Sex Differences in Academic Self –Esteem of Secondary School Students in Abuja Metropolis of Nigeria

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Abstract
This research investigated sex differences in academic self-esteem of secondary school students in FCT, Abuja Metropolis, of Nigeria. To achieve the objectives of this study, a total of 250 senior secondary class two (SS2) students consisting of 125 males and 125 females were randomly selected as sample for this study. The Self Descriptive Questionaire (SDQ) of Marsh, Parker and Smith, (1983) was used as the main instrument for data collection and Schiraldi's Self-esteem Enhancement Programme (SSEEP) was used for the actual experiment. The SDQs were distributed amongst the 250 students before and after the application of the SSEEP and this study took duration of 125days.Two null hypotheses were formulated and tested at the 0.05 significant level using the two- tailed students t-test. The results revealed that there was an improvement in the academic self-esteem levels of the students due to the application of SSEEP but there was no significant difference in academic self-esteem levels between males and females. From these results it was concluded that the SSEEP is effective in improving academic self-esteem and is useful in studies on sex differences. The results also are a pointer to the need for counselling students on the importance of high academic self-esteem.
Keywords: counselling, self-esteem, students, sex differences

INTRODUCTION
Self-esteem as a construct has been defined by various authors in various ways. Most of the definitions suggest that it is the evaluative component of the self-concept and which has to do with a person making judgements about his or her self-worth. Woo Bae and Brekke (2003) describe it as the subjective evaluation of oneself. Self – esteem is:

> the experience of being competent to cope with the basic
> challenges of life and of being worthy of happiness. It consists
> of two components- (1) self-efficacy i.e. confidence in one's
> ability to think, learn, choose, and make appropriate decisions
> and by extension, to master challenges and manage change
> (2) self-respect i.e. confidence in one's right to be happy, and
> by extension, confidence that achievement, success, friendship,
> respect, love and fulfilment are appropriate for oneself (Branden
> 1994:2).

Leary and Baumester (2000) suggest that self-esteem is a monitor for social

belongingness. The effect of self-esteem on various behaviours of youths cannot be overemphasized. Students' outlook to life is traceable to their level of self-esteem. Michael (2005) reveals that research findings show high self-esteem to have a lot to do with good mental health, social skills and higher achievement. Rubie, Townsend and Moore, (2004) reveal the existence of documented evidence by numerous researchers that the best way to improve students' achievement is to increase their self-esteem. Trzesniewski, Donnellan and Robins (2003) suggest that healthy social relationships, positive perceptions by peers, academic achievement, persistence and improved coping skills, are some positive outcomes of high self-esteem, while Woo Bae and Brekke (2003) suggest that low self-esteem is associated with depression, drug, alcohol use and criminal behaviour.

Males and females have been observed to differ in several ways during adolescent years in their bid to align with gender stereotypes. In early adolescence for instance, differences exist in self-esteem, overall physical development and other aspects of development. Several studies have shown sex differences in the behaviour of males and females. Cross and Slater (1995) opine that self-esteem in males is seen to be more impressed by goals characterized by independence and autonomy, while self-esteem in females is more influenced by goals related to interdependence and sensitivity. Ekanem (1999) in his study discovered a higher artistic competence in favour of females, and a higher, realistic, investigative, enterprising, and conforming competence in favour of males. Jacob (2002) comments that the difference in self-esteem can lead to difference in academic achievement between boys and girls. Girls do better in school, get higher grades and can graduate from high school at a higher level than boys (Aryanya, 2010).

Yun Dai (2001) worked on 10th grade students in a key and regular school and discovered that boys at the regular school showed high mathematics self-concept while the girls showed a higher verbal self-concept. However the results for the key school showed that the boys and girls had comparative math self-concept while girls had

higher verbal self-concept than boys.

