

## **A Study of The Academic Achievement and Self- Concept of Male and Female Hearing-Impaired Students in Nigeria**

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The main purpose of the study was to examine the academic achievement and self-concept of male and female hearing-impaired students in Nigeria. In doing so, a purposive sampling procedure was employed to elicit responses from 566 (364 males and 204 females) hearing-impaired secondary school students identified in various parts of the country. The Adolescent Personal Data Inventory (APDI) was used to measure self-concept while the respondents' Junior Secondary Certificate Examination (JSCE) results were measures of their academic achievement. The data collected were analyzed using the t-test statistical procedure. The findings revealed that male hearing-impaired students did not achieve better than their female counterparts. It was also found that the self-concept of male hearing-impaired students was not significantly different from that of female hearing-impaired students.

It was then suggested that counsellors should utilize strategies which could enhance the development of favourable self-concept among hearing-impaired students in general and female hearing-impaired students in particular.

## INTRODUCTION

It would seem logical to reason that a poor self-concept, which implies a lack of confidence in the environment, would be related to deficiency in one of the most important areas of accomplishment for children - their performances in school. It is not surprising therefore that studies (Fink, 1962; Doyle, 1970; Purkey, 1970) have documented a significant relationship among variables such as academic achievement, school satisfaction, and self-concept. It has also been noted that this relationship has been reported for children at all grade levels, from the primary grade levels through college (McCandless & Evans, 1973; Adeniran, 1985; Salawu, 1991). Academic success and positive self-concept have also been shown to be positively correlated in Black and Hispanic children (Vasquez, 1974; Borovetz, 1975); in mentally retarded children (Tolor, 1974; Meyers, 1976); in physically handicapped children (Byran, 1974; Cafferston, 1977); in sensory impaired children (Makin, 1976); and in learning disabled pupils (Seaman, 1974).

The problem of under-achievement of children at school has a long history in educational psychological research. In the 1920s, psychologists generally assumed that the IQ was the major predictor of school achievement, but that other factors such as family background, personality characteristics, attitudes and interests also contributed to academic success or failure (Behrens & Vernon, 1978). Thus, the correlations either of achievement or of achievement discrepancy scores with measures of emotional stability or neuroticism, positive or negative self-concept, anxiety, aggression and introversion have earlier been confirmed. (Cattell, 1966; Entiwistle & Entiwistle, 1970).

While, considerable attention in educational psychology has focused on cognitive and instructional aspects of human learning, relatively little empirical effort has been applied to investigating the influence of affective factors in learning. Wylie (1974) as well as Wells and Marwell (1976) noted that during the second quarter of this century, the dominant - behaviorists and functionalists left little room for such mentalistic elements or effective influences on

behaviour. But more recently, an upsurge of interest in self-referent constructs have become apparent. This interest is particularly evident in the areas of self-concept and self-efficacy (Covington & Berry, 1976; Wells & Marwell, 1976; Bandura, 1980). Research efforts, here strongly suggest that self-perceptions -are important mediational influences which define for individuals the nature of their relationships with other people, the types of behaviour and tasks in which they will engage, the state of tension they will experience, and in turn, how individuals will perceive themselves (Kifer, 1975; Abraham, 1978; Bandura, 1990; Weiner, 1980).

Hamacheck (1971) opined that there is a continuous flow between the self and the stream of experiences involved in the process of living and learning in school. He further stated that a student perceives, interprets, accepts, rejects, or resists what he/she encounters at school in the light of the way he/she sees himself/herself as a person generally and as a student. He then concluded that there is a mounting body of evidence to suggest that a student's performance in an academic setting is influenced, in both subtle and obvious ways, by his/her concept of self. For example, Roth (1959), investigating the role of self-concept in achievement concluded that:

In terms of their conception of self, individuals have a definite investment to perform as they do. With all things being equal, those who" do not achieve, choose not do so, while those who do achieve, choose to do so. (p. 265).

