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STUDENTS' PERCEPTION OF ACADEMIC PEACE OF MIND, CRITICAL THINKING, ATTITUDE, ACADEMIC SELF-CONFIDENCE, AND THEIR ACADEMIC ACHIEVEMENT IN MATHEMATICS AT THE SECONDARY SCHOOL LEVEL

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Abstract

The issue concerning academic peace of mind, critical thinking, attitudes, and self-confidence in determining academic achievement has been an interesting area of research in educational literature. The study aimed to explore the students' academic peace of mind, critical thinking, attitudes, and self-confidence as predictors of academic achievement in Mathematics in Anambra State. Four research questions and three null hypotheses guided the study. The study adopted a correlational predictive research design to provide answers to the research questions and testing of the hypotheses. The population of the study comprised of 21204 from which a sample of 840 was drawn. Multi-stage procedure was used to select the sample. Standardized research instruments namely; Peace of Mind Scale (PMS), Academic Self-Confidence Scale (ASCS}, Critical Thinking Ability Scale (CTAS), Attitude Scale (AS) were used for data collection. Students' Mathematics Achievement Scores (SMAS) from the state wide promotion examination were used to represent mathematics achievement. Cronbach's alpha was used to determine the reliability of the items in the instruments. A reliability index of .64, .68, .73, and .82, for academic peace of mind, critical thinking, academic self-confidence, and attitude respectively. The standard multiple regression was used to analyze the collected data. The t-test for r, F-test and test of significance for β, were used to test hypotheses at .05 level of significance. Findings showed that students' academic peace of mind, critical thinking, and self-confidence jointly predicted their academic achievement in mathematics The analysis of variance in the table shows that the regression equation was significant. This implies that at least one of the independent variables significantly predicted the academic achievement in mathematics. Based on the positive contributions of students' academic peace of mind, critical thinking, attitude, and self-confidence, it

was recommended that students should adapt these behaviors as robust indicators and facilitators of learning in the academic context.

Keywords: Academic Peace of Mind, Critical Thinking, Attitude, Academic Self-Confidence, and Academic Achievement.

Introduction

Literature revealed that positive education emphasizes the significance of social and psychological factors that facilitate key learning outcomes (Heffner & Antaramian, 2016). The study of Datu (2017), noted that the emergence of this paradigm has led to empirical investigations which focused on positive psychological constructs that serve as antecedents of adaptive academic functioning. Four notable psychological variables that have been linked to a wide range of academic outcome at the individual level are students' academic peace of mind, critical thinking, attitude and self-confidence. The debating issue anchored on whether the four personality constructs could relatively and collectively to predict students' academic achievement. For example, students' academic peace of mind normally reflects on positive affect which pertains to individuals' experience that involves desirable emotional states (e.g., happiness, excitement and elation) at various point in time (Datu & Valdez 2016).

Research finding has revealed that positive emotional situation plays an important role in fostering students' academic success (Datu, 2017). Supporting this finding, positive emotional effect has been linked to greater academic engagement, meaning in life, intrinsic motivation and academic achievement (Datu & Valdez 2016; Nickersen, Diener & Schwarz, 2011). As positive emotion is a true reflection of peace of mind, the present study aimed to explore students' critical thinking, attitude, self-confidence and academic peace of mind as determinants of learning outcomes that elucidate the students' level of learning experience. Academic peace of mind refers to the extent to which the individuals feel internal peace, coherence and comfort in the learning situation (Datu,

2017). Interestingly, with the seeming value of examining the role of academic peace of mind in the academic setting. Very few studies have especially investigated the impact of this in the school settings. For example, investigation from the study of Datu (2017) revealed that only the study of Datu, Valdez, and King (2016) has looked at the relations of academic peace of mind with an academic outcome (e.g., academic engagement). It is on these observations that researchers hypothesized that academic peace of mind could predict students' academic achievement when it is connected to their attitude, self-confidence, and critical thinking.

