

# SELF CONCEPT AND ACADEMIC PERFORMANCE OF HEARING IMPAIRED STUDENTS IN ONDO STATE SECONDARY SCHOOLS

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## **Abstract**

This study was designed to investigate the relationship between the self-concept and academic performance of hearing impaired students attending special and regular schools through the use of Adolescent Personal Data Inventory (Akinboye, 1985). A simple survey design was used in the study. The product-moment correlation co-efficient and i-test statistic were used to compare the two groups on their self-concept and academic achievement. The findings of the study revealed significant relationship between self-concept and academic achievement of the subjects. There was no significant difference in the self-concept of subjects in the special and regular schools while there was a significant difference in the academic performance of the two groups of subjects. These findings were discussed and appropriate counseling suggested with a view to enhancing the self-concept and correspondingly the academic performance of students

Hearing impairment is a sensory disorder that affects the auditory system of the sufferer. It is a condition that prevents or limits the perception and interpretation of acoustic signals by the victim.

Hearing impairment can occur at any time in one's life time. In other words, the time of onset of hearing impairment varies from victim to victim. It could occur from birth and this is known as congenital deafness. Sometimes it could occur after birth or at adult age. This is known as acquired or adventitious deafness. On the other hand, deafness can be described through the extent of language development of the child. Pre lingual deafness refers to the deafness that occurred before mastery of language skills, while post lingual deafness refers to deafness that occurred after language skills have been learned.

Deafness has a devastating effect on the victims especially in the area of communication. Brill (1975) stated that: Although hearing impairment is classified as a physical handicap, the actual handicapping condition occurs in the area of communication and hence is not 'physical' in the usual of the term.

In other words, the problem of the hearing impaired individual be it congenital, acquired, or pre-lingual or post-lingual ranges from total lack of speech to a little but defective one. This is explained when some people exhibit low pitch while others have high pitch. Some more others may show some audible but non coherent sound that is not characteristic of human beings.

When an individual is pronounced hearing impaired especially if the hearing impairment is sensor neural in nature, aural rehabilitation in form of amplification is necessary. However amplification or the use of hearing aid is only meaningful after a detailed diagnosis of the hearing problem that this is usually carried out in an audiology clinic.

An audiology clinic is therefore a place uniquely designed to provide audiological services to deaf clients. These services are carried out mainly through the use of the audio meter and tympanometer in a sound proof room.

### **Incidence of /Hearing Impairment**

Since Hearing impairment does not affect the individual physically but only creates some problems of communication, it has therefore become a little difficult to identify the deaf person through mere physical observations as can be done with other physical handicapping conditions. In other words, incidence of hearing impairment around the world over but a little more time and equipment is needed to get the true numbers.

This notwithstanding, some statistical figures of incidences of hearing impairment in different areas of the world have been put down. Fait (1999) stated that statistically, 35 out of every 1,000 adults in the United Kingdom, experience some hearing impairment, while 8 out of every 1000 children to the age of 0 have auditory handicap. In Nigeria, Igbokwe and Adeoyin (1998), reporting the Nigeria Federal Ministry of Education Survey of 1995, showed that of the 1,628 handicapped children of all categories in schools, 32% were deaf and hard of hearing. Going by the rate of increase in population in the country, this figure might have increased by now. In addition the Universal Basic Education Programme launched in 2002 has enlightened many Nigerian parents on the need to send their children to school. Many more handicapped children (including the deaf) have really been identified through the school system.

In addition Mba (1981) estimated that one out of every 10 people has some hearing problems which rob him/her of one or the other many advantages which normal hearing makes possible.

### **Academic Performance of Impaired Persons**

In recent times, public interest is gradually being focused on disadvantaged students within the nation's educational system. This development is in response to the call by the Federal Government as contained in the National Policy on Education (2004)(New draft 2006) that adequate education should be provided for all persons with disabilities to enable them play their role and thereafter develop psychological satisfaction. This challenge has apparently stimulated a lot of studies into the various areas among the various groups of disadvantaged people. One area that has attracted the attention of scholars is the relationship between the self concept and academic achievement of hearing impaired students (Ramdall, 1969; Makinde, 1982; Abdullahi, 1995; Akinpelu,

1997). In an attempt to establish the link between self-concept and, academic achievement, Ozoji (1993) hypothesized that the way we think about ourselves may be closely related to our interaction with the environment and our ability to learn and to achieve academically.

