

Test-Anxiety and Self-Esteem as a Predictor of Secondary School Students' Academic Self-Efficacy in Ekiti State

IRETOR-OSCAR, OluwaseunBamidele

Department of Guidance and Counselling, Ekiti State University, PMB 5363 Ado-Ekiti, Nigeria

ABSTRACT: *This study investigated test-anxiety and self-esteem as a predictor of secondary school students' academic self-efficacy in Ekiti State. It also examined the relationship between the two psycho-social factors (self-esteem and test-anxiety) and students' academic self - efficacy. The study employed the descriptive research design of the survey type. The population consisted of all students from the public secondary schools in Ekiti central senatorial district of Ekiti State. The sample for this study was 200 students which were selected from four secondary schools using Multistage Sampling technique. A self-structured questionnaire tagged "Psychosocial Factors and Students' Academic Self-Efficacy Questionnaire (PFSASEQ)" was used to collect relevant data for the study. The face and content validity of the instrument was determined by experts of Test and Measurements and researcher's supervisor. It was said to have facial relevance and concerned with the subject matter, the instrument claim to measure. The hypotheses postulated were subjected to inferential statistics of Pearson Product Moment Correlation analysis. All the hypotheses were tested at 0.05 level of significance. The findings of the study revealed that there was significant relationship between test-anxiety, self-esteem and students' academic self – efficacy. Based on the findings of the study, it was recommended among others that students self-esteem can be enhanced and test-anxiety reduced by creating an enabling environment for mentoring where they can practice assertiveness skills which will in turn boost their confidence to perform all academic tasks successfully .*

Keywords: *Adolescents, Test-anxiety, self-esteem, academic self-efficacy*

I. INTRODUCTION AND BACKGROUND

The frightening increase of low academic self-efficacy and eventual low achievement creates a great concern to parents, teachers, examination bodies, counsellors and psychologists. This represents a colossal loss on the parts of students, parents and the government. Students' beliefs in their capabilities to achieve in academic tasks have been worrisome. They attend schools, seemingly settle down to study but their efforts yields little or no positive results. Students with high-sense of academic self-efficacy are more likely to exert effort in attempting to accomplish academic task and persist when faced with difficulty but many with low academic self-efficacy put in less efforts and they give up easily when they encounter obstacles and difficulties, the resultant effect is poor academic achievement.

The proportion of young people who successfully complete and pass to the next level constitute a meagre percentage in Nigeria. Performances in examinations have been consistently abysmal in the past three decades with the annual percentage pass in West African School Certificate Examination hovering around, 30 percent, this moved down to 13 percent in 2008 with just a little improvement between 2009 and 2015. This poor outcome which has been of great concern to all and sundry should be investigated.

Many variables affect students' academic self-efficacy and their eventual academic achievement. Baker (2003) noted that it is possible to perceive the totality of human as being guided and ruled by psychological and social variables. Olaogun (2005) also avers that the modern man as a person has his educational aspiration and accomplishments projected by the psycho-social variables in the environment, the positions of these two sets of variables are unique and important and may be appreciated when it is realized that the variables are necessary for the understanding of human beings, their overt and covert behaviours, potentialities and performances in the three areas of educational domains (cognitive, affective and psychomotor). The need for this study can, therefore, not be overemphasized.

The concept of self-efficacy is the focal point of Bandura's social cognitive theory. Individuals exercise control over their thoughts, feelings and actions. Bandura (1986) states that people will be more inclined to take on a task they believe they can succeed in. People generally avoid tasks where their self-efficacy is low but will engage in task where their self-efficacy is high. A strong sense of academic self-efficacy enhances students' academic accomplishment, quality of functioning and personal well-being (Adeyemo, 2008). Bandura (1997) states that a sense of self-efficacy is an important contributor to the attainment of further competences and successes.

Research on self-efficacy beliefs in academic setting is on the increase, but the general problem is that students are sometimes known to do poorly in specific subject areas while performing up to standard in others.

The reason for this, no doubt, reflects the multivariate nature of school learning. There is the need to take into account the idiosyncratic nature of diverse learners and their capabilities; learners do not perform up to their potential, despite positive environmental conditions. Performance of students in school is a major concern though many believe that students with great intellectual potential will often succeed at a higher level than will students with lower ability, it is not always the case, because cognitive potential does not always translate into attained success. Just as there are intellectually gifted who do not perform well, there exists many lower ability students who perform at above average or grade expectation.

Many variables interact to produce this phenomenon; self-efficacy is one of them. Merely, possessing knowledge and skills does not mean that one will use them effectively under difficult condition (Bandura, 1986). Only those who are more self-efficacious about being able to effectively manage and cope with these circumstances are expected to have probability of succeeding even if others have the same inherent ability or skill level. There is sufficient evidence documenting significant relationship between self-efficacy beliefs and achievement in academic settings (Bandura, 1997).

