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EFFICACY OF SELF-CONCEPT THEORY ON THE ACADEMIC PERFORMANCE OF SECONDARY SCHOOL STUDENTS IN OREDO LOCAL GOVERNMENT AREA OF EDO STATE



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ABSTRACT

This study sought to investigate the efficacy of self-concept theory on the academic performance of secondary school students in Oredo Local Government Area of Edo State. To guide the study, three hypotheses were formulated and were also tested at 0.05 alpha level of significance. The design used for the study was a pre-test post-test non-equivalent control group quasi- experimental design. The population of the study consisted of all the public mixed Senior Secondary II students in Oredo Local Government Area of Edo State and the sample used for the study comprised 236 students. The instrument for data collection for the study was a questionnaire titled Self-concept and Academic Performance Questionnaire" (SAPQ). The instrument which was adopted from Rady and Nady (2016) and modified by the researcher was validated by two experts, obtained a reliability index of 0.78. During treatment procedures, the two groups were pretested, the experimental group was exposed to Self-concept theory while the control group was not exposed to any treatment and after treatment administration, both groups were post tested and the finding, among others, showed that there is a significant difference between the academic performance of adolescents in the experimental and control groups after treatment among secondary school students in Oredo Local Government Area of Edo State. This showed the efficacy of self-concept theory used in sensitizing the experimental group. As their self-concept mean score increased, their academic performance significantly increased. Based on the findings therefore, it is recommended that counsellors should employ self-concept theory to enhance academic performance of secondary school students.

KEYWORDS: Self-concept Theory, Academics, Experimental Group, Control group and Performance

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INTRODUCTION

Background to the Study

Students' academic performance plays an important role in producing the best quality

graduates who will become great leaders and manpower for the country thus responsible for

the country economic and social development. Philipson and Philipson (2007) defined

academic performance as "the measured ability and performance level of a learner in a school,

subject or particular skills". In other words, academic performance deals with a learner's

scholastic ability and attainment, as regards his or her work and this is often measured

through tests, exams, course works and assignments. Furthermore, "academic performance is

the outcome of education the extent to which a student, teacher or institution has achieved

their educational goals. It is commonly measured by examinations or continuous

assessment but there is no general agreement on how it is best tested or which aspect is most

important procedural knowledge" Park & Kim. (2010).

Students are more or less concerned with their results in examination. This achievement of

student is much more linked to their knowledge about potentials and talents they possess.

Academic achievement has been very interesting area of study for researchers and they define

this term differently. Zimmerman (1997) defines academic achievement as student's

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accomplishments in a given academic field. It refers to how students become successful in achieving their educational goals. Educational institutions usually maintain record of student's academic achievement in order to find out whether their current educational policies and styles are working or not, and to decide what kind of changes are required in order to increase student's academic achievements. There are two sets of definitions for academic achievement that are used when it is evaluated. The definition given by Coetzee (2011) is that achievement in the field of academics tells about the scoring of student's information in order to evaluate understanding of adjustment regarding their school task and the education system. The second set of definition is quite biased, and proposed that achievement of the student in school is dependent upon his approach towards his potentials and abilities (KhadiviZand 1982) and one of the most significant factors responsible for students' academic performance is their self-concept (Bandura, 1997;

Villarroel, 2001; Boulter, 2002). According to Boutler, if students are expected to perform well

in their examinations, positive or high self-concept is sine qua non.

Self-concept theory has always had a strong influence on professions especially in the field of counselling. By far, the most influential and eloquent voice in self-concept theory has been that of Rogers (1947) who introduced an entire system of helping build around the importance of the self. In Rogers' view, the self is the central ingredient in human personality and personal adjustment. Rogers described the self as a social product developing and of interpersonal relationship striving for consistency. He argued that there is a basic human need for positive regard both from others and from oneself and that in every person there is a tendency towards self-actualisation and development so long as this is permitted and encouraged by an inviting environment (Purkey & Schmidt, 1987). Self-concept may be understood as a perception every human has of himself or herself. It is a component of personality development and indicates who

we are and how we fit into the world. Machargo (1991) perceives self-concept as a set of

perceptions or reference points that the subject has about himself, a set of characteristics,

attributes, qualities and deficiencies, capacities and limits, values and relationships that the

individual knows to be descriptive of himself and which he perceives as data concerning his

identity. This definition embraces issues including the set of knowledge and attitudes that we

have about ourselves; the perceptions that the individual assigns to himself or herself and

characteristics or attributes that we use to describe ourselves. This is understood to be

fundamentally a descriptive assessment and has a cognitive nuance (Manning, Bear & Minke,

