

## Self-Concept, Attitude to Course of Study and Academic Achievement among Students of Tertiary Institutions in Katsina State, Nigeria

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### Abstract

The study sought relationship between self-concept and attitude to course of study in relation to academic achievement among students in tertiary institutions in Katsina state, Nigeria. Questions raised lead to the generation of hypotheses like self-concept was not significantly related to academic performance and that self-concept was not a better predictor of academic performance than attitude to course of study. The study utilized the correlational survey designed using APDI, ACS and AA instruments to collect data that was analyzed using Pearson's product moment correlation coefficient and regression analyses. With  $p$ -values of .000, hypotheses 1 – 3 were not accepted respectively. But, a  $\beta = .070$ ,  $t = 24.203$ ,  $p < .05$  lead to the conclusion that attitude to course of study is a better predictor of academic achievement. Among recommendations made were that counsellors, and parents should employ means of motivating students to develop more positive attitudes towards what they learn for the maximum achievement of their educational aspirations. Tertiary institutions should help students to develop more positive self-concept through appropriate counselling measures as this will greatly help in easing whatever academic, personal-social or/and career challenge(s) that they may face in the course of their studies.

**Keywords:** Self-Concept, Attitude to course of study, Tertiary Institution, Academic achievement

### Introduction

Parents, lecturers and the government has been noticing an unprecedented low academic achievement among students and this has started to be linked to how students' confidence and interest in what they are studying may be playing a vital role for such an uncalled-for trend despite funding and efforts.

Academic achievement of a student is the ability of the student to study and remember facts and being able to communicate his knowledge orally or in written form even under examination conditions (Verešová, and Malá<sup>a</sup>, 2016). In this study, academic achievement is determined by the performance of students in different courses over a period of time. This could be described, in other words, as the sum of an individual's performance in tests and examinations given within the institutions' system at the end of every semester or session results of which interpreted into Grade Point Average and Cumulative Grade Point Average (Yahaya, 2010).

Empirical studies abound about how self-concept and attitude affect academic performance thus, Adebayo (1995) observes that among the personality factors that contributes to academic performance are self-concept and attitude. A learner's attitude relates to all the factors of his education. Furthermore, an important factor that has been noted as contributing to good results of students in individual subjects is their attitude towards them (Sejčová, 2006). Dulton (2004) also maintains that attitudes are related to academic performance when measured on promotion grades. That was why Akinola (2003) pointed that attitude has a greater influence on aspects of learning which are emphasised in the classroom. And Sejčová (in Verešová, and Malá<sup>a</sup>, 2016) concludes that an attitude towards a subject reflects a measure of popularity that, in turn, reflects a tendency to undertake actions required by the subject and the satisfaction gained from these actions.

Theory of productivity by Walberg, Fraser, & Welch (1986) postulates that individual students' psychological attributes and the psychological environments surrounding them influences cognitive, behavioural and attitudinal learning outcomes. This theory was relevant for this study because it is suitable about the factors influencing a like or dislike of courses and those influencing students' performance.

Self-concept refers to self-evaluation or self-perception, and it represents the sum of an individual's beliefs about his or her own attributes. It reflects how an individual evaluates himself or herself in *domains* (or areas) in which he or she considers success important (Hadley, Hair and Moore, 2008). Thus, self-concept is how we think about and evaluate ourselves. To be aware of oneself is to have a concept of oneself. The term self-concept is a general term used to refer to how someone thinks about or perceives themselves.

The self-concept is the accumulation of knowledge about the self, such as beliefs regarding personality traits, physical characteristics, abilities, values, goals, and roles. It refers to the global understanding a sentient being has of him or herself. It presupposes but can be distinguished from self-consciousness, which is simply an awareness of one's self. It is also more general than self-esteem, which is the purely evaluative element of the self-concept. It is normally viewed as being composed of relatively permanent self-assessments, such as personality attributes, knowledge of one's skills and abilities, one's occupation and hobbies, and awareness of one's physical attributes.

The study of self-concept has awakened growing interest in psychological research but, despite the profusion of studies devoted to it, it is difficult to find a unanimous, accepted definition of the term, given that it has been approached from different theoretical perspectives. Nonetheless, there exists an agreement among the different authors in that the term self-concept has a multi-dimensional nature. It is considered to comprise various dimensions, areas or facets, some of which are more related to certain personality aspects (physical, social, emotional), while others appear to be more linked to academic achievement (in different areas and subjects).