In the learning process, critical thinking (CT) assists people in making prompt decisions and enables them to cooperate with the larger society. However, learning process requires people with a wide varieties of characteristics that could represent adaptive behavior that could enhance academic success. These attributes include the learning and application of different thinking methods such as conducting research, problem solving, creativity and the critical thinking. On this note, critical thinking means how to think properly in an attempt to gain awareness of the world and it consists of mental processes of data identification, analysis, and evaluation (Shaabain, Maktabi, Yeylagh & Morovati, 2011).

In other words, the critical thinking is the act of thinking around thinking in order to turn the thoughts into better, clear, more accurate or more defendable ones (Shamsaee, Alhani, & Cheraghi, 2010). If appropriate condition for learning are provided, critical thinking could offer many solutions to solve current education problems. For example, by means of critical thinking, learning and exchange of meaningful ideas may remarkably have increased and got varied. Therefore, critical thinking would have made it easier to access learning instructions through interpersonal relationship. In respect to these observation, the researchers assumed that students' application of critical thinking to

solve most of their academic problems could have a link with their academic peace of mind, self-confidence, and attitude to predict academic achievement

Attitude can be defined in various ways, for example, systematic long-term emotion, beliefs and opinion tendency (Baker, 2012). That is the tendency to show positive or negative way of feeling and behaving towards any person, incident, place or object. According to Fraser (2014) attitude is a person's beliefs about the objects around him considering which ones are good, bad, acceptable or unacceptable. Actually, these definitions indicate that attitude has a considerable effect on human behavior (Cakir, 2012). Since students' attitude is conative in nature, examining its links with academic peace of mind, critical thinking, and self-confidence could predict their academic achievement in the learning situation is one of the gaps in knowledge in the present study.

In many circumstances, self-confidence is used with the same meaning of self-efficacy beliefs (Tomle & Hatlevik, 2011). For example, Bandura (1986) defined self-efficacy perception as individual's beliefs for his own capacity to be able to achieve a target. Self-efficacy is not a general pattern, but it is related to certain situations, topics and duties. Thus, self-efficacy is measured as a relation to a specific field and performance (Bandura, 2001). Suffice it to say that, academic self-confidence affects the effort, ability and the dispositional preferences which the individual endorsed as the orientation to engage and achieve something. It also represents the intensity and continuity of the individuals' zest to achieve in any situation. That is students with high academic self-confidence make more academic effort to achieve a target and are more determined, persistence and patient when they encounter challenging and negative situations in the academic situations. Therefore, the concept of self-confidence as one of the features of self-efficacy that unlock the beliefs to be the person to your abilities in other to perform tasks and duties successfully (Karimi & Saadatmnand, 2014). In the

attempt to examine the relations of academic self-confidence with academic peace of mind, critical thinking and attitude as the adaptive learning behavior that could impact positively on students' academic achievement, the researchers hypothesized that the intricate association among students' self-confidence, academic peace of mind, critical thinking and attitude could significantly predict academic achievement.

Academic achievement has been considered as scores obtained from the examination that measure the extent to which a person has acquired certain information or mastered certain skills, usually as a result of specific instruction (Meherns & Lehman, 2018). It is assumed that the perceptions of students toward their academic peace of mind, critical thinking, attitude and self-confidence may have a robust relative impact on their academic achievement. Surprisingly, the dramatic increase in the prevalence of poor academic achievement among the secondary school students in the mathematics has broken the traditional view that academic success is the only standard in assessing good students. In the Nigerian settings, not only students' academic achievement, but also their learning behaviors being examined in the present study such as; self-confidence, academic peace of mind, critical thinking and attitude, should be elucidated by the educational stakeholders as panacea to the incessant students' poor academic achievement. One begins to understand the need to empirically examine how students' academic peace of mind, critical thinking, attitudes and self-confidence could uniquely and jointly predict students' academic achievement. Suffice it to say that many studies have examined the relations between peace of mind, critical thinking, attitudes, self-confidence and academic achievement. For instance, Anyanwu and Emesi (2021) recorded that self-confidence was very low positively related with academic achievement. The study of Datus (2017) indicated that peace of mind was positively associated with academic achievement. Also, peace of mind was negatively linked to

academic motivation. These results indicate that students who feel internal peace and harmony are more likely to get higher grades and espouse self-determined from academic motivation. From the study of Datu (2017), it was reported that the effect sizes found as regards to the associations among the peace of mind, academic motivation and achievement in the study ranged from 1% to 18%.

