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# The Predictive Validity of Autonomous Motivation and Self-Concept to College Students' Academic Achievement

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Abstract: Academic success is commonly measured by the aggregate of grades received by students at various levels. The literature on psychological assessment is flooded with studies on self-concept and motivation. Several research back up the idea that these constructs are powerful facilitators of academic success or performance. As a result, a shift in self-concept and motivation tends to correspond to a shift in academic achievement. As a result, the association between academic self-concept, autonomous academic motivation, and college students' academic achievement was investigated in this study. The study enlisted the participation of 130 college students. The College Students Academic Self-Concept Questionnaire (CSASCQ) and the College Students Academic Motivation Inventory were used to collect data (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 academ

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

### 1. Introduction

Teachers have a responsibility to assist their students in becoming effective learners. Aside from the strategies and methods used in the classroom, understanding the nature of the students is an important component of teaching. Recognizing the nature of students necessitates not just an understanding of what they can and cannot do in the classroom, but also an understanding of their psychological makeup and emotions.

In today's classrooms, many students are experiencing a variety of academic emotions (Kumar, 2010). Empirical research reveals that, in addition to the predictive validity of cognitive and motivational dimensions, emotions play a significant influence in students' academic engagement and accomplishment (Pekrun, 2006). Self-concept and motivation research abound in the psychological evaluation literature. Several research back up the idea that these constructs are powerful facilitators of academic success or performance. As a result, a shift in self-perception and motivation tends to correspond to a shift in academic performance.

According to Yara (2010), students who have a positive selfconcept and are motivated do well in mathematics. On this premise, it is possible to hypothesize that students who think positively about their abilities, enjoy solving math problems, learn lessons quickly, place a high value on the benefits of having high grades in their academics, and evaluate themselves as capable of performing favorably in mathematical tasks, are more likely to think positively about their abilities. In this vein, the researcher believes that researching the predictive effect of motivation and self-concept in tertiary students' academic performance is promising. As a result, the researcher's inquiries into the significance of the two components (motivation and self-concept) in academic achievement serve as the catalyst for this research.

#### **Statement of the Problem**

The association between two psychological constructs – autonomous academic emotion and academic concept – and tertiary level students' academic success was investigated in this study. This research sought to answer the following questions: (1) What characterizes the respondents' academic self–concept and academic emotion? Is there a substantial difference in these characteristics when comparing high achievers to poor achievers? (2) Is it possible that a college student's academic self-concept and autonomous academic emotions have a major impact on their academic achievement? If so, what was the magnitude of the correlation coefficient?

## 2. Materials and Methods

#### **Research Design**

The nature of the research problems highlighted in this investigation lend itself to a mixed method approach, in which quantitative data is collected and analyzed first, followed by qualitative data collection and analysis (Creswell, 2003). The goal of a mixed method design is usually to employ qualitative results to help explain and interpret the findings of a largely quantitative study. The study's initial quantitative phase can be used to profile people based on particular features that are relevant to the research topics. These quantitative findings can then be used to inform the selection of participants for a qualitative research. The sort of data to be collected in the qualitative phase is determined by the findings of the quantitative investigation (Gay, Mills and Airasian, 2006).

#### **Respondents of the Study**

The study's participants were 130 college students from a Philippine higher education institution. As previously stated, the respondents were divided into two groups: high achievers and low achievers. During the first semester of the 2018–2019 school year, they were separated into groups based on their General Weighted Average (GWA). Students who have a GWA in the higher quartile are considered high achievers, whereas students who have a GWA in the lower quartile are considered low achievers.

#### **Research Instrument**

A mix of quantitative and qualitative measures were employed to collect data to address the research questions established in the preceding section, in keeping with the mixed-method approach utilized in this study. The College Students Academic Self-Concept Questionnaire (CSASCQ) and the College Students Academic Motivation Inventory were used in the quantitative section of this study (CSAMI). In the qualitative portion of the study, interviews were then conducted to uncover students' experiences.

#### **Statistical Treatment**

The following descriptive and inferential measures were used to answer the questions posed in this study. The mean was used as one of the measures of central tendency to determine the amount of academic self-concept and autonomous academic emotion of the respondents. In addition, descriptive statistics like frequency and percentage were utilized to describe the respondents' arithmetic abilities. The Pearson Product Moment Correlation Coefficient was used to determine if there is a significant association between academic self-concept and mathematical achievement, autonomous academic emotion and mathematics accomplishment, and academic self-concept and autonomous academic emotion.

## 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 <sup>a</sup>	0.0028**	Significant				
	Low Achieving	2.71 <sup>b</sup>						
Academic Emotion	High Achieving	4.15 <sup>a</sup>	0.0035**	Significant				
	Low Achieving	2.06 <sup>b</sup>						

Table 1 demonstrates that students in the higher group have a very high endorsement of academic self-concept (mean score of 4.35), whereas students in the lower group have a moderate endorsement of self-concept (mean score of 2.71). Analysis of the academic self-concept of high achievers and low achievers using t-test for independent samples with the help of Statistical Package for Social Sciences (SPSS) finds that there is a significant difference between the academic self-concept of high achievers and low achievers. High achievers have a greater self-concept than low achievers, as evidenced by the p-value of 0.0028 at the 0.05 level of significance.

Furthermore, when it comes to academic motivation, the table shows that students in the high-achieving group have a high level of support for it, with a mean score of 4.15. Low achievers, on the other hand, show a low endorsement of motivation, with a mean score of 2.06. A further examination finds that there is a considerable variation in academic motivation between students in the upper and lower groups. The p-value of 0.00035 significantly suggests that students in the upper group had a greater level of academic emotion endorsement than their classmates.

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 reveals that the respondents' academic self-concept and academic accomplishment have a very strong positive link. This means that pupils with a strong academic selfconcept have been statistically linked to good academic performance. This supports the findings of research studies undertaken by Hung (2011), Marsh (1990), and Freeman (2008), which found a link between good academic selfconcept and high academic achievement. Furthermore, further research demonstrates that the respondents' academic self-concept and academic accomplishment have a substantial link. The statistical significance of the association between this psychological construct (academic self-concept) and academic accomplishment is clearly supported by the p-value of 0.0004. 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.

Furthermore, the data demonstrates that the respondents' academic motivation and academic achievement have a very strong positive link. A strong academic emotion has been statistically linked to good academic achievement among students, according to the correlation coefficient of 0.918. That is, highly driven students will get excellent academic achievement. This conclusion was based on a research by Pearson (2008), Boggiano (1997), Rout (2017), and Tella (2007), which found that highly driven students outperform weakly motivated individuals academically.

# 4. Conclusion

According to the present study, students' academic selfconcept influences their academic performance. This backs up Hung (2011), Marsh (1990), and Freeman (2008) studies that show a favorable and substantial link between students' academic self-concept and their academic achievement. As a result, it is critical for instructors to give students with teaching and learning opportunities and experiences in order to develop their academic self-concept, particularly among low-achieving students, as self-concept has been demonstrated to be highly connected to academic performance.

Furthermore, further research demonstrates that the respondents' academic motivation and academic achievement have a substantial link. The statistical significance of the association between this psychological construct (academic motivation) and academic accomplishment is clearly supported by the p-value of 0.0002. As a result, the data imply that students' academic drive plays a role in their academic success. That is, students' motivation has a major impact on their academic achievement. As a result, it is strongly advised that educators, as well as parents and guardians, discover strategies to assist kids in becoming motivated (either intrinsically or extrinsically), as this psychological construct has been linked to academic accomplishment.

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