Hence Salawu (1991) posited that some students have problems with their studies not necessarily because of low intelligence, poor hearing or poor motivation but because they have learned to consider themselves as unable or inadequate.

Thus, when comparisons are made as they are under the assessment system within the school situations, the child who is below the others tends to get discouraged, and to conceive himself as a poor students and vice versa. In general, when a child feels successful, his/her level of aspiration goes up, and when he/she feels defeated, his/her level of aspiration for the immediate future goes down. The problem of self-concept vis-à-vis academic achievement becomes aggravated for the disadvantaged individuals particularly the hearing impaired, who, as a result of the society's attitude of labeling, make them to experience psychological depression and subsequently develop negative self-concept. Not surprisingly, some studies (Roy, 1992; Ramdall, 1999) have shown that in general, the self-concept of hearing impaired people are more negative than that of the general population.

Attempts to correlate the relationship between self-concept and academic achievement among hearing impaired students have evoked much controversy. While studies carried out by Bledoe (1987;), Akinpelu, (1997) show positive relationship, other studies (Nicholson, 1985; Williams," 1987) reveal no significant relationship on what might be responsible for the relationship between self-concept and academic achievement of students, studies have revealed environmental variables of rural versus urban settings (Adediran, 1984); Communication Styles (Campell, 1986) negative labels commonly associated with handicapped individuals particularly the hearing impaired (Hilton, 1986); personality development and level of social interaction (Johnson, 1981); as well as disabilities of handicapped people (Ozoji, 1993; Kolo, 1993).

The various studies cited above suggest that a poor self-concept, which implies lack of self-confidence in facing and mastering the environment would or would not be related to deficiency in school performance not only among 'normal' children but also among handicapped ones including the hearing impaired; and that the degree of relationship will vary from individual to individual. The degree of variation might even be more pronounced among children with disabilities within the context of the society's attitude towards them.

The purpose of this Study reported here was to investigate the relationship between self-concept and academic achievement of hearing impaired

secondary school students attending special and regular schools in Ondo State. In doing this, three null hypotheses were postulated; namely:

- i. There is no significant relationship between the self-concept and academic performance of secondary school students with significant hearing loss in Ondo State.
- ii. There is no significant difference in the self-concept of students with significant hearing loss and those in special and regular schools in Ondo State.
- iii. There is no significant difference in the academic performance of students with significant hearing loss in special and regular schools in Ondo State.

### **Methodology**

The study employed a simple descriptive survey method. The population from which the sample was drawn comprised only subjects who are hard of hearing. The hard of hearing students are those that are experiencing some difficulty in hearing loudly spoken speech unless the speaker's voice is strong and his face is visible, and whose hearing degree of hearing loss ranges between mild and profound (Kirk & Gallagher, 1989). The subjects used for this study belong to the severe category of hearing loss and whose assessment by a pure tone audiometer is put between 56 to 90db.

With the assistance of some officials at the Ondo State Education Resource Department of the State Ministry of Education and School for the Handicap Owo. The researchers discovered schools where hearing impaired students could be found. Having identified these schools, the researcher decided to use the 63 available hearing impaired students within Ondo State, using the cluster sampling technique as suggested by Dalen (1993). The schools used for the study were:

- (1) Owo High School (30)
- (2) St. Louis College (4)
- (3) Technical College (4)
- (4) Akure High School (9)
- (5) School of Handicap Owo (8)
- (6) Ondo Boys High School (4)
- (7) Stella Maris College (4)

The subjects were drawn from Junior Secondary Classes 2 and 3 as well as Senior Secondary Classes 2 and 3 because JSS I and SS I students. Subjects scores based on available school records in Mathematics, English, History, Geography and Social Studies were also used. The decision to use the scores from these subjects was predicated on their peculiar importance as core subjects

as well as forming the basis of the main aspects of academic aptitudes and subjects as well as forming the basis of the main aspects of academic aptitudes and were drawn by a panel of specialists, they were deemed to meet the content validity as suggested by Kerlinger (1973). The three hypotheses were tested and analyzed by using the Pearson product moment correlation co-efficient to test hypothesis while the t-test statistics was used to test hypotheses 2 and 3. Senior Secondary Classes 2 and 3 because JSS I and SS I students.

