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Abstract

This study examined self-concept and academic performances of NCE III Students in Colleges of Education in Adamawa State. It was conceived in order to understand the parameter of self- concept as a determinant of academic performance among this category of students. Thus, two research questions and two hypotheses were drawn as guides for the study. The NCE II CGPA and the teaching practice results of 384 NCE III students who were categorized as having positive and negative self-concept using a Self-Concept Inventory Questionnaire (SCIQ) were used. The reliability of the SCIQ was found to be 0.76. The analysis of the data using mean score, standard deviation and t-test of independent samples showed that there was a significant difference between the mean score of students with positive self-concept and that of students with negative self-concept. The mean scores were based on the performances of students in theory papers and teaching practice. Based on the findings, it was recommended that necessary conditions be created for the development of positive self-concept in students especially those of Colleges of Education. This is particularly important because prospective teachers and those in training need to acquire substantial knowledge and skills to enable them pass same to those learners under their supervision for a better society.

Introduction

Academic success is no doubt the main focus and concern of all educational activities, thus it has received tremendous attention from sociologists, psychologists and educationalists where considerable efforts have been directed towards uncovering factors that inhibit or facilitate academic performance and achievement. The assertion that predictability of academic achievement is a complex task is meaningfully shared and accepted by these categories of individuals alike. This however is because there are many intricately related factors associated with academic achievement which make prediction of academic achievement at best situational.

Educational research literature is replete with findings which indicate that academic performance or achievement is apparently difficult to predict due to too many factors operating on the learner (Momoh-Olle, 1992). For instance, Ferguson (1991), posited that parental educational background accounted for about 24% of the variance in student's performances while socio-economic status accounted for 26%.

Other researchers like Laosa (1978) and Frymier and Gansneder (1989) contended that, dysfunctional home environment, low parental expectation, ineffective parenting and language difference might account for the low academic performance of learners from low socio-economic background. While on their part, Trueba (1988), Wells (1990) and Delgo-Gaitan (1992), are of the view that congruence between home and school culture is a good predictor of academic performance. This means that students tend to be more successful when their home and school culture are similar. Conversely, they tend to be less successful when there is a disconnection between home and school cultures. To remove self-concept from the list of the factors affecting academic performance is to underestimate the function of self-concept as a limiting and facilitating factor in students' academic performance (Janakiran, 1982). In recent time, considerable efforts have been directed to the study on the relationship between self-concept and academic performance in schools. It has however been suggested that students with negative self-concept are likely to experience more difficulty with their studies than students with positive self-concept (Waltensberg & Clifford, 1964).

In an attempt to find out the closeness between self-concept and academic performance of students, many scholars such as Castejon and Perez (1998), Zsolnai (2002) and Abdell (2002) revealed that self-concept is related to academic performance. While some of the scholars are of the opinion that self-concept is significant in the determination of academic performance at all levels, others are of the view that it does not apply to all levels of education and subjects. It was based on this position that this present study was contemplated to verify the impact of self-concept on the academic performances of students in colleges of education.

Evidences from studies on self-concept in Africa appear to have been inconclusive. Thus, Calysn and Kenny (1977) stated that, although the general belief is that positive self-concept may be an advantage in influencing entry into the school system, it may only be casually associated with the process of academic performance.

Most of the evidences emerging from these studies only suggest that over and under achievement particularly in Africa are not necessarily affected by self-concept differentials. This is because the evidences also point to the paucity of information relating to other factors that may be operating on the learners with positive and negative self-concept to produce over and under achievement.

It is against this background that this study was designed to investigate the link between self-concept and academic performances of students in tertiary institutions with particular reference to Colleges of Education. Due to the complexity of self-concept, that is having psychological and sociological implications, this study concentrates not on clearly designated self-concept but positive and negative self-concept in teacher education.

Research Questions

The following research questions have been asked:

- 1) How does the self-concept of the different – categories of students determine their levels of academic performances in theory taught courses?
- 2) To what extent does self-concept of NCE III students determine their levels of academic performances in teaching practice?

Hypotheses

The following hypotheses were formulated:

- Ho₁: There was no significant difference in the mean score of students with positive self-concept and those of students with negative self-concept in theory taught courses.
- Ho₂: There was no significant difference between the mean score of students with positive self-concept and the mean score of students with negative self-concept in teaching practice.

Methods and Procedure

One research design was used in the study and it is a causal comparative or ex post facto design. The causal comparative research design otherwise called the ex post-facto research design was used in comparing two different samples of the students on a particular variable. The study compared two categories of students on the variable of academic performance and self-concept. The design also recognized the fact that the situation has already taken place and the issues were examined in retrospect.