Sequel to be the above observations, the paucity of studies on how these psychological constructs (academic peace of mind, critical thinking, attitudes and self-confidence) could relate with one another to predict achievement was the major rationale in the present study. Against this backdrop, the study examined students' academic peace of mind, critical thinking, attitude, self-confidence, and their academic achievement in mathematics at the secondary school level.

Research Questions

1. To what extent are the assumptions of multiple regression equation for predicting students' academic achievement scores in mathematics using academic peace of mind, critical thinking, attitudes and academic self-confidence scores met?
2. What is the nature of the regression equation for predicting students' academic achievement scores in mathematics using their academic peace of mind, critical thinking, attitude and academic self-confidence scores?
3. Which of the independent variables such as; academic peace of mind, critical thinking, attitudes and academic self-confidence scores predicts students' academic achievement scores in mathematics?
4. What are the unique contributions of academic peace of mind, critical thinking, attitude and academic self-confidence scores to predict students' academic achievement scores in mathematics?

Hypotheses

1. The regression equation does not significantly predict students' academic achievement scores in mathematics using their academic peace of mind, critical thinking, attitude and academic self-confidence scores.
2. Students' academic peace of mind, critical thinking, attitude and academic self-confidence scores do not significantly predict students' academic achievement scores in mathematics.
3. The unique contributions of students' academic peace of mind, critical thinking, attitude and academic self-confidence scores to predict their academic achievement scores in mathematics is not significant.

Method

The researchers adopted a correlational predictive research design and used questionnaires to collect data for the study. The population of this study consisted of 21204 which represented all the senior secondary school students II in Anambra State. A sample of 840 SS2 students was drawn from the senior secondary schools in the six education zones in Anambra State. Multi-stage sampling procedure was used to select the respondents. In stage one, three education zones were selected from the six education zones in the state by simple random sampling. Then in stage two, from each sampled education zone, one local government area (L.G.A) was selected through simple random sampling given a total of three (3) L.G.As. In stage three, from each sampled L.G.A, 10 schools were randomly selected giving a total of 30 schools. Then, from each of the schools, 28 SSII students were selected for the study using a table of simple random sampling. This gave a total number of 840 students used in the study.

The study adapted four standardized research questionnaires namely, Lee, Huang and Fredrickson (2013) The Peace of Mind Scale (PMS), Jones (2001) Academic Self-

Confidence Scale (ASCS), Peng, Wang, Cheng, Bai, Li, Cai, Wang and Yin (2004) Critical Thinking Ability Scale (CTAS) and Rosen, Whaling, Carrier, Cheever and Rokkum (2013) Attitudes Scale (AS). The students' achievement scores were obtained from the state wide Senior Secondary One (SS1) promotion examination from the schools before the administration of the instruments. The methods used for validating the instruments were face and construct validity by the three experts from the Faculty of Education, Nnamdi Azikiwe University Awka. Cronbach's alpha reliability method was used to determine the internal consistency of the sub-scales for the three instruments were such as; academic peace of mind, critical thinking, attitudes and self-confidence were .64, .68, .73. and .82 respectively. The data were analyzed using standard multiple regression analyses. The t-test for r, F-test and test of significance for β, were used to test hypotheses at .05 level of significance.

Results

The data were first screened for missing values, and 196 respondents had missing values representing 23.3%. Hence likewise deletion approach was adopted. After deleting the 196 respondents, the sample size was reduced to 644. Thereafter, analysis of the study was carried out using standard multiple regression analysis with SPSS 25.

Research Question One: To what extent are the assumptions of the regression equation for predicting students' academic achievement scores in mathematics using academic peace of mind, critical thinking, attitudes and academic self-confidence scores met?