In very general terms, self-concept may be defined as the accumulation of an individual's self-perceptions (Wigfield & Karpathian, 1991), particularly those perceptions relating to relative ability (Byrne & Shavelson, 1986). According to Clark (2000), self-concept is considered to

comprise various dimensions, areas or facets of academic and non-academic components. Academic self-concept is then divided into self-concept in particular subject areas (Mathematics, English, and so on) while nonacademic is divided into social, emotional, and physical self-concepts. These perceptions are derived from experiences with the social environment as information is supplied by significant others in the home, school and community (Cole, Maxwell, Martin, Peeke, Seroczynski, Tram, et al., 2001; Hau, Kong, & Marsh, 2000). Since a person cannot exist alone, the self-concept must be taken in context; that is, a person may think differently of himself in various situations, but a self-concept in one situation may tend to generalize to other situations (Plucker and Stocking, 2001). For instance, if a person does what he/she considers as satisfactory in several situations, he/she is likely to perceive him/herself as adequate in other situations, and likewise an inadequate self-concept may tend to generalize. And it has been observed that students' subjective and personal evaluation of themselves – their self-concept – has a dominant influence on their success or failure in schools (Yahaya, 2010).

Attitude can be seen as a relatively enduring organization of beliefs, feelings, and behavioural tendencies towards socially significant objects, groups, events or symbols (Hogg & Vaughan, 2005). Attitudes are unconsciously learned through experience. Extensive research has shown that a person's attitudes are learned, as opposed to being inherited. Many factors can influence a person's attitude, including previous experiences and social influences (Craker, 2006). Attitudes are emotionally formed beliefs directed towards or against something or someone. Self-attitudes only differ from attitudes to other things in that they are reflexive, with the individual being the object of his own attitude. Because of this inward direction, the emotions and evaluations aroused by the belief component of the attitude are very strong. It is possible to avoid, rationalize, project and use a wide variety of defenses to devalue the attitudes of others to oneself. According to Syeeda (2016) and Hogg and Vaughan (2005) attitude has three main component. They structured attitude in terms of ABC components of affective component (involving a person's feelings / emotions about an attitude object), behavioural or conative component (which is the way the attitude we have influences how we act or behave) and cognitive component (involving a person's belief/knowledge about an attitude object).

Various literature and studies have revealed how attitude to course of study is very important in understanding how student' synergize with learning strategies to enhance overall learning outcome (Sankaran, Sankaran, and Bui, 2000). That was further reiterated when learning outcome was found to be positively affected by student attitude to course formats when Gee (1990) explored the impact of student's attitude to instructional settings on academic achievement. Accordingly, Jegede (2003) pointed out that students' positive attitude to science correlate highly with their science achievement. And a study by Adodo (2006) also shows that students positive attitude toward Integrated Science correlate with achievement. Moreover, in a related development, Balarabe (1990) found a significant relationship between students' social-class background and their academic motivation and attitudes towards the contents of learning in schools. Kiamanesh (2004) shows that researchers have suggested that achievement in Mathematics in secondary schools is a function of many interrelated variables among which is students' attitude and perceptions towards course offerings.

Those concerned with the education of such students usually forget about the important aspects of what students feel and how they think about their abilities generally; how they feel about what they are studying in terms of interest, difficulty and the social benefit it stands to offer them. To this end, the study attempts to find out how self-concept and attitude to courses of study affect the academic achievement of students among students of tertiary institutions in Katsina state.

### Hypotheses

The following null hypotheses were generated for the conduct of the study.

H0<sub>1</sub> There is no significant relationship between self-concept and academic performance of students.

H0<sub>2</sub> There is no significant relationship between attitude to course of study and academic performance of students.

H0<sub>4</sub> Students' self-concept is not a better predictor of their academic performance than attitude to course of study.

### Methodology

The study used the correlational survey design. Measures of self-concept and attitude to course of study are the predictors or independent variables while the measure of academic achievement is the dependent variable. The population of this research was the entire 54, 671 students of government owned tertiary institutions in Katsina state. The students' population concerned here comprises all the students undergoing Undergraduate studies, National Certificate in Education (NCE) and Higher National Diplomas (HND) & National Diplomas (ND) (Department of Higher Education Katsina State, 2019). Five hundred (500) subjects were drawn from the total population by the multistage simple random sampling technique (See Table 1). This constructs a 95% confidence interval with a Margin of Error of about  $\pm 4.4\%$  (<http://research-advisors.com/>, 2006). Level of Significance was at 0.05.