### **Instrumentation**

Adolescent Personal Data Inventory (APDI) developed by Akinboye (1995).was used for data collection Even though, this instrument was originally designed for 'normal' children, it has been used successfully for hearing impaired children (Akinpelu, 1997). The ADPI is a non- intellectual scale used for evaluation of some general characteristics of adolescents. It has ten sections made up of 244 items. Section A contains 30 items based on personal concept on social relation, Section B 25 items on personal concept on intelligence, section C contains 26 items on personal health. Section D has 30 items on personal behaviour. Section E dealt with career choice and contains 26 items including provision for listing of subject choice for West African school certificate Examination. Section F contains 13 items on personal and reproductive health. Section G contain 24 items on personal characteristics. Section h contains items on out door activities, indoor activities other extra curricula activities Club activities, Radio television viewing and listening activities.

Moreso, section I had ten items each on concept of time, space, death and dying and about God. Section J contains 20 items on personal satisfaction and self actualization. The construct validity of the instrument yield a co-efficient of 0.75 (Akinpelu, 1985) and studies by Owoyemi (1994) and Akinpelu, (1997) on deaf children equally attest to the validity of the instrument. Similarly, Akinboye 1995) reported an internal consistency reliability co-efficient of 0.97 which was considered high enough to ascertain its reliability particularly since the sub-scale of the instrument has been used and attested to by (Akinpelu 1997) who has used them on hearing impaired children due to the poor English background of the subjects, all the items were carefully translated into Yoruba and local ethnic language around the environment.

The ADPI was administered to the subjects with the assistance of some selected staff who are proficient in sign language and the subjects were thereafter required to complete the ADPI by rating themselves numerically between 1 and 5 on each of the 30 items.

### **Results**

Hypothesis 1 states that there is no significant relationship between the self- concept and academic performance of hearing impaired secondary school

students. To test the hypothesis, the Pearson product-moment correlation coefficient was employed to determine the degree of relationship between self-concept and academic performance.

**Table 1: Correlation Co-Efficient Value of the Relationship Between Self-Concept and Academic Performance of Hearing Impaired Subjects (N = 63).**

Variables	N	Total value	Total square value $\sum x^2y^2$	$\sum XY$	R	P<0.05
Self-concept	63	7164	992804	304134	0.90	0.361
Academic performance		2345	96976			

Table I indicates that the product moment correlation co-efficient value of the relationship between self-concept and academic performance of the subjects as 0.90. Given the critical value of 0.36 1 ( $p<0.05$ ), the decision is to reject the null hypothesis implying a high level of significant relationship between the levels of self-concept of hearing impaired secondary school students and their academic performance.

### Hypothesis 2

Hypothesis 2 states that there is no significant difference in the self-concept, of students with significant hearing loss between those in special and regular schools. In testing the hypothesis, data were subjected to t-test statistical analysis.

**Table 2: Mean Standard Deviations and t-value of self-concept of student with significant hearing loss in special regular schools. (N=63).**

Variables	N	Mean	DS	df	T	P<0.05
Special school	32	111.31	5868.28	61	0.34(N.S)	2.00*
Regular schools	31	116.19	5269.56			

Data in table 2 shows that the self-concept mean value for subjects in the special school is 111.31 while that for the regular schools is 116.19. The standard deviation for the special school is 5868.28 while that for the regular schools is 5269.56. The results, therefore, show that the subjects in regular schools have higher self-concept than those in the standard deviations show that the subjects in

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regular Schools are more homogenous in terms of their self concept while a greater degree of variability exist amongst those in the special school. The t-value of 0.34 given the probability level of 2.00 indicates that there is no significant difference in the two means; thereby leading to the acceptance of the null hypothesis.

#### **Hypothesis 3**

Hypothesis 3 states that there is no significant difference in the academic performance of hearing impaired students in special and regular schools. The data were tested with the use oft-value statistics as shown in table 3.