Parents' involvement has been identified as a factor that improves students' academic self-efficacy. When parents are involved, the academic self-efficacy of students is enhanced. The child's first place of contact with the world is the family. As a result, he acquires initial education and socialization from parents and other significant persons in the family. The parents are the child's first teachers (Adeyemo, 2008; and Olaogun, 2005). The family provides the primary education environment and there is the need to look at how the home and school interrelates to help in the students' academic self-efficacy and achievement. Students with parental involvement in their education tend to have better academic performance and are not likely to drop out school (Adeyemo, 2008).

The present study examined the influence and predictability of the psychosocial factors such as self-esteem, and test-anxiety on secondary school students' academic self-efficacy.

Self-esteem is a concept that has been extensively studied in the psychological literature and may be defined as the individual's positive or negative attitude toward the self as a totality. Harter (1993) defined self-esteem slightly differently by referring to it as the level of global regard that one has for the self as a person. Self-esteem is related to a number of variables that may lead to better adjustment and academic self-efficacy of students. For example, happiness, life-satisfaction, a deep learning approach and low levels of stress have all been found to be related to a student's level of self-esteem. Students who have less non-persistence decisions have been reported to display a higher level of self-esteem and to feel more positive about completing academic tasks.

Test-anxiety is inability to think or remember a feeling of tension, and difficulty in reading and comprehending simple sentences or directions in an examination. Similarly, Zeidner (2008) defined test-anxiety as a set of phenomenological, physiological, and behavioural responses that accompany concern about possible negative consequences or failure on an exam or similar evaluative situation. Students who experience test-anxiety during an examination have been reported to feel tense and to worry about a possible negative outcome (Gierl & Rogers, 2002). Feeling slightly nervous and tense, and experiencing low to moderate levels of stress about an upcoming examination is considered to be normal. Elevated levels of test-anxiety, however, may have adverse consequences for students' academic self-efficacy at Secondary school.

The goal of education as one of the most important components of human development and the engine of national development, even as a ladder leading to a better and higher social status, can only be realized when students have the confidence to achieve the very best; then they can deliver what the nation expect from them for national development. Baker (2003) noted that academic self-efficacy and achievement leave much to be desired, therefore, there is every need for researchers to continue to explore this frontier of knowledge. This is why the study will investigate psycho social factors predicting secondary school students' academic self-efficacy in Ekiti State.

Purpose of the Study

The purpose of this study is to investigate psycho social factors predicting secondary school students' academic self-efficacy in Ekiti State. It will further examine the relationship between self – esteem, test anxiety and students' academic self – efficacy.

II. LITERATURE REVIEW

Concept of Academic Self-Efficacy

In Education, self-efficacy is a key contributing factor to learners' success, because self-efficacy influences the choices learners make and the courses of action they pursue (Pajares, 2002). Academic self-efficacy refers to an individual's belief (conviction) that they can successfully achieve a designated level on an academic task or attain a specific academic goal (Bandura, 1997; Eccles and Wigfield, 2002; Elias and Loomis, 2002; Linenbrink and Pintrich, 2002a; Schunk and Pajares, 2002).

Academic self-efficacy is grounded in self-efficacy theory (Bandura, 1977). According to self-efficacy theory, self-efficacy is an “individual’s confidence in their ability to organize and execute a given course of action to solve a problem or accomplish a task” (Eccles and Wigfield, 2002, p. 110). Self-efficacy theory suggests that academic self-efficacy may vary in strength as a function of task difficulty—some individuals may believe they are most efficacious on difficult tasks, while others only on easier tasks. Furthermore, self-efficacy is believed to be situational in nature rather than being viewed as a stable trait (Linenbrink and Pintrich, 2002a). Students make reliable differentiations between their self-efficacy judgments across different academic domains which, collectively, form a loose hierarchical multidimensional structure. Self-efficacy is different from self-esteem or self-concept as it is a task-specific evaluation whereas self-esteem and self-concept reflect more general affective evaluations of self (Linenbrink and Pintrich, 2002a).

Research conducted by Linenbrink and Pintrich (2002b) have shown that academic self-efficacy is significantly associated with students' learning, cognitive engagement, analytical thinking, academic commitment, strategy use, persistence, susceptibility to negative emotions and achievement. In the academic context, children's beliefs in their personal efficacy to control their own educational processes and outcomes and to become proficient in challenging subject matter, likely has a great impact on their scholastic impetus, interest and educational performance. Students who are confident in their capability to organize, execute, and regulate their problem-solving or task performance at a designated level of competence are demonstrating high self-efficacy. Self-efficacy is generally regarded as a multidimensional construct differentiated across multiple domains of functioning.