The target population comprised of all NCE III students of the Colleges of Education Hong and the Federal College of Education Yola. The total population stood at 3,831 with College of Education Hong attracting 1,693 while FCE, Yola attracted 2,138 students. Due to the large population size, it was necessary to obtain sample sizes from the two colleges' population. Thus, the two college populations were considered as two strata from which the simple random sampling technique was applied to obtain the sample sizes.

The samples obtained showed, 215 students from the 2138 students of FCE Yola giving a sampling percentage of 55.9% while 169 students representing 44.1% from the total of 1693 students of COE Hong was selected.

Two instruments for data collection were used and they included:

- i) Self-Concept Inventory Questionnaire (SCIQ). This was developed by the researcher. However, the items were adapted from the Piers-Harris Children Self-concept Scale (1984), the Rosenberg self-esteem scale (1965) and the Marsh Self-Description Questionnaire (1992). The questionnaire consist of two sections which are A and B. Section A provides information on the respondents' Bio-data while Section B consists of 15 closed-ended and structured items constructed using the points modified Likert Scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD), scored as 4,3,2 and 1 respectively.
- ii) Student's Academic Record Form (SARF). This instrument was developed as a proforma and used to collect information on the samples' academic standings. It has six columns which are research code, registration number, remark, course of study, CGPA, NCE II and grade in Teaching Practice.

The SCIQ was subjected to test of validity. The content validity establishment was necessary since the instrument was not a standardized one. Thus, the developed instrument was subjected to experts judgments to scrutinize it for appropriateness based on the research objectives. Based on observations made by the experts, the items were re-modified.

The reliability of the SCIQ was determined by the Pearson Product Moment correlation using the test re-test method. This test yielded a value of 0.76 which according to Ibanga (1992) is considered reliable.

The research questions were answered using mean (\bar{x}) and standard deviation while the hypotheses were tested using the students "t" test for independent samples.

Research Questions

RQ₁: To what extent does the self-concept of the different categories of NCE Students determine their levels of academic performances in theory taught courses?

Table 1: Mean and standard deviation on performances of the different categories of NCE students in theory taught courses.

	A	B	C	D	E	N	X	SD
Positive self concept	28	101	60	35	33	257	3.24	1.15
Negative self concept	05	34	22	34	32	127	2.5	1.24

Information from the values in Table 1 reveals that the nature of the Self-concept of the students determines their levels of academic performances in theory taught courses. Students with positive self-concept had a mean score of 3.24 while the students who exhibited negative self-concept obtained a mean score of 2.5. The difference between the two means showed a value of 0.74 which cannot be considered insignificant. The implication of the findings is that self-concept nature was a strong determinant of the academic performances of the students in theory taught courses. This finding could have agreed with that of Leimy (1965) which reveal that self-concept determines a student's level of school performance. Though, the time period between the two findings spans over several decades, it only justifies the potency of the factor.

RQ₂: To what extent does the self-concept nature of NCE III students determine the levels of their academic performances in teaching practice?

Table 2: Mean and Standard Deviation Table Showing the Academic performances of the NCE III Students in Teaching Practices.

Category of students	A	B	C	D	E	N	X	SD
Positive self concept	33	95	66	36	27	257	3.28	1.17
Negative self concept	08	39	23	32	25	127	2.79	1.25

Information in Table 2 shows that students with positive self-concept obtained a mean of 3.28 and a Standard Deviation of 1.17 while those with negative self-concept had a mean score of 2.79 with a Standard Deviation of 1.25. The difference between the two means but in favour of students who exhibited positive self-concept dispositions is 0.32. This seems to have caused the deviation which manifested in the performances of the two categories of students in the teaching practice exercise. The outcome of this research question tallies with that of Copper-Smith (1967) which reveals that there is a positive relationship between self-concept and academic performance. It shows that self-concept to a large extent determined students/learners levels of performances in teaching practice exercise. Though, the two researches were conducted on different cultural environments, there was agreement in the findings. Also, that the time-span between the two researches did not interfere with the phenomenon observed. Thus, self-concept may have a global prevalence.

Research Hypotheses

H₀₁: There is no significant difference between the mean score of NCE students with positive self concept and that of students with negative self-concept in theory taught courses.

Table 3: Summary of t-test analysis for students with positive and negative self-concept in mean theory taught courses.