Most of these studies have been mainly carried out on "normal" subjects. Weiner (1980), for example, had shown that labels can determine affective reactions to achievement outcomes. Hilton (1986), in supporting this assertion of Weiner stated that:

One key factor, and one thought to adversely influence achievement outcomes, is the negative labels commonly associated with handicapped individuals. And depending on the individuals, one or more labels could reinforce feelings of inferiority and isolation. These in turn can result in negative or otherwise adverse effects on the development of one's self-concept, (p. 64).

Calsyn and Kenny (1977) also shared the same views with previous researchers that self-concept, whether high or low, is a primary predictor of achievement levels. Accordingly, if a student with special needs enter an educational setting with an already low self-concept, his or her academic performance could be similarly lowered.

Several studies have been conducted in western countries to illustrate the relationship of self-concept to academic achievement of "special students." One in particular (Nduromo, 1980) investigated whether reading disabled children have poor perception of not only their reading skills but also of their non-academic and cognitive abilities. These children were first tested, and then asked to rate their best performance on a point scale (1=positive; 1-negative). The findings indicated that the students viewed themselves as being inferior in many of the cognitive tasks. Also, they did accurately rate their performance in comparable cognitive areas as being positive or negative.

Doyle (1978) also carried out another study to investigate self-concept and the variables of academic achievement, maternal self-esteem and sensory integration abilities. The conclusion drawn from the study was that self-concept relates significantly to sensory integration abilities in children.

It has been established by many researchers (Sarfaty & Kate, 1978; Nduromo, 1980; Garison & Tesh, 1980) that self-concept is an important personality variables in the academic achievement of any individual. The purpose of this study therefore was to investigate whether differences exist between the academic and self-concept of male and female hearing-impaired students. To achieve this purpose, two hypotheses were generated and tested:

1. There is no significant difference between the academic achievement of male and female hearing-impaired students.
2. There is no significant difference between the self-concept of male and female hearing-impaired students.

## METHOD

### Sample

The students who participated in this study were drawn from the population of hearing-impaired students in senior secondary (SS I, II, III) schools in Nigeria. The researcher adopted the purposive sampling technique to draw her subjects because of their "special nature" - there are a limited number of hearing-impaired students in secondary schools. A total number of 566 (362 males, 204 females) students were identified and they all participated in the study.

### Instrument

The students' Junior Secondary School Certificate Examination (JSCE) scores in English Language and Mathematics were used to measure their academic achievement, (these scores were obtained from the schools' log books and were most often obtained from the counsellors). The Adolescent Personal Data Inventory (APDI) developed by Akinboye (1985) formed a ready tool for the measurement of the students self-concept.

In order to obtain academic scores for each respondent, their grade points in both English and Mathematics were added together and their averages found whereas in scoring the APDI, some of the items were first reversed because they were structured in negative forms. The total score obtainable is 150, as such, a score that is less than 90 is regarded as low.

## RESULTS

TABLE 1  
Means, Standard Deviations and t-values of the Academic  
Achievement (English Language and Mathematics) of Male and  
Female Respondents

Sex	N	X	S.D	df	t-Cal	Crit-t
Male	362	2.72	1.00			
				564	.98 (NS)	1.96
Female	204	2.64	.94			

NB: Ns = Not Significant at 0.05 level.

Table 1 reveals the mean-scores and standard deviations of both male and female hearing-impaired respondents on a measure of academic achievement. The table shows that there is no significant difference between the academic achievement scores of both male and female hearing-impaired respondents. This is because the calculated t-value of .98 is less than the critical t-value of 1.96 at 0.05 level of significance. For this reason, the null-hypothesis which stated that there is no significant difference between the academic achievement of male and female hearing-impaired students was accepted.

TABLE 2  
Means, Standard Deviations and t-values of the self-concept Scores of  
Male and Female Respondents

Sex	N	S.D	df	t-Cal	Crit-t
Male	362	97.43	12.32		
				564	..84 (NS) 1.96
Female	204	96.54	11.59		

NB: NS = Not Significant at 0.05 level.