Self - Esteem and Students' Academic Self – Efficacy

Self-esteem is a concept that has been extensively studied in the psychological literature and may be defined as the individual’s positive or negative attitude toward the self as a totality. Harter (1993) defined self-esteem slightly differently by referring to it as the level of global regard that one has for the self as a person. Self-esteem is related to a number of variables that may lead to better adjustment and academic performance of students. For example, happiness (Lyubomirsky, Tkach, & DiMatteo, 2006), life-satisfaction (Baumeister, Campbell, Krueger, & Vohs, 2003), a deep learning approach (Phan, 2010) and low levels of stress (Baker, 2003) have all been found to be related to a student’s level of self-esteem. Students who have less non-persistence decisions have been reported to display a higher level of self-esteem and to feel more positive about completing academic tasks. Numerous studies have demonstrated that there is a positive association between self-esteem and the important educational variables of adjustment (Crede & Niehorster, 2012); and academic performance (Lockett & Harrell, 2003).

For example, Woo and Frank (2000) reported a significant positive relationship between academic self-esteem and academic self – efficacy among 208 college students. Similarly, Reitzes and Mutran (1999) also indicated an association between self-esteem and self-reported academic performance among 396 students, with results of the regression analysis showing that self-esteem has a direct positive effect on students’ academic performance and self – efficacy. In addition, the result of the meta-analysis carried out showed a small but positive association between self-esteem and academic self - efficacy. In their analysis of 21 independent correlations, self-esteem had a small positive mean effect size predicting academic performance.

Research has also shown that there is a link between self-esteem and adjustment for students at schools. That is, researchers have repeatedly found a positive relationship between self-esteem and all four dimensions of adjustment (Hertel, 2002; Wintre & Yaffe, 2000). For example, in a survey investigating the relationship between self-esteem, family and friend support, academic support programs and adjustment to school, Hertel (2002) reported that students with high levels of self-esteem and friend support were better adjusted academically and socially at school. Additionally, the meta-analysis by Crede and Niehorster (2012) provides substantial evidence about a link between self-esteem and the different facets of adjustment. Overall adjustment of students to school, as well as all individual facets of adjustment to school showed strong relationships with self-esteem. In their substantial review spanning 1872 to 2010 and comprising multiple databases, overall adjustment and personal/emotional adjustment had the strongest relationship with self-esteem, followed by academic adjustment, social adjustment and institutional attachment (Crede & Niehorster, 2012). Thus, previous research indicates that there is a stronger association between self-esteem and adjustment than between self-esteem and academic self - efficacy. This conclusion might also apply locally, as Petersen (2009) found that self-esteem is predictive of students adjustment to school but not academic self - efficacy. As the majority of studies between self-esteem and academic performance have been correlational in nature there is disagreement about the directionality of the relationship. That is, does high self-esteem lead to better academic performance or does good overall academic performance lead to higher levels of self-esteem? Hence, systematic research is needed to establish if self-esteem predicts academic self - efficacy or if academic self - efficacy predicts self-esteem. For the present study it is assumed that self-esteem has a positive relationship with academic self - efficacy.

Test Anxiety and Students' Academic Self – Efficacy

Test anxiety refers to the inability to think or remember a feeling of tension, and difficulty in reading and comprehending simple sentences or directions on an examination. Similarly, Zeidner (1998) defined test-anxiety as a set of phenomenological, physiological, and behavioural responses that accompany concern about possible negative consequences or failure on an exam or similar evaluative situation. Students who experience test-anxiety during an examination have been reported to feel tense and to worry about a possible negative outcome (Gierl & Rogers, 2002). Feeling slightly nervous and tense, and experiencing low to moderate levels of stress about an upcoming examination is considered to be normal. Elevated levels of test-anxiety, however, may have adverse consequences for students' academic success at university.

Previous research shows decisive evidence for a strong inverse association between student test-anxiety and academic self - efficacy, consistently finding that high test-anxiety leads to lower academic self - efficacy (Cassady & Johnson, 2002; Jing, 2007; Talib & Sansgiry, 2011). For example, the study of Faleye (2010) showed that students with low levels of test-anxiety displayed higher levels of academic self-efficacy than students with moderate or high levels of test anxiety; and students with moderate levels of test-anxiety displayed higher levels of academic performance than students with high levels of test-anxiety.

Additionally, three meta-analyses reporting on the relationship between test-anxiety and academic performance were identified; all showing a significant negative relationship between test-anxiety and academic performance. The meta-analysis by Hembree (1988) reviewed 562 studies conducted from 1950 to 1986. In total, 32 studies were identified that examined students, classified according to how test-anxiety and academic performance were assessed.

