



THE INTERPLAY AMONG SELF-CONCEPT, AUTONOMOUS ACADEMIC MOTIVATION AND ACADEMIC ACHIEVEMENT OF COLLEGE STUDENTS

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ABSTRACT

Success in academic endeavor is usually aggregate grades obtained by students at various levels. There are many variables that may have an influence on students' ability to achieve academically, these includes cognitive and non-cognitive factors. The literature on psychological assessment is flooded with studies on self-concept and motivation. Several studies support the belief that these constructs are strong facilitator of academic achievement or performance. Thus, a positive or negative change in self-concept and motivation tend to produce a commensurate change in academic achievement. This study therefore investigated the relationship among academic self-concept, autonomous academic motivation, and academic achievement of college students.

A sample of 130 freshmen students participated in the study. The instruments for data collection were the College Students Academic Self-Concept Questionnaire (CSASCQ) and College Students Academic Motivation Inventory (CSAMI). Statistical analyses were performed to ascertain: (1) whether academic self-concept and academic motivation are significantly related to students' academic achievement, (2) whether there is any significant relationship between academic self-concept and academic motivation, and (3) whether self-concept and academic motivation are significant predictors of students' academic achievement.

The findings of study showed that there is a significant positive relationship between academic self-concept and academic achievement; academic motivation and academic achievement; and academic self-concept and academic motivation. Consequently, both self-concept and academic motivation promote positive learning among students. Therefore, these constructs bring out the students' full potential and help them to be successful in their academic engagement.

Keywords: *Academic Self-Concept, Motivation, Achievement, Intrinsic Motivation, Extrinsic Motivation*

1. INTRODUCTION

It is an obligation of teachers to help in the development of their students to be effective learners. Aside from strategies and methods employed inside the classroom, another aspect of teaching is to understand the nature of the students. An understanding of the nature of the students involves the recognition of not only what they can do and cannot do in the classroom, but also their psychological make-up as well as their emotions.

Many learners experience different academic emotions in our schools today (Kumar, 2010). Empirical research suggests that emotions play an important role in students' academic engagement and achievement over and above the predictive value of cognitive and motivational constructs (Pekrun, 2006). The literature on psychological assessment is flooded with studies on self-concept and motivation. Several studies support the belief that these constructs are strong facilitator of academic achievement or performance. Thus, a positive or negative change in self-concept and motivation tend to produce a commensurate change in academic achievement.

According to Yara (2010), students with high self-concept and motivation perform satisfactorily in math. On this premise, it could be hypothesized that students who think positively about their abilities, feel highly delighted in



solving math problems, act promptly in learning math, place high value on the benefits of having high grades in math and evaluate themselves as being capable of performing favorably in mathematical tasks.

Thinking along this line, it is the researcher's belief that investigating the predictive role of motivation and self-concept in mathematics performance of tertiary students is promising. Hence, the researcher's questions about the role of the two constructs (motivation and self-concept) to academic performance becomes the impetus for this study.

Statement of the Problem

This study determined the interrelationship between two psychological constructs – autonomous academic emotion and academic concept – and academic achievement of tertiary level students. Specifically, this study aimed to address the following queries: (1) What describes the academic self-concept and academic emotion of the respondents? Are these variables significantly different when compared according to achievement (high achiever and low achiever)? And (2) Could academic achievement of college students be significantly predicted by their academic self-concept and autonomous academic emotion? If yes, how large was the correlation coefficient?

2. MATERIALS AND METHODS

2.1 Research Design

The nature of the research problems raised in this investigation lend themselves to a mixed method design which is characterized by the collection and analysis of quantitative data followed by the collection and analysis of qualitative data (Creswell, 2003). Typically, the purpose of a mixed method design is to use qualitative results to assist in explaining and interpreting the findings of a primarily quantitative design. The initial quantitative phase of the study may be used to characterize individuals along certain traits of interest related to the research questions. These quantitative results can then be used to guide the purposeful sampling of participants for a primarily qualitative study. The findings of the quantitative study determine the type of data to be collected in the qualitative phase (Gay, Mills and Airasian, 2006).

2.2 Respondents of the Study

The respondents of the study were the 130 freshmen students from the College of Teacher Education. As mentioned, the respondents were bifurcated into two group: (1) High Achieving and (2) Low Achieving. They were divided according to their General Weighted Average (GWA) during the first semester, SY 2018 – 2019. High Achieving students are those students whose GWA fall into the upper quartile while Low Achieving students are those students whose GWA fall into the lower quartile.

2.3 Research Instrument

Consistent with mixed-method design adopted in this study, a combination of quantitative and qualitative measures was used to collect data to answer the research questions raised in the preceding chapter. In the quantitative part of this study, the researcher adopted the College Students Academic Self-Concept Questionnaire (CSASCQ) and College Students Academic Motivation Inventory (CSAMI). Interviews were then be conducted to unravel students' experiences in the qualitative part of the study.