Table 1: Correlation and descriptive statistics of independent and dependent variables in the regression model for this study (N = 644).

Variables	APM	CT	AT	ASC	ACH	X	SD	VAR	SK	KU	TF	VIF
APM	1					19.8	3.01	9.067	-.325	-.256	.266	3.75
CT	.118** .003	1				19.6	2.98	8.914	-.156	-.603	.986	1.01
AT	.047 .231	.026 .512	1			19.3	3.02	9.160	-.229	-.604	.996	1.00

ASC	.855**	.093**	.024	1		19.8	2.87	8.266	-.318	-.348	.268	3.73
	.000	.018	.546									
ACH	.124**	.802**	.079*	.120**	1	19.4	2.99	8.997	-.253	-.569	…..	……
	.002	.000	.044	.002								

Std. Residual Min = -7.240, Std. residual Max = 4.836, Durbin Waston statistics = .1.851. APM = Academic Peace of Mind, CT = Critical Thinking, AT = Attitude, ASC = Academic Self-Confidence and ACH = Achievement.

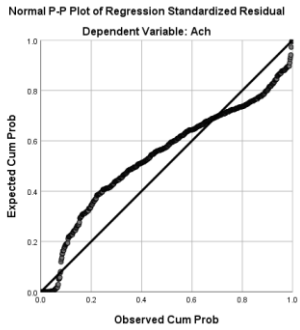

Fig 1 the normal P.P plot of standardized residuals data points of teaching people with disabilities.

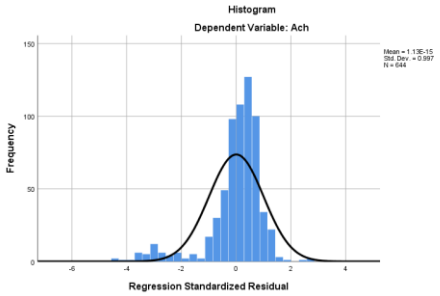

Fig 2 the normal distribution curve of standardized residuals data points of academic achievement.

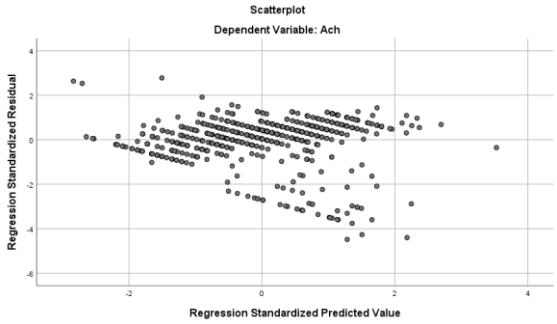

Fig 3 the scatter plot of standardized residuals data points of academic achievement.

To answer research question 1, seven assumptions of multiple linear regression were tested in this study. First, the assumptions of normality of the data were tested using Skewness and Kurtosis. The assumptions were made since none of the Skewness and Kurtosis values of each of the variables do not exceed + 3 and – 3 as recommended.

Second, the assumptions of absence of multivariate outliers was checked using standardized residual statistics and Cook's distance statistics (1977). Result of standardized residual values indicated that the (Std, Residual Min = -2.775, Std, Residual Max = 2.493). It lies between -3 to 3 as recommended by (Tabachnick and Fidell, 2018). While the result of the Cook's distance shows a maximum value of .223 which is less than 1 as recommended by (Cook, 1977). Hence, the assumptions of absence of multivariate outliers was not violated. Third, the assumptions of absence of multicollinearity among the predicting variables were checked using Variance Inflated Factor (VIF), and Tolerance Factor (TF). The Tolerance Factors and Variance Inflated Factors (Academic Peace of Mind, TF = .266, VIF = 3.757; Critical Thinking, TF = .986, VIF = 1.015; Attitude, TF = .996, VIF = 1.004; Academic Self-Confidence, TF = .268, VIF = 3.731) of the independent variables show that the values were less than 10 for Variance Inflated Factor and greater than .20 for Tolerance Factor respectively as recommended by (Schumaker, 2015). Hence, this assumption of absence of multicollinearity was made. Forth, the assumption of independent of error was tested using Durbin Waston statistics. The result shown a Durbin Waston statistics of .1.851 which is less than 3 but greater than 0 as recommended by (Denis, 2020). Hence, the assumption of independent of error was not violated. Fifth, the assumptions of normality of error distribution were tested using normal P.P plot of standardized residual. Figure 1shows that the normal P.P plot of standardized residual data points were normally distributed. Histogram of the standardized residual in figure 2 also testified to that. Sixth, the assumption of homogeneity of variance and linearity was tested using scatter plot of standardized predicted values. The result in figure 3 shows that the data met the assumption of homogeneity of variance and linearity as the predicted values were distributed above zero in both dimensions and do not show any pattern. Seventh, the