**Table 1: Sample for the Study**

S/N	Selected Institutions	Total Population	Proportionate Sample	Percentage
1	Federal University, D/Ma Katsina State	9,607	88	17.6%
2	Umaru Musa 'Yaradua University, Katsina	12,966	119	23.7%
3	Federal College of Education, Katsina	10,545	96	19.3%
4	Hassan Usman Katsina Polytechnic, Katsina	9,547	87	17.5%
5	Isah Kaita College of Education D/Ma, Katsina State	8,741	80	16.0%
6	Bala Usman College of Legal and General Studies Daura, Katsina State	3,265	30	6.0%
<b>TOTAL</b>		<b>54,671</b>	<b>500</b>	<b>100%</b>

### Instrumentation

To achieve this study's purpose and to obtain relevant information, the following instruments were used.

- a) Adolescent Personal Data Inventory – The researcher used the Subscale A of Adolescent Personal Data Inventory (APDI) developed by Akinboye (1986). Tambawal (2001) has adapted the Section which measured self-concept. The instrument was validated by a group of lecturers of Federal College of Education (Tech.) Gusau and School of Nursing and Midwifery Sokoto. With the unanimous agreement as to content and quality of the items, the instrument was adjudged to possess content validity. The results of the test-retest produced a fairly high Co-efficient Alpha of 0.874. This study completely adopts this instrument.
- b) Attitude Scale – AS (with subscales on Interest, Difficulty, and Social-Benefits of learning) (Balarabe 1989, adapted version) which measured attitude to course of study. Validation was done by experts in the Department of Education at Usmanu Danfodio University Sokoto and Umar Musa Yar’adua University Katsina going through the modified instrument. Factor analysis of the AS under the three basic factors of Interest, Difficulty and Social Benefit obtained a unanimous agreement as to content and quality of the items, thus it was deemed to have content validity. Its reliability was measured by the internal consistency method where a split-half measurement produced a Co-efficient of 0.84 (Yahaya, 2010).
- c) A researcher developed Academic Achievement Test (AAT) which measured the subjects’ academic achievement. Validation was done by a group of lecturers at the Department of General Studies at Umar Musa Yar’adua University, Katsina, Federal College of Education, Katsina and Hassan Usman Katsina Polytechnic, Katsina going through the test items. Construct validity was determine by how the test measured the respondents’ recognizable quality of intelligence which to some degree count for academic performance, concurrent validity was determined by how the test estimate current performance in the test with the respondents’ academic standings in the institution and also content validity was determined by how the items measured the subject-matter knowledge of the respondents. Reliability was determined by the use of inter-rater technique, which produces a percentage of agreement of 91.3% (Yahaya, 2010).

## Results

Table 1: Relationship between self-concept and academic achievement of students.

Variables	N	Mean	Std. Deviation	<i>r</i> -Cal	<i>p</i> -value	Decision
Academic Achievement	500	3.31	1.039	.413	.000	Sig.
Self-Concept	500	166.76	11.391			

Table 1 shows that relationship between self-concept and academic achievement was positive and significant, Pearson’s  $r(498) = .413$ ,  $p = .000$ . This indicates a significant relationship between self-concept and academic achievement because the  $p$ -value is less than the .05 level of significance. Therefore,  $H_{01}$  which states there is no significant relationship between self-concept and academic achievement of students is rejected. This means that self-concept of students in tertiary institutions in Katsina is an important factor for their academic achievement.

Table 2: Relationship between attitude to course of study and academic achievement of students.

Variables	N	Mean	Std. Deviation	<i>r</i> -Cal	<i>p</i> -value	Decision
Academic Achievement	500	3.31	1.039	.320	.000	Sig.
Attitude to Course of Study	500	61.49	4.764			

Table 2 shows that relationship between academic achievement and attitude to course of study was positive and significant, Pearson's  $r(498) = .320, p = .000$ . This indicates a significant relationship between academic achievement and attitude to course of study because the *p*-value is less than the .05 level of significance. Therefore,  $H_{02}$  which states there is no significant relationship between academic achievement and attitude to course of study of students is rejected. This means that students' attitude to course of study in tertiary institutions in Katsina is an important factor for their academic achievement.

