as indicated by ($F=22.021$, $p=.000$) at $p < 0.05$. It means that the null hypothesis is rejected. However, financial stress for international students in Cavite, Philippines predicts 6.9% of financial sustainability. The beta (β) of 0.232 is interpreted to as *low* correlate. The beta shows a positive correlation between financial stress and financial sustainability.

This implies that they move together in the same direction and a unit change in financial sustainability will be responded by financial stress by 0.232. This implies that international students in Cavite do not seek financial sustainability mainly because they are financially stressed. It means there are about 93.1% unconsidered predictors that international students seek to attain financial sustainability and it is the reason for the *low* correlation.

Table 6: Financial Stress and Financial Sustainability Model

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.262 ^a	.069	.066	.7817	.069	22.021	1	298	.000

a. Predictors: (Constant), Financial Stress

Table 7: Financial Stress and Financial Sustainability ANOVA

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.455	1	13.455	22.021	.000 ^b
	Residual	182.072	298	.611		
	Total	195.526	299			

a. Dependent Variable: Financial Sustainability

b. Predictors: (Constant), Financial Stress

Table 8: Financial Stress and Financial Sustainability Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1	(Constant)	1.930	.129		14.994	.000		
	Financial Stress	.232	.049	.262	4.693	.000	1.000	1.000

a. Dependent Variable: Financial Sustainability

In order to research question and also based on the hypothesis that needs and wants do not mediate the relationship between financial stress and learning motivation and financial sustainability, specific protocols must be observed to exist. According to Baron and Kenny (1986) mediating relationship exists when the independent variable is significant on the dependent variable, and the mediating variables are associated with both the independent and dependent variables. In this case of the research, the significant relationships have been established between financial stress and learning motivation and financial sustainability. There is also research supporting the influence of needs and wants on financial stress, learning motivation and financial sustainability in economic theory.

Also, factor analysis for the confirmation of the structure was done on the items. The data set has a KMO 0.751 with Bartlett's test is significant ($p = .000$), and more values of Factorability of the correlation matrix of $r = 0.3$ or greater. Therefore factor analysis is appropriate. The initial factor extraction was eight components explained 73.06% of the loading items. However, using SPSS and based on the Kaiser criterion which states that retain all components with eigenvalues above 1 and accept items of $r = 0.3$ or greater, most of the items came in component 1 and 2. It meant that the fixed factor of extraction must be two which explains 41.43% of the factor loading items under Oblimin rotation of two-factor solution. Below are the statistical results of the factor analysis.

Table 9: Factor Analysis KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.751
Bartlett's Test of Sphericity	Approx. Chi-Square	7589.591
	Df	528
	Sig.	.000

Table 10: Pattern and Structure Matrix for Need and Wants, Financial Stress, Learning Motivation and Financial Sustainability Oblimin Rotation of Two Factor Solution of Items

Item Code	Item Description	Pattern coefficients		Structure coefficients		Communalities
		Component 1	Component 2	Component 1	Component 2	
FS11	I sometimes fail to enroll in some semesters due to lack of tuition fees	.831		.807		.673

FS10	I am not always able to pay my full tuition fee during enrollment	.829	.800		.671
FS9	I am sometimes not able to purchase some of the required academic materials due to lack of enough funds	.822	.794		.660
FS6	I am always worried if the allowance received will cover my educational needs	.810	.790		.640
FS7	I am always worried whether my tuition fee will be paid on time	.786	.750		.612
FS5	I am sometimes forced to take less course load due to lack of tuition fee	.784	.775		.604
FS4	I am always forced to borrow money from others sources to meet my educational needs	.742	.745		.556
FS8	I always avoid participating in some academic activities due to lack of funds	.702	.676		.483
LM1	I am discouraged from learning more because I am not able to pay my tuition fee on time	.688	.718		.549
LM2	I am not meeting my career goals since I do not meet my academic, financial needs	.685	.722	.342	.574
FS3	I am always forced to borrow money from my friend to meet my educational needs	.675	.691		.487
FS2	I always receive monthly allowance late	.621	.624		.325
LM3	I do not put effort to finish my course requirement in time, due to lack the class requirements	.610	.644	.313	.461
LM4	Am always late in my classes due to lack of class requirements need	.582	.613		.414

LM5	I fail to strive to get high grades in my classes since I miss the required	.495	.531	.306	.332
FSB1	My cash received cover my monthly expenses				
NS2	My needs are unchangeable over time	.742	.752		.249
NS3	Non-fulfillment of my needs may lead to an adverse outcome	.719	.712		.569
FSB5	Financial sustainability give me the quality of life	.689	.713		.532
FSB6	Financial sustainability improves my standard of living	.644	.668		.467
FSB7	I seek self-sufficiency	.623	.632		.404
NS4	An individual has the same needs	.604	.617		.386
WS2	My wants are unessential for survival	.577	.557		.325
FSB2	I seek financial independence as a student	.574	.560		.321
NS1	I need money to survive	.501	.499		.249
FSB4	Financial sustainability gives me happiness in school	.495	.346	.537	.358
WS4	Non-fulfillment of want may result in mental distress	.484	.485		.236
WS5	My wants differ from the individual	.454	.452		.205
WS3	My wants change over time	.445	.429		.194
FSB3	My life is impacted by any financial sustainability	.436	.463		.243
WS1	My wants are my desires	.396	.378		.156
NS5	My needs are a necessity	.391	.382		.149
FS1	My Monthly Allowance is equal to my need	.321	.308	.362	.196

Note: major loadings for each item are bolded

As shown in table 11, a based on research question three as hypothesized as needs and wants do not mediate the relationship between financial stress and learning motivation and financial sustainability. The results show in tables 11, 12, and 13 that needs and wants do not mediate the relationships between financial stress and learning motivation and financial

sustainability. Therefore we fail to reject the null hypothesis. This is shown by the higher p-value of .157 and .779 in table 11. The indirect effects or the mediating effects values in tables 12 and 13 show 0.000 effects for needs and wants. The implication for this result is that international students in Cavite, Philippines do not consider their needs and wants to explain their financial stress relationship with learning motivation and financial sustainability. As earlier shown, financial stress has a direct relationship or influence of learning motivation and financial sustainability.