assumptions of non-zero variance were tested using variance statistics and the data also met the assumptions of non-zero variances (Academic Peace of Mind, Variance = 9.067; Critical Thinking, Variance = 8.914; Attitude, Variance = 9.160; Academic Self-Confidence, Variance = 8.266; academic Achievement, Variance = 8.997) as there is no zero variance for the variables in the study as shown in the table 1.

Research Question Two: What is the nature of the regression equation for predicting students' academic achievement scores in mathematics using their academic peace of mind, critical thinking, attitude and academic self-confidence scores?

Table 2: Regression coefficient for academic peace of mind, critical thinking, attitude and academic self-confidence scores (N = 644).

Model	Unstandardized βeta	Std. Error	Standardized βeta
Constant	1.746	.775	
Academic Peace of Mind	-.042	.045	-.042
Critical Thinking	.801	.024	.798
Attitude	.058	.023	.059
Academic Self-Confidence	.084	.047	.081

Using the information in table 2, the nature of the regression equation for predicting students' academic achievement scores in mathematics follows:

$Y = b0 + b1x1 + b2 x 2 + b3 x3 + b4 x 4$

$Y = 1.746 + -.042 x1 + .801 x2 + .058 x3 + .084 x4$

$Ach = 1.746 +- 0.042 + 1.602 + 0.174 + 0.336$

$Ach = 1.746 – 0.042APM + 1.602CRT + 0.174AT + 0.336ASC$

APM = Academic peace of Mind, CT = Critical Thinking, AT = Attitude, ASC = Academic Self-Confidence. The equation shows that for every unit decrease in academic peace of mind, achievement increased by -0.042. For every unit increase in critical thinking, achievement increased by .801. For every unit increase in attitude, achievement

increased by 0.147. For every unit increase in self-confidence, achievement increased by 0.336.

Research Question Three: What is the unique contributions of students' academic peace of mind, critical thinking, attitude, and academic self-confidence scores to predict their academic achievement scores in mathematics?

Table 3: Regression model summary of students' academic peace of mind, critical thinking, attitude, and academic self-confidence scores to predict their academic achievement scores in mathematics (N = 644).

Model	R	R-Square	Adjusted R- Square	Std. Error of the Estimate
	.805[a]	.649	.646	1.78346

To answer this research question, the adjusted multiple regression R square was used. The result of study shows that using students' achievement scores in mathematics yielded an adjusted R squared of .646. This implies that predictors accounted for about 64.6% of the variance scores in students' achievement scores in mathematics.

Research Question Four: Which of the independent variables such as, students' academic peace of mind, critical thinking, attitude, and academic self-confidence scores best predicted their academic achievement scores in mathematics?

Table 4: Regression coefficient for students' academic achievement scores in mathematics using their academic peace of mind, critical thinking, attitude, and academic self-confidence scores (N = 644).