Research further indicated that high levels of test-anxiety are related to: a) low or poor self-esteem (Thomas & Gadbois, 2007); b) poor study habits, poor study techniques and high procrastination (Cassady, 2004); c) feelings of academic overload and poor time-management (Sansgiry & Sail, 2006); and d) poor motivation, negative self-evaluation and concentration difficulties (Swanson & Howell, 1996). The meta-analysis by Hembree (1988), moreover showed that students with high levels of test-anxiety experience a "lower sense of well-being, less self-acceptance, less self-control, less acceptance of responsibility, lower capacity for status, less tolerance, and lower intellectual efficiency" than students with low levels of test-anxiety.

III. METHODOLOGY

Population

The population consisted of all students from the public secondary schools in Ekiti central senatorial district of Ekiti State.

Sample and Sampling Techniques

The sample for this study was 200 students which were selected from four secondary schools using Multistage Sampling technique. The first stage involved the random selection of two local government areas from the six local government areas in Ekiti Central senatorial district. The second stage was selection of two public secondary schools from each of the two local governments earlier selected making four public secondary schools using simple random sampling technique. The third stage was the selection of 50 students from each of the four schools using stratified random sampling technique. The 50 students from each of the schools were male and female.

Research Instrument

A self-structured questionnaire tagged "Psychosocial Factors and Students' Academic Self-Efficacy Questionnaire (PFSASEQ)" was used to collect relevant data for the study. Section A of the instrument sought for comprehensive bio-data of the respondents. Section B consisted of 10 items which sought for information on Academic self-efficacy scale. The scales used were modified versions of the original scale, Academic Self-efficacy Scales by Brown (2005). Section C consisted of 10 items which sought for information on variables such as self-esteem and test anxiety as it predicts students' academic self-efficacy in secondary schools. The instrument was prepared using Likert type scale which was used as follows: Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD).

Data Analysis

The data collected was analyzed using inferential statistics. Hypotheses 1 and 2 were tested using inferential statistics of Pearson Product Moment Correlation (PPMC). All hypotheses were tested at 0.05 level of significance.

IV. RESULTS

Hypothesis 1

There is no significant relationship between self – esteem and students’ academic self – efficacy.

Table 1: Correlation between self – esteem and students’ academic self – efficacy

V a r i a b l e s	N	Mean	Stand Dev	r-cal	r-tab	R e m a r k
S e l f – E s t e e m	200	2 . 5 9	1 . 0 1	0.437	0.195	Significant*
Students’ Academic Self – efficacy	200	2 . 9 1	1 . 0 4			

*P<0.05

Table 1 showed that r-cal is positive and moderate. The r-cal (0.437) is greater than r-table (0.195) at 0.05 level of significance. The null hypothesis was rejected. This implies that there was significant relationship between self – esteem and students’ academic self – efficacy. Hence, self – esteem have impact on students’ academic self – efficacy.

The findings from hypothesis 1 showed that a significant relationship existed between self – esteem and students’ academic self – efficacy. The implication of this is that self – esteem has impact on students’ academic self – efficacy. This finding is supported by the findings of Woo & Frank (2000), Hertel (2002) and Phan(2010) who opined a significant relationship exist between students’ self – esteem and students’ academic self – efficacy.

Hypothesis 2

There is no significant relationship between test anxiety and students’ academic self – efficacy.

Table 2: Correlation between test anxiety and students’ academic self – efficacy

V a r i a b l e s	N	Mean	Stand Dev	r-cal	r-tab	R e m a r k
T e s t a n x i e t y	200	2 . 4 4	0 . 8 9	0 . 2 8 3	0.195	Significant*
Students’ Academic Self – efficacy	200	2 . 9 1	1 . 0 4			

*P<0.05

Table 2 showed that r-cal is positive and low. The r-cal (0.283) is greater than r-table (0.195) at 0.05 level of significance. The null hypothesis was rejected. This implies that there was low significant relationship between test anxiety and students’ academic self – efficacy. Hence, test anxiety have an impact on students’ academic self – efficacy.

The findings from hypothesis 2 revealed that there was low significant relationship between test anxiety and students’ academic self – efficacy. By implication, test anxiety has low impact on students’ academic self – efficacy. This is in agreement with the findings of Jing (2007), Zeidner (1998) and Faleye (2010) on the impact of test anxiety on students’ academic self – efficacy. They concluded that test anxiety has positive impact on students’ self – efficacy.

V. RECOMMENDATIONS

Students self-esteem can be enhanced and test-anxiety reduced by creating an enabling environment for mentoring where they can practice assertiveness skills which will in turn boost their confidence to perform all academic tasks successfully .

Specifically for teachers, certain teaching techniques such as cooperative learning, praising students, and using icebreakers in the classroom increase the likelihood a student will connect to school and enhance academic performance. Ultimately, increasing interactions with positive adults and establishing an environment that is warm and responsive to youth needs tends to promote healthy child and adolescent development.

The family, society and significant others should take time to appreciate and understand the academic and developmental challenges faced and experienced by in-school adolescents as to device appropriate measures to help them overcome their challenges and adjust well to their challenges.

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