Kearney-Cooke (1999) points out that the adolescent period goes with dramatic and often difficult changes in the life of a young person. According to him, the adolescent's personal development and self-esteem are influenced by a collection of biological, cognitive, social and environmental factors. He further reveals that studies have shown adolescent girls tending towards having lower Self-esteem and more negative assessments of their physical characteristics and intellectual abilities than boys. Hergovich, Sirsch and Felinger (2004) discovered that boys exhibited higher self-concept in almost all areas than girls. Boys rated higher in maths abilities while girls rated higher in verbal abilities. Maccoby and Jacklin (1974) point out gender differences favouring girls in verbal abilities and performance, favouring boys in maths ability and performance (partially in problem-solving rather than computation during adolescence), and favouring boys in spatial ability. According to Harter (1982) and Marsh (1989), boys have higher scores for physical activities and maths, and girls do so for reading and music. However Linn and Hyde (1989) suggest that these differences are negligible. Marsh also notes that these differences are not very substantial in terms of the amount of variance explained. Robin, Trzesniewski, Tracy, Gosling and Peter (2002) and Major, Barr, Zubek and Bubey (1999) show no difference in self-esteem between boys and girls.

From the cases reviewed in the literature, it is evident that there is no favour to any particular sex. Some studies show no sex differences while those that showed differences either favoured the males or the females without any sex being consistently favoured. Denwigwe and Ikeotuonye (2008) investigated sex differences in general self-esteem and discovered a difference in favour of boys. They suggest that the causes of sex differences in self-esteem levels are not very clear; some may be inherent, culture-bound, or may result from a combination of factors.

This study investigated sex differences in academic self-esteem of students using Schiraldi's Self-esteem Enhancement Programme.

Statement of the Problem

The adolescent period is saddled with certain developmental problems. According to Aryana (2010) adolescents encounter diversified job of developing and challenges of their own age. Hence, development of self-esteem is considered as one of the most important developmental processes of adolescence (Sirin and Sirin-Rogers, 2004 cited in Aryana,2010). Depending on how these problems are handled, the individuals may become well-adjusted or maladjusted in life. Boys and girls develop at different times in their adolescent years and their rates of development can greatly influence their self-esteem. Low self-esteem may lead to delinquent individuals who may exhibit disruptive behaviours and often have poor academic performance. The problem of this research therefore is to investigate sex differences in academic self-esteem of adolescents (boys & girls) and help them in their bid to understand and cope with the problems that they experience in the course of growing up. This is with a view to helping them succeed in their endeavours.

Purpose

The purpose of this study is to investigate sex differences in the academic self-esteem of secondary school students in Abuja Metropolis before and after application of Schiraldi's Self-esteem Enhancement Programme with a view to helping them adjust properly to life.

Hypothesis:

Two null hypotheses were raised to guide this study.

HO 1: There is no significant difference in the academic self-esteem level of male and female students before the application of Schiraldi's self-esteem enhancement programme.

HO 2: There is no significant difference in the academic self-esteem level of male and female students after the application of Schiraldi's self-esteem enhancement programme.

METHOD

Sample:

125 males and 125 females randomly selected from 5 out of the FCT senior secondary schools in Abuja metropolis constituted the sample for the study. These students fell within the age bracket of 15 and 16 years.

Data collection

The data for this study was collected using the Schiraldi's Self-esteem Enhancement Programme (SEEP) and the Self-descriptive Questionnaire (SDQ). The self-descriptive questionaire was developed by Marsh, Parker and Smith (1983), used by Tambawal (2004) and found reliable. The students were subjected to the 125 days Schiraldi's self-esteem enhancement programme for half an hour daily. Denwigwe and Ikeotuonye (2008) citing Schiraldi (1999) opine that the thrust of the programme is to ensure physical health so as to sharpen the performance and improvement of one's mental health. The programme pre-supposes that self-esteem can be developed by understanding the 3 factors upon which self-esteem is built. These 3 factors are unconditional human worth, unconditional love and growing.

The self-descriptive questionnaire uses items on both general self-esteem and academic self-esteem to estimate how an individual feels and regards himself in terms of general self-esteem and academic self-esteem. The general self-esteem items ask questions on physical appearance, physical abilities, relationship with parents and significant others while items on academic self-esteem tend to decipher skills on reading, mathematics and other school subjects.

The researchers gave adequate instructions to the subjects on how to respond to the self-descriptive questionnaire before administering it on them. To obtain the pre-test scores, the students were made to fill the questionnaires before going through the Schiraldi's self-esteem enhancement programme for 125 days of half an hour training session daily. After this training, the self-descriptive questionnaire was re-administered on the same set of subjects in order to obtain the post test scores.