Model	Unstandardized βeta	Std. Error	Standardized βeta
Constant	1.746	.775	
Academic Peace of Mind	-.042	.045	-.042
Critical Thinking	.801	.024	.798
Attitude	.058	.023	.059
Academic Self-Confidence	.084	.047	.081

Table 4: Regression coefficient for students' academic achievement scores in mathematics using their academic peace of mind, critical thinking, attitude, and academic self-confidence scores. To answer this research question 4, the standardized regression coefficient (β) in table 4 was used for comparison. The regression coefficients presented in table 4 shows unstandardized (β) and standardized regression coefficient (β) academic peace of mind scores are -.042 and -042. For critical thinking scores are .801 and .798. For attitude scores are .058 and .059. For academic self-confidence scores are .084 and.081. Using the standardized (β) for comparison, critical thinking mostly predicted students' academic achievement scores in mathematics as shown by the β of .798. Academic self-Confidence is the second most predicted students' academic achievement scores as shown by the β of .081. Attitude is the third most predicted students' academic achievement scores in mathematics as shown by the β of .059. Academic peace of mind is the fourth most predicted students' academic achievement scores in mathematics as shown by the β of -.042 respectively.

Hypothesis One: The regression model does not significantly predict students' academic achievement scores in mathematics.

Table 5: F- test for regression model of students' their academic achievement scores in mathematics (N = 644).

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	3752.710	4	938.178	294.955	.000[b]
Residual	2032.495	689	3.181		
Total	5785.205	643			

The analysis of variance in the table 5 shows that the regression equation was significant (4, 689) = 294.955, $p < .05$. This implies that at least one of the independent variables significantly predicted students' academic achievement scores in mathematics.

Hypothesis Two: The unique contributions of students' academic peace of mind, critical thinking, attitude, and academic self-confidence scores to predict their academic achievement scores in mathematics is not statistically significant?

Table 6. t-test of adjusted R square of the regression model for this study (N = 644).

Model	R	R- Square	Adjusted R- Square	Std. Error Estimate	t – cal for adj. R^2	DF	t- crt.	Remark
	.805[a]	.649	.646	1.78346	58.1107		1.960	S

To test hypothesis 2, t-test for adjusted R square was conducted. Results of the study shown in table 6 indicates that t-critical for adjusted R square is 1.960 while that of the t-calculated is 58.1107. Since the t-calculated for adjusted R square 58.1107 is greater than t-critical 1.960, the null hypothesis which states that the unique contributions of students' academic peace of mind, critical thinking, attitude, and academic self-confidence scores to predict their academic achievement scores in mathematics is not statistically significant is rejected and the alternative hypothesis is accepted. In other words, the unique contributions of students' academic peace of mind, critical thinking, attitude, and academic self-confidence scores to predict their academic achievement scores in mathematics is statistically significant. Effect sizes were also evaluated using adjusted R^2 comparing it with Cohen's *d* statistics guideline, where $d < 0.20$ indicates a minimal effects size, $0.20 < d < 0.50$ indicates a small effect size, $0.50 < d < 0.80$ indicates a moderate effect size and $d > 0.80$ indicates a large effect size. The value of R adjusted square .646 indicates a large effect size.

Hypothesis Three: Students' academic peace of mind, critical thinking, attitude, and academic self-confidence scores do not significantly predict their academic achievement scores in mathematics.

Table 7: t-test of regression coefficient of students' academic achievement scores in mathematics using their academic peace of mind, critical thinking, attitude, and academic self-confidence scores (N = 644).

Model	Unstandardized β eta	Std. Error	Standardized β	T	P-value	Remark
Constant	1.746	.775		2.254	.025	S
Academic Peace of Mind	-.042	.045	-.042	-.917	.359	NS
Critical Thinking	.801	.024	.798	33.769	.000	S
Attitude	.058	.023	.059	2.505	.012	S
Academic Self-Confidence	.084	.047	.081	1.778	.076	NS

Table 7 shows that students' critical thinking and attitude scores significantly predicted their academic achievement scores in mathematics since their p-values are smaller than .05. Then, students' academic peace of mind and academic self-confidence scores does not significantly predict their academic achievement scores in mathematics since their p-values are greater than .05.