2006)

Many theories and models have tried to describe the correlation between academic self-concept

and academic achievement but they were not been able to give the proof that better academic

self-awareness leads to rise in achievement or better grades in academics effects academic

selfconcept (Ajmal & Rafique, 2018). Skill development model states that high achievement in

academic field influences the development of better self-concept whereas self-enhancement

model states that achievement is mainly concerned with students' self-concept regarding their

educational settings. (Marsh & Craven, 2002). It has been discussed that there is a connection

between academic selfconcept and achievement. Some researchers have focused their attention

to study the correlation between academic self-concept and academic achievement.

John, Abdul-Jaleel and Emma (2014) investigated the influence of student's self-concept on their

academic performance using a total of 297 randomly selected junior high school students in the

Elmina Township, Ghana and found that students' self-concept is perceived positively by

students; however, this self-concept does not directly predict students' academic performance. It

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does so only when students are able to exert some level of effort in learning what they have been

taught during their private studies.

Ajmal and Rafique (2018) investigated the relationship between academic self-concept and

academic achievement of distance learners. The academic self-concept of distance learners was

measured by the Liu and Wang (2005) academic self-concept scale which was adapted by the

present researcher and results revealed that there is a strong relationship between academic self-

concept and academic achievement of distance learners.

Kumari and Chamundeswari (2013) examined Self-Concept and Academic Achievement of

Students at the Higher Secondary Level in India. A sample of 321 students in different categories

of schools following different systems of education at the higher secondary level was chosen.

The findings of the study conducted revealed that students belonging to central board schools

were better in their self-concept and academic achievement when compared to students from

other boards. There is also a significant and positive relationship between self-concept and

academic achievement of students at the higher secondary level.

Rady and El-Nady (2016) carried out a study on the relationship between academic self-

concept and students' performance among school age children. This article was carried out in

freedom school for basic education boys and girls at Cairo governorate. A purposive sample

was composed of 182 school age children and their teachers. Results indicated that there was

a significant statistical relationship between academic self-concept and students' performance

among school age children. This finding implies that there was a wide gap in how males

develop their self-concept as compared with female students. The relationship between gender

and academic performance was investigated. It was concluded that students' academic self-

concept can affect their performance. The students with high academic achievement receive

reward and have more opportunities in future.

Nalal (2014) examined the influence of self-concept on academic performance among students

of College of Education, Akwanga, Nasarawa state-Nigeria. A total of 412 participants were

randomly selected for the study. Result indicated that a statistical significant relationship existed

between students' high and low in self-concept and academic performance. A significant

relationship exists between the self-concept and academic performance of fresh (NCE1) and final

year (NCE3) students. The finding also reveals no significant relationship between the self-

concept and academic performance of male and female students.

Ghazvini (2011) studied the relationship between the academic self-concept and academic

performance. The sample consists of 363 students from 10 high schools were chosen by using

multistage cluster sampling method. After verifying the scale's factorial structure, established

levels of association between self-concept and academic performance, and predictive power of

academic self-concept. The research finding showed a close relationship between academic self-

concept and measures of academic performance. Academic self-concept powerfully and positive

predicts general performance in literature and mathematics.

All the reviewed literature within the reach of the researcher, it is observed that only a few

studies or none have been done to investigate the efficacy of self-concept theory itself on

students' academic performance. This study therefore sets to examine efficacy of self-concept

theory on the academic performance of secondary school students in Oredo Local Government

Area of Edo State.

To guide the study, three hypotheses were formulated and were tested at 0.05 alpha level of significance.