**Table 3: Means, Standard Deviations and t-value of performance of subjects with significant hearing loss in special and regular schools (N = 63).**

<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>df</b>	<b>t</b>	<b>P&lt;0.05</b>
Special school	32	47.21	34.87	61	11.11	2.00
Regular school	31	116.19	5269.56			

N.B: Significant at  $p < 0.05$

An examination of data in table 3 shows that the mean score for subjects at the special school is 47.21 with a standard deviation of 34.87; as well as a mean score of 26.90 with a standard deviation of 67.47 for subjects in regular schools. From the two mean scores, it is evident that the subjects in the special school have higher academic performance levels than their counterparts in regular schools. Hence, given the calculated t-value of 11.11, it is deductible that given the critical value of 2.00 ( $p < 0.05$ ), there is a significant difference between the two means, thus leading to the rejection of the null hypothesis.

#### **Discussion**

Findings of this study agree with the earlier findings of Bledsoe, (1987); Akinpelu (1997) whose researches showed a significant positive relationship between self-concept and academic performance. A number of other studies (Nicholson, 1985; Williams, I 987 reveal no significant relationship between self-concept and academic performance of hearing impaired students. Generally, therefore, results are inconclusive about the relationship between self-concept and academic performance of students. The present study only buttresses those findings which indicate high positive relationship between self-concept and academic performance of hearing impaired students while it negates the assertion by Igbokwe (1987) that children with hearing impairment are faced with some personality and social shocks and so are prone to low self-concept and corresponding low academic achievement. In the case of this study, the students' social interaction and the fact that the ADPI was translated to Local Ethnic

(Yoruba) languages might have enhanced the subjects understanding of the items and so/they tend to dearly evaluate themselves with regard to their personal worth.

Furthermore, the findings of this study confirm similar findings (Nduromo, 1987, Akinpelu, 1997) that there is no significant difference in the self-concept of hearing impaired students in special and regular schools while it disagrees with those of Johnson, (1981) and Campbell (1985) who discovered that students in special schools tend to have higher level of self-concept than those in regular schools. The probable reason for the finding of the present study is the high level of interaction which existed among the subjects since they experienced identical impairment. It should be noted that the subjects used for this study had their earlier education at Specials school before some of them were transferred to the regular schools. Hence, this early interaction may have had a long lasting effect on their general behaviour even after *some* of them have left the special school.

Even though several studies have been carried out to establish generally poor academic performance of hearing impaired students (Obemeota & Oyebola, 1987, Dada, 1996), the present study reveals that students with significant hearing loss in the special school performed significantly better than their counterparts in the regular schools. The relatively poor academic performance of subjects in regular schools is attributable to unfavorable school environment in regular settings. The availability of specially trained teachers who can communicate effectively during instruction (using sign language) with subject. in the special school may have accounted for the significant difference in the academic performance observed in this study.

### **Conclusion and Recommendation**

The findings of this study raise serious implications for counseling and special education in Nigeria. Since the introduction of guidance and counseling services in the nation's education systems decades ago, no serious attempt has been made to train special counselors for disadvantaged students like the hearing impaired. The main reason being that counseling in present-day Nigeria has its target population drawn mainly from among normal' students. The issues raised in this study can help to provide a basis for training special counselors for disadvantaged student, such counselors will help to provide services that can enhance effective personal social adjustment to enable hearing impaired students channel their self-concept attribute into positive personal accomplishment for self and the society. Special education instructors should also be posted to regular schools to assist hearing impaired students in their academic work. Such teachers can function either on itinerant basis or as resource class personnel assisting students with special needs. In view of the current move towards inclusive education for people with disabilities, all deaf students in special schools should be taken to specific regular schools where appropriate equipment and teachers



can be transferred to functional mainstreaming. It is hoped that the issues raised in this study will provoke further studies in this area with a view to giving the hearing impaired individuals an opportunity to advance to their highest potential and to adjust effectively to a hearing world. Since this study is limited to the type of school, further researches are being recommended in terms of gender, socio-cultural differences, class levels and urban rural settings.