Data Analysis

The statistical analysis was done using the students' t-test. The null hypotheses were tested at 0.05 level of significance to ascertain any statistical difference in the academic self-esteem levels of the male and female students based on their pre-test and post test scores.

Results

HO 1: There is no significant difference in the academic self-esteem level of the male and female students before the application of Schiraldi's Self-esteem Enhancement Programme (SSEEP). Table 1 below shows the result obtained from the two-tailed t-test analysis of the academic self-esteem pre-test scores of the male and female students.

Table 1: Two-tailed t-test Analysis of the Academic Self-esteem Pre-test scores of the Male and Female Students.

	Number (N)	Mean (X)	Standard Deviation. (SD)	Degrees of Freedom	t-value	t-Critical	Significant Level
Male Pre-test	125	118.1	12.17				
Female Pre-test	125	116.4	12.13	124	1.7	1.96	0.05

Table 1 shows that the calculated value of t (1.7) is less than the critical value of 1.96 at 0.05 level of significance for the two-tailed test. Therefore the null hypothesis 1 which states that there is no significant difference in academic self-esteem level between the male and female students before the application of Schiraldi's Self-esteem enhancement programme is accepted.

The result of the testing shows that there is no significant difference between males and females before the application of Schiraldi's Self-esteem enhancement programme.

HO 2: There is no significant difference in academic self-esteem level between male and female students after the application of Schiraldi's Self-esteem enhancement programme. Table 2 below shows the result obtained from the two-tailed t-test analysis of the academic self-esteem post-test scores of the male and female students.

Table 2: Two tailed t-test Analysis of the Academic Self-esteem Post- test scores of the Male and Female Students.

	Numbers N	Mean X	Standard Deviation (SD)	Degrees of Freedom	t-Value	t- Critical	Significant Level
Male Post test	125	159.5	18.9				
Female Post test	125	156.9	18.3	124	1.6	1.96	0.05

Table 2 shows that the calculated value of t (1.6) is less than the critical value of 1.96 at 0.05 level of significance for the 2-tailed test. Therefore the null hypothesis 2 which states that there is no significant difference in academic self-esteem between male and female students after the application of Schiraldi's self-esteem enhancement programme is accepted. The result of the testing shows that there is no significant difference between males and females in academic self-esteem after application of Schiraldi's Self-esteem enhancement programme.

DISCUSSION

The findings on hypotheses 1 and 2 show no significant difference in academic self-esteem of boys and girls.

These findings are not in line with the findings of YunDai (2001) where boys scored higher in maths ability while girls scored higher in verbal ability. They are not also in line with the findings of Kearney-Cooke (1999) that adolescent girls have lower self-esteem and more negative assessment of their physical characteristics and intellectual ability than boys; and that of Maccoby and Jacklin (1974) that gender differences favour girls in verbal abilities and performances while boys are favoured in maths ability and performance. It also deviates from the findings of Royer, Tronsky and Chan (1999) that boys are more highly represented in the area of maths ability in the highest performing groups of children and adolescents. Girls generally score higher grades than boys across the school years even in maths and sciences despite not doing well in tests of mathematical ability during adolescence.

Marsh (1989) opines however that the differences are not very substantial in terms of the amount of variance explained (i.e. boys score higher for physical activities and maths, and girls higher for reading and music).The results of this study are however consistent with the findings of Aryanya (2010) who discovered no significant difference between boys and girls in academic self-esteem. From the foregoing, it is evident that in terms of academic self-esteem, no sex is branded superior to the other. It becomes necessary therefore to discourage gender gaps or imbalance in planning academic activities for the males and females. In terms of career choice one should be allowed to go into any area he or she can excel in, irrespective of gender. Concerted efforts should be made to help learners develop high self-esteem.

CONCLUSION

This study investigated sex differences in academic self-esteem among selected secondary school students in Abuja metropolis. The results showed no significant differences in academic self-esteem between male and female students. Further research is suggested using a larger sample of students in other geographical areas to see if any significant difference will be obtained. Results from this research will be useful in counselling students on the need to develop high academic self-esteem and to venture into careers in which they will find fulfilment and achieve success irrespective of their gender. Also educators are encouraged to avoid gender imbalance as they plan the school curriculum. Government should sponsor counsellors and educators on Continuous Professional Development Programmes especially in line with how to boost students' academic self-esteem.

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