Hypotheses

- There is no significant difference between the academic performance of adolescents in the experimental and control groups before treatment
- 2. There is no significant difference between the academic performance of adolescents in the experimental and control groups after treatment
- 3. There is no significant difference in the academic performance between male and female adolescents in the experimental group after treatment

Methodology

A pre-test post-test non-equivalent control group quasi- experimental design was used for the study. One independent variable (Self-concept Therapy) was involved in this study, one (01) intervening variable (sex) and one dependent variable (academic performance). This intervening variable (sex) is of two levels. All the subjetcs used for this study were of the same background since they are all from the same Local Government Area. The independent variable is manipulable variable since the samples were exposed to the different levels respectively. This study involved only one dependent variable namely academic performance. The independent variable of the study was Self-concept therapy. The experimental group was taken through the tenets and beliefs of Self-concept therapy but the control group was not exposed to any treatment.

Table 1: Showing the Design Over Variables

Groups	Design				
Experimental Group	O ₁ O ₂				

GSJ: Volume 10, Issue 12, December 2022

ISSN 2320-9186

Control Group O₁------ O₂

Key: $O_1\&O_2$ is pre-test and post test

------ No randomization of subjects to groups.

 X_2 is used for Self-concept therapy

Population for the Study

The population of the study comprised all the public mixed Senior Secondary II students in Oredo Local Government Area of Edo State. There are 9 public mixed schools with population

of 2,794 numbers of students (Post Primary Education Board, New Lagos Road, Benin City).

Sample and Sampling Technique

The sample of the study consisted of 236 Secondary School II students in the two schools randomly selected in Oredo Local Government from the nine (9) schools in the local government

area using simple random technique through balloting. In doing this, the researcher wrote the

names of the schools on a sheet of paper, folded and put into a blind bag from which he picked.

The first two schools picked became the sample used for the study. From these two schools

selected, school A was randomly assigned as experimental groups and while school B was the

control group. School A was exposed to Self-concept Therapy, school B was not exposed to any

therapy Out of the 236 students, 131 students comprising of 54 males and 77 females were

exposed to Self-concept Therapy in school A, 105 students comprising of 41 males and 64

females were not exposed to any therapy in school B.

Research Instrument

The instrument for data collection for the study was a questionnaire titled "Self-concept

and Academic Performance Questionnaire" (SAPQ), which was adopted from Rady and Nady

(2016) and modified by the researcher, is made up of three sections. Section A contains the

information about the students' bio-data such as sex, section B consists of twenty (20) items on

self-concept on a five-point Likert scale of Completely true of me (CTM), Mostly true of me

(MTM), Partly true of me (PTM), Mostly untrue of me (MUM) and Completely untrue of me

(CUM) and section requested for student' academic performance in their last term examination.

Validity of the Instrument

In order to validate the instrument, drafted copies were given to the three experts, one in

Counselling Psychology while the other two in the field of Measurement and Evaluation to

ascertain its validity. Suggestions by the experts were inculcated into the final draft of the

instrument and this made the instrument valid.

Reliability of the instrument

Because of the modification of the instrument, there was a need to test for its reliability.

So, in establishing the reliability of the instrument used for this study, the test-re-test method was

used. In using this procedure, the researcher administered thirty (30) copies of the instrument to

senior secondary school II students outside the sampled students used for the study. After three

weeks, the same instrument was re-administered to the same students. The data collected were

analyzed, using Pearson Product Moment correlation statistical procedure to determine its

reliability and the instrument obtained a coefficient value of 0.78. This showed that the

instrument was reliable.

Treatment Procedure

Step I: Pretest and Collection of students' First Term Results

The students in the two groups were pre-tested using the instrument and their First term results

were also collected from their Principals.

Step II: Treatment Packages

Sensitization of the students in Group A using the Self-concept Therapy. (a)

In order to sensitize the experimental group using the self-concept therapy, the counsellor took

the experimental group students through the following sessions.

Session 1: In this session, the following sub-heading were discussed: the concept of Self-concept

Therapy (ST).

Session 2: These sub-heading were discussed: Key Rules of ST, and The Basic Tenets That

Inform Self-concept Therapy.