Category of students	N	X	S ₂	CAL 't'	Sig Level	Df	Table Value	Dec
Positive self concept	257	3.24	1.31	5.163	0.05	382	1.645	Ho
Negative self concept	127	2.57	1.54					rejected

In Table 3, it is clear that the calculated 't' value of 5.153 is greater than the table 't' value of 1.645 at 0.05 level of significance. This indicated that using the normal curve for hypothesis testing, the calculated value falls within the rejection region. The interpretation is that, there is a significant difference between the mean score of students with positive and negative self-concepts in their performances in theory taught courses. This implies that self-concept has remained a potent factor in the determination of students' performances. Thus, Evans and Anderson (1973) have alluded to this position which has been proven even after many years of researching.

R₀₂: There is no significant difference between the mean score of NCE III students with positive self-concept and that of students with negative self-concept in teaching practice.

Table 4: Summary of t-test analysis of students with positive and negative self-concept in teaching practice.

Category of students	N	X	S ²	CAL 't'	Sig Level	Df	Table Value	Dec
Positive self concept	257	3.28	1.38	3.769	0.05	382	1.645	H ₀ rejected
Negative self concept	127	2.79	1.57					

In Table 4, the calculated 't' value of 3.769 is greater than the table 't' value of 1.645 at 0.05 level of significance. Thus, the null hypothesis was rejected while the interpretation shows that there is a significant difference in the performances of the two categories of students.

This finding is in agreement with the earlier finding of Janakiram (1982), Copper-Smith (1967) and Brook Over et al (1965) who stressed that students with positive self-concept performed better than those with negative self-concept when the influences of other factors are controlled.

Conclusion

Academic performance is no wonder the main focus and concern of all educational activities, but its determination is a complex task because there are many intricately related factors associated with academic performance. Among these factors is self-concept. Thus, the relationship between self-concept and academic performance of NCE III Students in Colleges of Education in Adamawa State was examined. The findings revealed that the self-concept dispositions of the students determined their performances in theory taught courses and teaching practice.

Recommendations

Based on the findings of this study, the underlisted recommendations were made:

- Students should develop and sustain positive self-concept for academic pursuits because capacities are usually hinged on positive self-concept integrity. Development of relevant capacities for the acquisition of positive self-concept should normally be based on the social value of society for which the school curriculum addresses. Learning instructors should always give positive social labels to learners. This has been proved to be very useful in upgrading the self-concept of learners.
- Teachers should assist youngsters and learners to develop positive self-concepts. In this regard, it should be noted that manners and facial expressions are vital in the development and modification of the learner's self-concept. Learning instructors should clearly express acceptable manners for students to emulate.
- Parental roles are necessary in self-concept development. The first nature of the child's self-concept is the one that is imbibed or inculcated from the home which obviously comes from the parents. When the child advances in age, he may find it necessary to alter or moderate his self-concept, but basically his initial characters are picked from the home. Thus, parental attitudes if they must positively influence the child's self-concept must be positively expressed to the child.
- Institutional roles are also necessary in the development of self-concept of learners. This can be carried out through periodic orientation programs for learners.

References

- Bandura, A. (1977). *Social learning theory*. New Jersey: Norton Press.
- Coser, L.A. (1977). *Masters of sociological thought: 2nd edition*. New York: Harcourt Brace Jovanovich.

- Brookover, W.B., Lepere, J. Hawachek, E.d. Thomas, S. & Erickson, E.L. (1965). Self-concept of ability and school achievement. *Sociology of Education*, 37, 271-278.
- Burns, R.B. (1979): *The Self-Concept: Theory, measurement development and behaviour*. London: Longman.
- Copper-Smith, A. (1967). *The antecedent of self-esteem*. San Francisco: W.H. Freeman.
- Delgado-Gaitan, C. (1992). School matters in Mexican – American Home. *American Educational Research Journal*, 29, 495-513.
- Ferguson, R. (1991). Paying for public education: New evidence of how and why money matters. *Harvard Journal of Legislation*. 28,465-498.
- Frymier, J. & Gransneder, B. (1989). The Phi-Delta Kappa study of students' at risk. *Phi-Delta Kappa*, 71, 142-146.
- Janakirama, V. (1982). Management, training and development in Nigeria. *A paper presented at National Conference organized by Mathematics and Mathematical Education, Zaria, Kaduna*.
- Momoh – Olle, J.Y. (1992). The relationship between student's entry grades and academic performance at Kwara State College of Education. *Ilorin Journal of Education*, 12 (1), 65-73.
- Tueba, H.T. (1988). Culturally based explanation of minority student's academic achievement. *Anthropology and Education Quarterly*, 19, 270-287.