Table 3: Prediction of self-concept and attitude to course of study to academic achievement of students.

Variables	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	SE	$\beta$	F	t	<i>p</i> -value
SC	.413	.171	.169	.947	.038	102.426	18.713	.000
ACS	.320	.103	.101	.985	.070	56.889	24.203	.000

Dependent Variable: Academic Achievement

SC: Self Concept

ACS: Attitude to Course of Study

From table 4, a look at the squared part correlations revealed that self-concept accounted for 17.1% of the variance in academic achievement  $R^2_{adj} = .169, F(1, 499) = 102.426, p < .05$  while attitude to course of study accounted for 10.3% of the variance in academic achievement  $R^2_{adj} = .101, F(2, 498) = 56.889, p < .05$ . Thus, the significant results of the procedure indicated that the combination of the predictor variables were able to account for a significant amount of variance in the dependent variable.

Although self-concept was an explanatory variable of academic achievement, analysis of regression coefficients indicated that attitude to course of study,  $\beta = .070, t = 24.203, p < .05$  emerged as the significant predictor when all variables were in the model. This indicated that attitude to course of study was a better predictor of students' academic achievement than their self-concept. Therefore,  $H_{04}$  is not accepted. Thus, it is concluded that attitude to course of study predict students' academic achievement than their self-concept.

## Discussion

The first finding of this study indicates a significant positive relationship between self-concept and academic achievement of students. The findings of this study is in accord to the findings of studies by Hasenzadeh, Hussini and Moradi (2004), Marsh and Yeung (1997), Yoon, Eccles and

Wigfield (1996) and that of House (1993) though the result of this study do not lent support to the findings of Muhammad (2007), Salawu (1991), Adediran (1992), Adesanya (1984). This provides evidence that the academic achievement of students in the area of study had bearing with their self-concept or, in other words, students' self-concept has a great amount of influence on their academic achievement. This then rightfully reconfirm the conclusion drawn by Madden as cited in Salawu (1991) that one of the important single cause of students' success or failure educationally relates directly to the question of what they believe about themselves.

Another finding showed that relationship between attitude to course of study and academic achievement was positively significant. This is not surprising as studies like that of Williams (2004), Finger and Schlessner (2002) and Brodie (2001) pointed that attitudes towards school and learning are associated with academic achievement and significant relationships were found between attitude to a subject and achievement in that subject. Similarly, a significant relation between the concept of attitude towards school and learning and academic achievement was established also by Geddes, Murrell & Bauguss (2010), Newton & Mwisukha (2009) and Ak & Sayil, (2006). Consequently, Candeias, Rebelo & Oliveira (2010) concludes that students with poor academic performance have a more negative attitude towards learning and believe that school and learning will not help them being successful in the future. This study, therefore, provides evidence that attitude to course of study of students in the study area had a lot of bearing on their academic achievement, or in other words, students' attitude to courses of study has a great amount of influence on their academic achievement.

Finally, the study reveals that though both self-concept and attitude to course of study are significant with respect to students' academic achievement, it further indicates that attitude to course of study is a better predictor of academic achievement of students than self-concept. This the result support the findings of Meyer (1988), Hummell and Roselli (1983) and Bakare (1975) who earlier reported that academic achievement of students in the area of study was mostly predicated by their attitude to course of study and that the variation in it was also explained by it. In other words, students' attitude to course of study has bearing on their academic achievement.

### **Conclusion**

The study was able to show that the inter play of self-concept and attitude to course of study were very essential to the academic achievement of students in the area of study. It also confirmed that attitude to course of study was quintessence to the academic achievement of students in the area of study. It also connotes that self-concept relates satisfactorily with academic achievement.

### **Recommendations**

The government, counsellors, the school, parents and all others should employ means of motivating students to develop more positive attitudes towards what they learn for the maximum achievement of their educational aspirations. Similarly, the institutions should help students to develop more positive self-concept through appropriate counselling measures as this will greatly help in easing whatever academic, personal-social or/and career challenge(s) that they may face in the course of their studies. Finally, all those concern with educating students should contribute their best so that positive self-concept and healthy attitudes are developed and geared towards the realization of the desired aims.

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