Session 3: These sub-headings were discussed: the Process of Self-concept Therapy, Rules and

The Therapeutic process of Self-concept Therapy

Session 4: These sub-headings were discussed: how to prepare for examinations

Session 5: These sub-headings were discussed: Building client self-concept with Positive

exceptions and finally,

Session 6: Questions and Answers time.

Step III: Post-test

Control of Extraneous Variables

These are the variables which could muddle and influence the findings of the study and are

capable of posing serious threats to the internal validity of an experimental design if not

controlled. The researcher emphasized confidentiality among students throughout the treatment

sessions to minimize contaminations. In this study, the extraneous variables that might

contaminate the study were identified and were controlled as follows:

Attrition/Experimental Mortality

The researcher controlled this by discussing with the students and agreed on a convenient time of

meeting before the treatment session commenced. The participants were encouraged and

sensitized to be punctual and regular to all session. To further reduce the chance of this error,

participants were informed of regular refreshment throughout the periods of meeting.

Subject Bias

The participant's perception of the nature of the study can affect the outcome. This was

controlled by not revealing the nature of the experiment to the participants. They did not know

whether they were in the treatment or control group.

Experimenter Bias

The nature and techniques the researcher used in the presentation of the treatments to students

might bring about bias on the researcher's part and this would affect the result of the study. To

control for this, the researcher strictly followed the treatment package designed for the

experimental group

Administration of Instruments

The instrument titled "Self-concept and Examination Malpractices Questionnaire

(SEMQ) was administered as pre-test, followed by the treatment. The experimental groups was

treated by the researcher in school A to avoid subject interaction with the students in the control

group in school B. And at the end of the treatment, both the experimental and the control groups

were post tested using the same questionnaire by the researcher and the completed questionnaire

were collected instantly.

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Method of Data Analysis

In analyzing the data collected, the scoring of the items follows thus: Positive worded items in the instrument were scored 5.4.3.2.1 on the scale while negative worded items were scored 1.2.3.4.5 on Completely true of me (CTM), Mostly true of me (MTM), Partly true of me (PTM), Mostly untrue of me (MUM) and Completely untrue of me (CUM) respectively. There are twenty (20) items on scale. If a respondent rates himself 5 on every item, the maximum of one hundred (100) scores would be recorded and this would represent the highest level of self-concept. Scores of 45 and above represented high level of self-concept while scores below 45 represented low level of self-concept. Also, the students' First Term results were compared with their results and the end of Second Term after they experimental group had been exposed to treatment.

In analyzing the data collected, all research questions were answered using the descriptive statistics of mean, standard deviation and percentage count while all the hypotheses were tested using the students' independent t-test Statistics at 0.05 alpha level of significance.

Data Analysis and Results

Testing of Hypotheses

H0₁: There is no significant difference between the academic performance of adolescents in the experimental and control groups before treatment

The summary of the test of this hypothesis is presented in table 1

Table 1: t-test statistics on the difference between the academic performance of adolescents in the experimental and control groups before treatment

GROUPS	N	t	Mean	Mean diff.	df	Sig.(2-tailed)	Decision
EXPERIMENTAL 131		131	2	25.51			

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	0.73	3	0.88	234	0.61	Accept Ho
CONTROL	105	24.63				

Table 1 showed that the observed difference between the academic performance of adolescents in the experimental and control groups before treatment is not significant at 0.61 (t = 0.73; df=234). Since 0.61 is higher than 0.05, the observed difference between the academic performance of adolescents in the experimental and control groups before treatment is not significant. With this, the null hypothesis which says there is no significant difference between the academic performance of adolescents in the experimental and control groups before treatment is accepted. This showed that there is no significant difference between the academic performance of adolescents in the experimental and control groups before treatment among secondary school students in Oredo Local Government Area of Edo State.