Table 2 reveals the mean scores and standard deviations of both male and female hearing-impaired students on the self-concept

scale. The table shows that there is no significant difference between the self-concept scores of male and female hearing-impaired respondents ( $t= 84$ ;  $df= 564$ ;  $p .05$ ) since the calculated  $t$ -value is less than the critical  $t$ -value of 1.96. Therefore, hypothesis two which states that there is no significant difference between the self-concept of male and female hearing-impaired student was accepted.

### DISCUSSION

Hypothesis one examined whether there was a significant difference in the academic achievement of male and female hearing-impaired students. The result showed that there was no significant difference between the academic achievement of male and female students although an examination of the mean scores and standard deviation revealed that male respondents ( $X= 2.72$ ,  $SD = 1.00$ ) scored a little higher than their female counterparts ( $X=2.64$ ,  $SD = .94$ ). This observation is similar to Babatola's (1987) finding that male hearing-impaired performed slightly better than female hearing-impaired students.

Hypothesis two stated that there is no significant difference between self-concept of male and female hearing-impaired students. The result shows that there was no significant difference between the self-concept scores of male and female respondents. This indicates that sex is not a determinant factor in respondents' self-concept. Though there was no significant difference, however, the mean scores and standard deviations revealed that the male respondents ( $X =97.43$ ,  $SD = 12.32$ ) had a slightly more positive self-concept than female respondents ( $X =96.54$ ,  $SD =11.59$ ). One possible explanation for this may be that the cultural stereotype for raising male children in preference to female children may have contributed to this development. In our culture, females are regarded and treated as inferior beings.

In addition to this, handicapped females are doubly disadvantaged and thus possibly have no place in the society. Interestingly, this finding differs from those of Fink (1962) and Purkey (1970) who both found that males tend to have lower self-concept than

females. It can thus be reasonably concluded that because the female respondents have a slightly lower self-concept, it may be expected that they would have lower academic achievement since it has been established that self-concept has a relationship with academic achievement.

### **IMPLICATIONS OF THE STUDY FOR COUNSELLING**

It is impossible to exclude or neglect women in the development of any society because they make up to a half of the human race (Nowiki, 1973; Danilova, 1975). The status of women is therefore bound to interfere with the developmental process of the society. Though, from the earliest times, women were denied access to schooling, current practices encourage women education and status change. The erroneous belief that the place of women should be in the kitchen is gradually fading away. Women in Nigeria are known to be distinguishing themselves in all aspects of our economy. Women now occupy a pride of place in the country. This thinking is probably responsible for General Obasanjo's claim that "gone are the days when the rightful place of a woman is in the kitchen, because it is now accepted that when one educates a woman, one educates a nation" (Obasanjo, 1978, p. 1313).

The impact of this women emancipation trend is yet to be felt among female handicapped citizens. A pointer to this is the revelation that female hearing-impaired students have slightly low achievement potential and self-concept than their male counterparts. Thus, there is need for self-development among female hearing-impaired students. Many of them because of low self-concept drop out of school, they either take to begging or to marriage. They tend to marry much older men who just keep them at home to be rearing children. This is a reason why, presently in our higher institutions of learning, male hearing-impaired students out-numbered female students in the ratio of 1 to 15. In some instance, females are not even available.

All hands must be on desk to see to the development of hearing-impaired students. Parents must not look down on their female deaf or hearing-impaired children, they should help them as much as possible to develop a positive self-concept which will in turn booster their academic achievement. Counsellors are very crucial in this aspect.

They should assist, by making use of their relevant counselling theories and techniques to work on the students and their parents. They should make deliberate intervention strategies available to this deprived population. It is when a country utilizes all its human resources, normal and disadvantaged for growth that it achieves self-sufficiency and technological development. After all, Helen Keller, a woman was deaf and blind, but she was also known to be a great achiever.

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