Discussion of Findings

The findings from the result revealed that the seven assumptions tested in table 1 indicated that students' academic peace of mind, critical thinking, attitude and academic self-confidence are statistically fit to examine their robust impact on students' constructive engagement in the learning of mathematics. Meeting the assumptions of the regression model implies that the data are suitable for the analysis.

The findings from the nature of regression equation revealed that, critical thinking, attitude and self-confidence have positive contributions to the predicting model, while academic peace of mind has negative contribution to the predicting model. This implies that these variables have had a significant impact in determining students' academic achievement in mathematics as positive and negative influences were observed from the endogenous variables in predicting the exogenous variable.

From the findings, multiple regression R square stands to prove a dynamic relationship among the academic peace of mind, critical thinking, attitude and academic self-confidence as they jointly predicted students' academic achievement scores in mathematics. The large percentage (64.6%) of these variables in predicting academic achievement scores in mathematics indicated that the constructs are salient predictors of students' willingness to adapt with these personality constructs as facilitating conditions to achieve optimally in the learning situation.

Findings indicated that the endogenous variables have critical roles to play in shaping and determining students' academic achievement. For example, when students' academic peace of mind, critical thinking, attitude and academic self-confidence are positively low in contributing to students' academic achievement, students' desire to adapt to these learning behaviors will also be positively low. Also, when students' academic peace of mind is negatively low in contributing to students' academic achievement, students' desire to adapt to their learning of mathematics will be negatively low. These observable learning behaviors will in turn affect students' chances of achieving optimally. These supported the study of. Anyanwu and Emesi (2021) which recorded that academic self-confidence was very low positively related with academic achievement. The findings supported the study of Datus (2017) which indicated that peace of mind was positively associated with academic achievement. These results indicate that students who feel internal peace and harmony are more likely to get higher grades and espouse self-determined from academic motivation.

Findings revealed that the analysis of variance for regression equation was significant using students' academic peace of mind, critical thinking, attitude and academic self-confidence in determining students' academic achievement scores in

mathematics. This indicates that the variables had statistically represented in described the level of learning beliefs which the students have endorsed in the learning process.

Findings revealed that the unique contributions of the components of students' academic peace of mind, critical thinking, attitude and academic self-confidence scores to students' academic achievement scores in mathematics is statistically significant. Using effect sizes to evaluate its adjusted R^2 to compare it with Cohen's *d* statistics guideline, the value of R adjusted square .646 indicated a large size effect. This showed that from the learning beliefs system of the students in the classroom learning, the adaptive learning behavior exhibited by the students robustly facilitated students' learning enthusiasm achieve in mathematics domain. This partly supported the study of Datu (2017), as it was reported that the effect sizes found as regards to the associations among the academic peace of mind, academic motivation and achievement in the study ranged from 1% to 18%.

Conclusion

From the findings of the study, it was concluded that the due to the significant interplay among the predicting variables and predicted variable, it was observed that students' academic peace of mind, critical thinking, attitude, and academic self-confidence, jointly and significantly predicted their academic achievement in mathematics. This shows that the endogenous variables are the key components in the learning environment that affect students' academic progress in different subject specific. With this assertion, the researchers affirmed the quality of learning opportunity created by the students affects their learning behavior and motivation to engage meaningfully in the learning process.

Reccomendations

Based on the findings, the following recommendations were made:

1. As a result of the positive contributions of students' academic peace of mind, critical thinking, attitude, and academic self-confidence, it was recommended that students should adapt these behaviors as robust indicators and facilitators of learning in the academic context.
2. Since academic peace of mind uniquely indicated a negative contribution in determining students' academic achievement, it was recommended that teachers should make the learning environment more friendly so that the achievement emotional state of the students will be positively oriented, which will in turn influence their learning beliefs to achieve optimally.
3. Despite the encouraging findings in the present study by using multiple regression approach, it was recommended that future study on this variabless should examine the interactive effect of these variables on one another. This should be done with path analysis approach to explore the direct and indirect effects of the endogenous variables on the ectogenous variable which the present study was unable to investigate.

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