2.4 Statistical Treatment

To answer the queries raised in this research study, the following descriptive and inferential measures were used. To determine the level of academic self-concept and autonomous academic emotion of the respondents, mean as one of the measures of central tendency was utilized. Moreover, descriptive statistics such as frequency and percentage were used to describe the mathematics achievement of the respondents. To test whether there is a significant relationship between academic self-concept and mathematics achievement, autonomous academic emotion and mathematics achievement, and academic self-concept and autonomous academic emotion, Pearson Product Moment Correlation Coefficient was employed tested at 0.05 level of significance. Furthermore, to test whether there is a significant



differences in the academic self-concept and academic emotion of the high achievers and lower achievers, t-test for independent samples was utilized. All statistical computations were analyzed with the aid of Statistical Package for Social Sciences Version 23.

3. RESULTS AND DISCUSSION

Table 1 Respondents' Academic Self-Concept and Academic Emotion

Psychological Construct	Group	Mean Score	P -Value	Interpretation
Academic Self-Concept	High Achieving	4.35 ^a	0.0028**	Significant
	Low Achieving	2.71 ^b		
Academic Emotion	High Achieving	4.15 ^a	0.0035**	Significant
	Low Achieving	2.06 ^b		

Table 1 shows that in terms of academic self-concept, students from the upper group have a very high endorsement of self-concept with a mean score of 4.35 while students from the lower group have a moderate endorsement of self-concept with mean score of 2.71. Using t-test for independent samples with the aid of Statistical Package for Social Sciences (SPSS), analysis reveals that there is a significant difference between the academic self-concept of high achievers and low achievers. The p-value of 0.0028 tested at 0.05 level of significance confirms that high achievers have higher self-concept compared with low achievers.

Moreover, with respect to academic motivation, the table also suggest that students from high achieving group have high endorsement of academic motivation having a mean score of 4.15. On the other hand, low achievers have low endorsement of motivation having a mean score of 2.06. Further analysis also reveals that there is a significant difference between the academic motivation of students from the upper group and the lower group. The p-value of 0.00035 strongly confirms that students from the upper group demonstrates higher endorsement of academic emotion compared with their counterparts.

Table 2 Relationship between the Respondents' Academic Self-Concept, Academic Motivation and Academic Achievement

Psychological Construct	Correlation Coefficient	Interpretation	P -Value	Interpretation
Academic Self-Concept	0.835	Very High Positive Correlation	0.0004**	Significant
Academic Motivation	0.918	Very High Positive Correlation	0.0002**	Significant

Table 2 shows that there is a very high positive correlation between the respondents' academic self-concept and their academic achievement. This implies that a high academic self-concept has been statistically associated with high academic achievement among students. This corroborates with the findings of the research studies conducted



by Hung (2011), Marsh (1990), and Freeman (2008) which suggested that high academic self-concept is directly related to high academic performance. Moreover, further analysis also reveals that there is a significant relationship between the respondents' academic self-concept and academic achievement. The p-value of 0.0004 strongly confirms that the relationship between this psychological construct (academic self-concept) and academic achievement is statistically significant. This was tested at 0.05 level of significance. This implies that the level of endorsement of academic self-concept of the college students predicts their academic performance.

In addition, the analysis also reveals that there is a very high positive correlation between the respondents' academic motivation and their academic achievement. The correlation coefficient of 0.918 implies that a high academic emotion has been statistically related with high academic achievement among students. That is, a highly motivated students will produce a high academic performance. This findings was anchored on the study conducted by Pearson (2008), Boggiano (1997), Rout (2017), and Tella (2007) which suggested that highly motivated students perform better academically than lowly motivated students.

4. CONCLUSION

Statistical analysis indicates that the students' academic self-concept have bearing with their academic achievement. This supports the findings of Hung (2011), Marsh (1990), and Freeman (2008) that there is a positive and significant relationship between students' academic self-concept and their academic performance. Hence, it is imperative for teachers to provide teaching and learning opportunities and experiences among students to improve their academic self-concept especially those students from the low achieving group since it was found out that self-concept is significantly related with their academic performance.

In addition, further analysis also reveals that there is a significant relationship between the respondents' academic motivation and academic achievement. The p-value of 0.0002 strongly confirms that the relationship between this psychological construct (academic motivation) and academic achievement is statistically significant. Therefore, the findings suggests that students' academic motivation have something to do with their academic achievement. That is, motivation significantly predicts students' academic performance. Hence, it is highly recommended that teachers as well as parents and guardians should find ways to help students become motivated (either intrinsically or extrinsically) since it was found out that this psychological construct affects their academic achievement.

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