### **References**

- Abdulahi, S. (1995). *Relationship between academic achievement and socio-economic status of hearing impaired students in Kano* (unpublished M.Ed Thesis), Bayero University, Kano.
- Adedirn, S.A. (1984). *Self-concept and academic performance of secondary school students in Ondo state of Nigeria* (Unpublished, Ph.D. Thesis), Obafemi Awolowo University, Ile-Ife.
- Akinloye, J. O. (1985). *Adolescent personal data inventory, (ADPI): User's Manual* Ibadan\_Claveron.
- Akinloye, J. O. (1985). Study of self-concept, study behaviour and health's of male and Nigerian adolescents. *Journal of African Studies* 1 (1), 102- 120.
- Akinpelu, O. F. (1997). *Relationship among perception of parents, behaviour, self concept and academic achievement of hearing impaired student* unpublished Ph.D. Thesis University of Ilorin.
- Bledsoe, J. (1987). Self-concept of children and their intelligence achievements, interest and anxiety. *Journal of Educational Psychology* 70 (1), 55-60.
- Campbell, I.B. (1976). Self-concept as it relates to academic achievement in middle grade public schoolchildren. *Dissertation abstract International* 27, 153-155.
- Dada, R. M. (1996). *A comparison of the academic performance of hearing and hearing impaired students in Kano City* (Unpublished M.Ed. Thesis) Bayero University, Kano.
- Dalen, D.V. (1973) *Understanding educational research*\_U.S.A. McGraw-Hill Inc.
- Federal Republic of Nigeria (1981). *National policy on education* Lagos: Ministry of Education Revised (2006).

- Brill, G. (1974). *The education of the deaf, administrative and professional development*, Washington D.C. Gallandet College Press.
- Fait, H. (1999). *Special physical education, adapted corrective developmental*, Toronto: W.B. Sanders Company.
- Mba, P. 1981), Language and the deaf child, *Journal of Special Education* p.2.
- Hilton, M. (1986). The effect of academic achievement and social acceptance upon the self-concept of Exceptional Children *Journal of Special Education*.<sub>10</sub> (1), 27—40.
- Igbokwe, K. (1987). Hearing impairment in Ogbue, R.M. T.C. Obani & CA. Okechukwu *Special education*\_Ibadan: Afiprint & Pak. Ltd.
- Johnson, D. (1981). Naturally acquired learned helplessness: The relationship of school failure of achievement behaviour, attributions and self-concept *Journal of Educational Psychology* 73, 104-108.
- Kerlinger, F.N. (1973). *Foundation of behavioural research* New York: Holt, Rinehart & Winsion Inc.
- Kirk, S.A. & Gallagher, J.H. (1989). Educating exceptional children in Kolo, I.A. (1994) *Elements of special and remedial education* Kano: Educational and Rehabilitative Consultancy Services.
- Makinide, S.M. (1982). *A comparison of the English language achievement levels of hearing and non-hearing students with reference to vocabulary* (Unpublished M.Ed. Thesis) University of Ibadan, Ibadan.
- Ndurom, M.M. (1987). *Effects of mainstreaming on hearing-impaired of high school students' self-concept and their perception of hearing people*. Dissertation Abstracts International, 41 (10), 436.
- Nicolson, I.O. (1985). The relationship between self-concept and reading achievement. *Dissertation abstracts international* 15, 6063.
- Obemeota, J. & Oyebola, M. (1987). The relative performance of subjects with different degrees of the hearing loss in tests of intelligence and academic achievement: *Journal of Educational Psychology*. 2 (1), 190 — 200.
- Ozaji, E.D. (1993). *Special education for the non-professionals*: Jos Deka Publication.

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- Ramdall, L.H. (19). *A comparison of the self-concept and personality characteristics of deaf high school students with norms of delinquents* (Unpublished Master's Thesis): University of Tennessee, Knoxville.
- Roy, I.I. (1992). Vocational; counseling aspects of deafness: *American Annals of the Deaf* 197, 562—565.
- Salawu, A.A. (1991). *Relationship between adolescents' self-concept and their academic achievement* (Unpublished Ph.D. Thesis) University of Ilorin, Ilorin.