However, the results as shown in table 11 confirm that needs have a significant relationship with learning motivation and financial sustainability whereas wants do not. It affirms that needs satisfaction is paramount to learning motivation and financial sustainability. Every human being will seek needs satisfaction first for survival before they consider their wants. In short, addressing the needs of international students in Cavite, the Philippines will help to improve and explain their learning motivation and financial sustainability.

Table 11: Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
Needs	<---	Financial Stress	.083	.059	1.416	.157	
Wants	<---	Financial Stress	-.018	.065	-.280	.779	
Learning Motivation	<---	Needs	.296	.047	6.273	***	
Financial Sustainability	<---	Wants	-.031	.035	-.885	.376	
Financial Sustainability	<---	Needs	.514	.039	13.177	***	
Learning Motivation	<---	Wants	.059	.042	1.392	.164	
Learning Motivation	<---	Financial Stress	.605	.048	12.648	***	
Financial Sustainability	<---	Financial Stress	.189	.040	4.755	***	

Tables 12: Indirect Effects (Group number 1 - Default model)

	Financial Stress	Wants	Needs
Wants	.000	.000	.000
Needs	.000	.000	.000
Financial Sustainability	.043	.000	.000
Learning Motivation	.023	.000	.000

Table 13: Standardized Indirect Effects (Group number 1 - Default model)

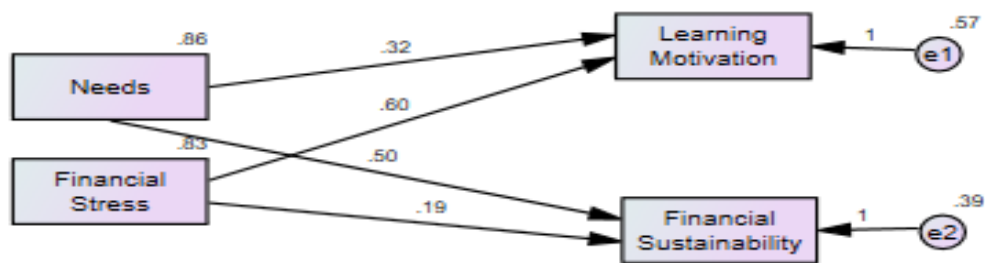
	Financial Stress	Wants	Needs
Wants	.000	.000	.000
Needs	.000	.000	.000
Financial Sustainability	.049	.000	.000
Learning Motivation	.022	.000	.000

New Model

Question four of this research demands a new model to be developed out of the researchers' paradigm. Based on the General rule of thumb shown in table 2 the results are as shown below with the new model.

Table 14: Model Fit Table

Fit Measure	Results	Verbal Interpretation
Chi-square	2.70	Acceptable Fit
p-value	0.07	Good Fit
RMSEA	0.75	Acceptable Fit
CFI	0.99	Good Fit
GFI	0.99	Good Fit



Model Fit
 Chi-Square=5.404; df=2; p=.067;
 RMSEA=.075; GFI=.991; CFI=.989; TLI=.968

Figure 2: Model for the Relationship between Needs and Financial Stress on International Students' Learning Motivation and Financial Sustainability.

The implication from this new model is that wants is not considered as a variable to influence international students' learning motivation and financial sustainability. Wants is not considered in the model because it is a desire which can be eliminated as shown by this research. Also,

needs must be considered as an independent or exogenous variable and not a mediating variable in that it is for human survival. This research helps to distinguish the important role of needs and wants and its implication on international students' in Cavite, the Philippines.

Below is the table for the new model:

Table 15: Regression Weights: (Group number 1 – Default model)

			Estimate	S.E.	C.R.	P	Label
Learning Motivation	<---	Needs	.318	.047	6.750	***	
Financial Sustainability	<---	Needs	.503	.039	12.905	***	
Learning Motivation	<---	Financial Stress	.603	.048	12.595	***	
Financial Sustainability	<---	Financial Stress	.190	.040	4.805	***	

CONCLUSION AND RECOMMENDATIONS

The research seeks to confirm the intervening effects of needs and wants on the relationship between financial stress and learning motivation and financial sustainability of international students. The research makes the following conclusions that there is a significant relationship between financial stress and learning motivation and financial sustainability. Also, needs and wants do not mediate the relationships between financial stress and learning motivation and financial sustainability. However, needs relationship with learning motivation and financial sustainability is significant. Therefore needs is considered as an independent variable in the new model and not a mediating variable. This research recommends that international students must consider their needs as more important in order to avoid financial stress which both impacts on their learning motivation and finance.

The limitation of this research is that it failed to analysis in detail the expenditure pattern of international students. This would have helped knowing the main expense needs that are causing financial stress on their learning motivation and financial sustainability. Future research is required in this area to broaden the knowledge on this area.

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