H0₂: There is no significant difference between the academic performance of adolescents in the experimental and control groups after treatment

The summary of the test of this hypothesis is presented in table 2

Table 2: t-test statistics on the difference between the academic performance of adolescents in the experimental and control groups after treatment

GROUPS	N	t	Mean	Mean diff.	df	Sig.(2-tailed)	Decision
EXPERIMENT	ral 13	31		48.52			
		-38.61		23.25	234	0.00	Reject Ho
CONTROL	105		25.27				

Table 2 showed that the observed difference between the academic performance of adolescents in the experimental and control groups after treatment is significant at 0.00 (t = - 38.61; df=234). Since 0.00 is less than 0.05, the observed difference between the academic

performance of adolescents in the experimental and control groups after treatment is significant. With this, the null hypothesis which says there is no significant difference between the academic performance of adolescents in the experimental and control groups after treatment is not accepted. This showed that there is a significant difference between the academic performance of adolescents in the experimental and control groups after treatment among secondary school students in Oredo Local Government Area of Edo State.

H0₃: There is no significant difference in the academic performance between male and female adolescents in the experimental group after treatment

The summary of the test of this hypothesis is presented in table 3.

Table 3: t-test statistics on the difference in the academic performance between male and female adolescents in the experimental group after treatment

GENDER	N	t Mean	Mean diff.	df	Sig.(2-tailed)	Decision
MALE	54	47.71				
	C	0.48	0.25	129	0.55	Accept Ho
FEMALE	77	47.46				

Table 3 shows that the observed difference in the academic performance between male and female adolescents in the experimental group after treatment is not significant at 0.55 (t = 0.48; df=129). Since 0.55 is higher than 0.05, the observed difference in the academic performance between male and female adolescents in the experimental group after treatment is not significant. With this, the null hypothesis which says there is no significant difference in the academic performance between male and female adolescents in the experimental group after treatment is accepted. This showed that there is no significant difference in the academic

performance between male and female adolescents in the experimental group after treatment

among secondary school students in Oredo Local Government Area of Edo State.

Summary of Findings

Three significant findings are obtained from this study and these include that:

• there is no significant difference between the academic performance of adolescents in the

experimental and control groups before treatment among secondary school students in Oredo

Local Government Area of Edo State.

• there is a significant difference between the academic performance of adolescents in the

experimental and control groups after treatment among secondary school students in Oredo

Local Government Area of Edo State.. This finding is in agreement with the findings of Ajmal

and Rafique (2018) who investigated the relationship between academic self-concept and

academic achievement of distance learners and results revealed that there is a strong

relationship between academic self-concept and academic achievement of distance learners.

Also it is in line with the study of Kumari and Chamundeswari (2013) who examined Self-

Concept and Academic Achievement of Students at the Higher Secondary Level in India. The

findings of the study conducted revealed that students belonging to central board schools were

better in their self-concept and academic achievement when compared to students from other

boards. There is also a significant and positive relationship between self-concept and

academic achievement of students at the higher secondary level. In the same vein, the finding

aligned with the finding of Ghazvini (2011) who studied the relationship between the

academic self-concept and academic performance and found a close relationship between

academic self-concept and measures of academic performance and that academic self-concept

powerfully and positive predicts general performance in literature and mathematics. However,

ISSN 2320-9186

the finding is in contrast with the finding of Nalal (2014) examined the influence of self-

concept on academic performance among students of College of Education, Akwanga,

Nasarawa state-Nigeria and found no significant relationship between the self-concept and

academic performance of male and female students and also in contrast with the work of

John, Abdul-Jaleel and Emma (2014) who investigated the influence of student's self-concept

on their academic performance in selected junior high school students in Elmina Township,

Ghana and found that students' self-concept does not directly predict students' academic

performance.

• there is no significant difference in the academic performance between male and female

adolescents in the experimental group after treatment among secondary school students in

Oredo Local Government Area of Edo State. This finding negates the finding of Rady and El-

Nady (2016) who carried out a study on the relationship between academic self-concept

and students' performance among school age children and found that there was a wide gap

in how males develop their self-concept as compared with female students.

Conclusion

It can be concluded from the study that Self-concept Therapy (ST) is effective in enhancing the

academic performance among secondary school students in Oredo Local Government Area of

Edo State.

Recommendation

Based on the findings therefore, it is recommended that counsellors should employ Self-concept

therapy in enhancing students' academic performance so to enable them achieve their maximum

potential in life.

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